

Suzanne Choo · Deb Sawch
Alison Villanueva · Ruth Vinz *Editors*

Educating for the 21st Century

Perspectives, Policies and Practices from
Around the World

 Springer

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Preface

The impetus to trade, explore and even conquer new worlds has existed for thousands of years dating to the fifteenth century when Christopher Columbus discovered the new world in the Americas and Vasco da Gama established a sea route from Europe to the East. Sometime after the nineteenth century, the modern world economy developed and international trade, previously limited to products catered for elite classes, now expanded to include basic goods such as wheat and textiles for the masses. The world economy began to expand geographically to include more territories as the influence of the merchant capitalist class grew alongside stronger interstate relations. Today, the sense of international interaction, interconnectedness and interchange, encapsulated in the term “globalization”, has intensified more than any other century in human history. Indeed, the word “global” has become a cliché in our twenty-first century landscape in which companies increasingly apply global marketing strategies, financial institutions compete to provide global banking services for their mobile clienteles, and education systems are compared globally on international test surveys while universities continue developing enticing global exchange programmes and partnerships with overseas institutions. These changes are fuelled by a race among cities all over the world from Dubai to Shanghai and Singapore to market themselves as global cities that are highly networked and that are encouraged to maintain a cosmopolitan openness to immigrants and foreign investors.

As the world becomes increasingly closer and flatter, it is also pulled apart by rising instances of global terrorism, xenophobia, inequality among rich and poor nations, and modern-day slavery. It is this complex and volatile landscape that has generated growing interest among governments, policymakers and scholars concerning how best to educate students with twenty-first century global capacities so that they have the requisite skills and knowledge to compete in the global marketplace and at the same time imbibe cosmopolitan sensitivities towards multiple and marginalized others in the world.

This edited volume provides insights into the different interpretations of twenty-first century education and aims to merge theory and practice by including contributions from scholars as well as educators from schools and those who work with

schools. The volume contains three key parts, each with its own introduction. Part I. “Perspectives: Mapping our Futures-in-the-making” centres on theorizations of the contradictions, tensions and processes that shape the way twenty-first century education discourses are constructed and articulated. Part II. “Policies: Constructing the Future through Policy Making” focuses on how the envisioning of twenty-first century education translates into policies and the tensions that emerge from top-down, state sanctioned policies and bottom-up initiatives. Part III. “Practices: Enacting the Future in Local Contexts” discusses on-the-ground initiatives that schools in various countries enact to educate their students for the twenty-first century.

This edited volume is timely as governments and policymakers around the world increasingly emphasize the need to adequately equip students with key knowledge and skills for the twenty-first century. A range of international perspectives is provided, including insights into schools and education systems in countries such as Australia, Canada, Cuba, Finland, Hong Kong, Japan, Kuwait, Singapore and the United States, among others. It is hoped that readers will be provoked to new ways of thinking about twenty-first century education through the contributions by key thinkers in the field of globalization and education as well as get a glimpse into the ways twenty-first century education is interpreted and translated into specific policy and pedagogical practices.

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Part I

Perspectives: Mapping Our Futures-In-The-Making

It is a mistake to try to reform the educational system without revising ourselves as learning beings, following a path from birth to death that is longer and more unpredictable than ever before. Only when that is done, will we be in a position to reconstruct educational systems where teachers model learning rather than authority.... The avalanche of changes taking place around the world . . . all come as reminders that of all the skills learned in school the most important is the skill to learn over a lifetime those things that no one, including the teachers, yet understands. (Mary Catherine Bateson, 1996.)

In the opening chapter of Part I, Erica McWilliam's "Today's Children, Tomorrow's Creatives: Living, Learning and Earning in the Conceptual Age" echoes Bateson's belief that we cannot "map out" a curriculum or competencies that anticipate what students in the twenty-first century will need to know. She cautions:

Given the learning imperatives arising from Big Data, schools cannot provide young people with the information they will need to live learn and earn well now and in the future. What counts as useful, relevant or seminal knowledge has an increasingly limited shelf-life.

Where does this belief that we cannot predict educational needs thoroughly and accurately leave those of us trying to conceive both the whats and hows of education in the twenty-first century? How might we prepare for the unexplored and unimagined terrain of the future that is before us?

The geographies of cyberspace create new maps that superimpose over the more time-honored maps where borders are drawn and continents and nations are named and renamed while, at the same time, illustrating our connecting topographies of mountain ranges, rivers, and oceans. It is an arresting picture of both connection and disconnection. Change, flux, movement, disruption seem cornerstones of the twenty-first century. Acknowledging and embracing change and uncertainty may suggest we will have no stable map to aid navigation. Is this a condition we can educate for—one that supports, as Williams calls for, "non-traditional attributes to learning" such as "risk-taking, self-criticality, a 'seriously playful' approach to problem solving, and the capacity to work alongside high-end digital tools in value-adding ways"? Yet, it is our connectedness as members of a global community that

becomes the strongest image of our new world—a world ripe with possibilities but also with ethical and social challenges for a planet in near chaos. How do we educate for the creative, imaginative, and affective capacities we will need for our futures-in-the-making?

McWilliam states, “The future is something we create together, not somewhere we are going.” She forecasts the need for different knowledge and skills with the expansion of digital geographies and technologies. Like many other authors in the first section of this book, she encourages educators to emphasize more team work, less desk work, and to use our human and technological resources to “put curiosity to work in a systematic way.” She calls for teachers willing to “meddle in the middle”, who are active and engaged themselves—not with knowledge acquired for a test, but with the disposition to both learn and *unlearn*.”

In Chap. 2, “Digitalizing Tradition: Staging Postcolonial Elite School Identities in the Online Environment,” Cameron McCarthy and his research team focus on the production of information in the digital landscape. As McLuhan famously stated, “The medium is the message.” But who controls the medium and the message? While examining how two elite schools constructed elaborate digital presences to brand the identities of their institutions, McCarthy notes that “digital identity making, re-making, and contestation is set against multiple backdrops of education” as a way to elaborate a global digital presence and construct their brand into the global education market. Yet, students’ consumption and production of various social media work to challenge and disrupt the carefully branded institutional identity. Perhaps one reality of our twenty-first century is that there is no one person, administration, or government in charge of disseminating information. Young peoples’ lives are *lived* online, and in-the-moment, “augmented by constant viewer “posts”, “likes,” “shares,” and “messages” creating an interactive, transnational version of school life.”

Both chapters emphasize how the powerful networks of cyberspace transform subject-object relations and interaction capabilities. Letter writing, face-to-face meetings, referrals, and telephone calls have given way to digital spaces such as LinkedIn (the digital networking for business referencing) and Xing (with a more global presence and focus). Facebook and Google + offer users a social site where content, highlighted topics, creation of small circles of networks generate hundreds of thousands of networks. In 2004 when Facebook and Flickr were introduced, we had not yet seen the advent of YouTube (2005) or Twitter (2006). These cyberspaces have created multi-dimensions to our physical spaces. From Whatsapp to WeChat, the globe expands, feeling a bit like huge networks of spider webs constantly weaving, repurposing and changing the designs, forms, and images of our global connective tissues. Global content-creators continue to invent new rhetorical contexts and sites that make porous the boundaries of continents, nations, cultures, and languages in the cyberspaces of everyday life. How will these cyber-landscapes affect the ways we learn, interact, and educate *with* others?

‘Becoming’ in a Global World

Nearly 50 years ago, Marshall McLuhan, philosopher of communication and media theory, predicted that media would change the way we looked at all aspects of life. He knew that the new age of electronic information would forever entangle us, so that the idea of a “global citizen,” one whose identity transcended local and national boundaries, would compel us to take responsibility for others around the globe.

In an electrical information environment, ...Too many people know too much about each other. Our new environment compels commitment and participation. We have become irrevocably involved with, and responsible for, each other (p. 24).

In Chap. 3 and 4, Reynolds, Ferguson-Patrick, and Macqueen’s “Players in the World: Action for Intercultural Competence in Classroom Pedagogy” and Alviar-Martin and Baildon’s “Deliberating Values for Global Citizenship: A Study of Singapore’s Social Studies and Hong Kong’s Liberal Studies Curricula” share ways in which educators challenge themselves to prepare citizens who can participate effectively in our futures-in-the-making. Subject matter, literacy and numeracy skills, learning to be discriminating receivers and producers of cyber-information alone will not provide students with the education they need to traverse the new and expanded landscapes. It will be how we, as human beings, turn inside to reflect, look outside to see and feel and understand *with* others, and commit ourselves to take action for sustainable and productive futures. As Reynolds, Ferguson-Patrick, and Macqueen remind us, “. . . for Intercultural Competence to occur there is a need to act, to do something, to interact and be challenged, to be motivated and to be brave – to transform.” This will not be achieved simply through learning *about* other cultures but in finding ways to *be* with others, to *participate* in the making of a global culture together.

Reiterated in many discussions of twenty-first century global competencies is the need to educate in order to keep a competitive edge in the global market. Students are frequently seen as human capital—a means to an end where the nation can achieve economic success in the global economy. As Alviar-Martin and Baildon observe as a result of their research, these citizenship and civic education curricula emphasize the production of citizens “possessing marketable skills for changing global economic conditions who will not raise questions of human rights or social justice or stridently challenge government policy.” What are other purposes for educating toward global citizenship? Might these include opportunities to question and deliberate social or human rights issues? To experience plurality through *doing*? Both of these chapters emphasize a call to action for educators—to create experiences for students that engage them in multiple opportunities to act and to imagine ways to improve relations, communications, and economic and social equality around the world.

Finding Our Way Through the Unfamiliar

There is absolutely no inevitability as long as there is a willingness to contemplate what is happening. (Marshall McLuhan, 1967)

The opening four chapters help us understand how today's students will need to be more digitally savvy, mobile and transitory, and more democratic in their worldview. This new reality has placed greater demands on educators in all countries to create learning environments that both reflect and facilitate the pluralistic nature of life on our globe. In Chap. 5 and 6, Veronica Boix Mansilla and Flossie Chua's "Signature Pedagogies in Global Competence Education: Understanding Quality Teaching Practice" and Ann Lopez's "Voices From the Field: What Can we Learn From School Leaders of Diverse Schools in Ontario, Canada, Tensions and Possibilities?" we are reminded how important it will be for educators to design classrooms where students experience other cultures, make connections to their own, and take action both locally and globally.

By understanding global issues and the challenges we face, teachers and students are more likely to take action to make the world a better place. As Boix Mansilla and Chua remind us, "Teaching for global competence goes beyond delivering new content through transmission-centered pedagogies. Rather, we argue here, it calls for a pedagogical approach uniquely tailored to nurturing deep, relevant, and sustained global learning." Their conceptions of "signature pedagogies" "favor an integrated view of learning, targeting a complement of practices such as "investigating the world," "taking perspective," "communicating across difference," and "taking action."

Of course, changes in educational settings take strong and visionary leadership. In Chap. 6, Ann Lopez examines the types of leadership that schools will need to enact culturally responsive teaching and learning. She goes on to describe the tenets of culturally responsive and transcultural leadership with examples of leadership in-the-making, where purposeful and speculative leaders supply resources and encourage classroom environments that generate passion to explore, understand, and inquire into the issues and problems of the world. This does not come without tensions, but examining some of the experiences of leaders making their way in this new terrain will lend support and provide examples for others.

Making the Road by Walking

Mapping is often viewed as an attempt to capture "what is." That is, a map functions to give an overview, help us see a panorama, or offer a route for where we want to go. Nearly every day in Syria, bombs fall, buildings and pipes crumble, faucets no longer run with life-giving water. A new *gps* map, developed by the International Red Cross in conjunction with the local water board in Aleppo, shows citizens

where water boreholes can be found. In this sense, we recognize the enormous power of the maps, especially interactive ones, of “what is” to be literally life saving—able to harness huge technological resources. But, what of the maps of our imaginings, the mapping of unexplored landscapes in and for education where we risk falling off the maps of the known? In Chap. 7, “Education for a Better World: The Struggle for Social Justice in the Twenty-First Century,” Ian Davies emphasizes “that education for global citizenship is achieved through—and expressed by—democratic engagement for social justice. As such I wish to encourage teachers to be activists for a social and political ideal and to see this as an essential part of their role as professionals.” And, we could not agree more. The mapping may not be easy and the road ahead may not be clearly defined. What may be a common characteristic of our search for purposes and practices to support education for a global future is the importance of creating learning environments that generate RESTLESSNESS. As the earth revolves, so, too, do students and teachers need to feel the revolutions of an education where desire, passion to explore, ongoing attempts to understand and act on behalf of others, and curiosities beyond all measure are the qualities we all need as learners and citizens who share and hope to thrive on this planet, together.

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Chapter 1

Today's Children, Tomorrow's Creatives: Living, Learning and Earning in the Conceptual Age

Erica McWilliam

Abstract This introductory chapter sets out the challenges all schools face in preparing young people for a world vastly different from the one most teachers grew up in. It then moves to consider how to design pedagogical activities that are likely to result in creative learning outcomes. The changes that new technologies are making to our living, learning and earning are unprecedented. This means, among other things, that value-adding learning environments will continue to become more digitally resourced, more networked, more self-directed, more software mediated, more open and more accessible. Yet we need to be thinking more radically about what children learn and how they learn it than 'going digital' in the learning environment. Fortunately, we are beginning to understand that creativity is a key driver of a sustainable and productive economy for a global and ethical citizenry. Moreover, we now know that creativity is in many respects both teachable and learnable. In understanding how important creative capacity is to the Conceptual Age, teachers can work towards making it less vaporous and more visible as a set of dispositions and capabilities that are at the centre of curriculum design and implementation.

It was not so long ago that we thought the future would be filled with Big Machines. We thought we would be wearing metallic spacesuits and being served by humanoid robots speaking with metallic voices, much like the robot maid Rosie in the Jetson cartoon family of the 1960s. We imagined that, 60 years on, our houses, offices and classrooms would be crammed full of clunky labor-saving gadgets of all kinds, freeing up our days so that, like George Jetson, we would be working just an hour a day for no more than 2 days a week.

We are now experiencing what it is like to live in what Daniel Pink (2005) calls "The Conceptual Age". It is a time when the routine accessing of information to solve routine problems has been displaced by unique cultural forms and modes of consumption made possible by digital tools and modes of communication. And so

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we now know that the future is not what it used to be. Through the affordances of nano-technology, we have been able to turn Big Machines into small devices, many so small indeed as to be invisible to the naked eye. We have exponentially increased their power at the same time as decreasing their bulk. Such high-powered devices have allowed us to access a world of continuous information flow, a relentless ecology of interruption and distractibility that is both our servant and our master. It is a world that makes unprecedented demands on our time and attention at the same time that it affords instant access to more and more information. The key marker of new times, in other words, is the way in which the data we access is being transformed, and is transforming us. We now know that the future is not Big Machines – it is *Big Data*.

Big Data, the exponential proliferation and transformation of information across the globe, is making for massive social and cultural transformations. Most of us now have multiple ways of connecting and engaging with each other, with work, with government and with a host of organisational systems. And those same organisational systems that once relied on vertical hierarchies of management and vertical supply and demand chains have been transformed into horizontal networks in which the flow of data is unprecedented and in which any node that does not add value can and will be by-passed. This means, among other things, that young people can sleep their way through their school physics class, but continue their learning in physics via any number of on-line courses and websites that can be accessed at any time. It follows that teachers who continue to work as a cog in the supply chain of schooling, delivering and assessing disciplinary content in traditional ways, will find themselves outside their students' learning networks. In other words, school offerings perceived as tedious or irrelevant *will* be side-stepped.

New Pathways, New Identities

The social and cultural transformations of the Era of Big Data are overturning not just the cultural logic of the supply-and-demand chain, but other linear-cumulative patterns of living, learning and earning. An aspirational life trajectory is no longer a predictable pathway in which learning is completed before long-term salaried work begins. Instead, according to sociologist Richard Sennett (2006), we are all under pressure to improvise a life-narrative without any sustained sense of self or continuous identity. Professions that have evolved historically from craftsmanship, through standardization and systemization, have now entered a fourth stage of *externalization*, with complex tasks “decomposing” into constituent fragments, many of which are performed on-line or elsewhere beyond the immediate context (see Susskind & Susskind, 2015). (The complex task of curriculum design, for example, can be ‘outsourced’ to a package of educational materials that is ready to be ‘delivered’ to any school, any time, anywhere.) This ‘externalization’ imperative disrupts the sense of a stable and predictable identity that once accompanied professional work.

With on-line affordances making it possible to outsource and atomize complex work to make it cheaper and more efficient (and sometimes of better quality), professional work cultures are less willing or able to reward craftsmanship – that is, to reward an individual's talent for doing expert work extremely well. Therefore hard-earned skills have an increasingly brief shelf-life, particularly in fields closely related to technology, sciences and advanced forms of manufacturing. As long-term, stable employment recedes, and fast-paced work transitions become the norm, we now find ourselves paying closer attention to managing short-term relationships while migrating (virtually or literally) from place to place, job to job and task to task, re-developing new talents as economic and skilling demands shift.

Among all the attributes that are needed for enterprising engagement in this century, agility of movement, is likely to be among the most valuable. The ability to move at speed across disparate geographical, virtual, disciplinary and socio-cultural landscapes is now a key capacity of the global workforce, demanding as it does an enhanced cognitive capacity to learn, un-learn and re-learn. With micro-jobs and micro-revenues displacing 'tenure', and '9-to-5ism', twentieth century scripts about how to educate for a future 'career' are looking decidedly dated. Careers, according to many young people, are things that old people have! Self-management towards an enterprising future is about travelling light, jettisoning the old information and traditional ways of doing things that have weighed down workers in the past. It is about knowing what to do when there are no blueprints or templates, and it is about having sufficient cultural and epistemological agility to learn 'on the run' through robust and flexible social networks.

It goes without saying that traditional schooling, with its egg-crate classrooms, lockstep progression and standardised testing is sub-optimal as a springboard to this sort of fast-moving future. While high levels of literacy and numeracy still matter, these categories are themselves expanding. Consistency and conformity are less useful now than curiosity and scepticism. The sort of young people who are thriving in the Conceptual Age are those who exhibit a range of non-traditional attributes to learning – risk-taking, self-criticality, a "seriously playful" (Kane, 2005) approach to problem-solving, and the capacity to work alongside high-end digital tools in value-adding ways. They are likely to be multi-lingual, ideas-oriented, fun-loving and error-welcoming. They are practised at 'editing' their real and virtual worlds in ethical and value-adding ways. And they have a capacity for design that enables them, alone or as part of a team, to hold incompatible ideas together to imagine and create innovative ideas, services and products. In other words, they are 'creatives' (Florida, 2012).

Going Digital

Most of the dramatic cultural shifts we have seen in recent times have been spawned by the Internet. Jana, a hypothetical young adult born in 1994, the same year as the Internet, has never known a pre-internet world. She grew up alongside Hotmail

(1996), Google (1998), Napster (1999), the iPod and the xBox (2001). She has had access to the iPhone, Playstation3 and Tumblr since she was 13, and at 14 added Facebook, Twitter and the iPad to her growing list of available digital tools and technologies. Since 2010, Youtube has been Jana's primary source of information. She has never learned about world events from reading a newspaper or watching free-to-air television. To Jana, the world looks, feels and sounds like Youtube.

Being connected via her social networks is as important to Jana as it is to her peers and to all those who come after her. She now uses Snapchat to send her friends a regular stream of quick pics that self-destruct in ten seconds or less, and she is one of the billions of people chatting on Facebook, more indeed than the entire population of the world a century ago. In the year 2012, she and her fellow global citizens contributed to and engaged with 2.5 quintillion bytes of data each day, most of which were created in the previous 2 years. Whether she lives in Zambia or Sweden, Jana can find out the current temperature in Ulaan Bator, or the closing price of BHP stock, or the name of Barak Obama's Secretary of State as quickly as the head librarian at Bodleian Library in Oxford. She does not think it's a miracle to search 100 billion pages in 15s – indeed, she is increasingly frustrated by what she perceives as a delay or slowness of access or delivery. Whether it's hair-braiding or horse-breeding, algorithms or anklets, she finds whatever information she wants and finds it precisely at the time she needs it.

Or does she? According to prediction analyst Nate Silver (2012), it is highly likely that, in a complex and unpredictable world, Jana will struggle to differentiate the information that is really useful to her from the overwhelming amount of useless, extraneous, impeding or misleading information that is proliferating globally at a much greater rate. As Silver explains it, information growth is rapidly outpacing our understanding of how to process it. We are less and less likely to distinguish *Signals* – the very small amounts of useful information we really need, from *Noise* – all the rest of the trivial, misleading and useless information that continuously bombards us.

There are real dangers, Silver asserts, for Jana's generation and all other generations if and when 'learning' is equated with accessing bits of information that are most readily available on the internet. Consider, for example, the information that appears on the first page or two of a Google or Yahoo search. The fact of data overload will mean that Jana needs to be highly selective and subjective in deciding what information she pays attention to. Unfortunately, she is more likely to 'cherry-pick' the information that best aligns with her preconceived views of the world and those of her friends. She will ignore the rest. In doing so, she will contribute to the growing trend to sectarianism that is an effect of information overload. She will find political, religious and cultural allies in those who make the same choices. By implication, those who make different choices she may well consider alien, even dangerous. If neither her family nor her school provide her with opportunities to engage with a wider range of values and ideas that she finds on social media, she is likely to struggle when it comes to her capacity to engage with the complex concepts necessary to global citizenship.

Doubting the Data

Big Data, then, is by no means an unmitigated blessing when it comes to the future of learning. Its affordances and opportunities come wrapped in barbed wire. Those like Jana who have grown up with the Web as a constant in their lives – those that Marc Prensky (2001) calls “digital natives” – have lived with a constant and unremitting bombardment of marketing hype and misinformation each and every minute of their on-line day. Every automated message that tells them ‘your call is important to us’, every bit of spam promising massive lottery wins or inherited millions, every packaged deal of ‘unbeatable’ offers, adds to their mistrust of all but perhaps the messages that come from a handful of their closest peers.

It is a sorry condition of our times that Jana and those who follow her will need to keep building their capacity to *mistrust and dismiss* most of what they read, see and hear on the internet. With so much data being generated so fast and for so many purposes, judicious decision-making about the credibility of data will be a key factor in whether and how the next generation can live optimally in their world. At least 80% of the data being generated on the Internet is either misleading or unreliable, according to Moshe Rappoport (2012), Executive Technology Briefer with the Zurich-based IBM Research Laboratory. So the capacity to judge data *veracity* will need constantly to be the subject of updating.

The disposition to mistrust can be a useful one, as all good scientists know, as long as it can be harnessed as the sort of robust skepticism that underpins the pursuit of both confirming and disconfirming data. Skepticism of this sort is a far cry from cynicism. The world-weary ‘whatever’ shoulder shrug, satirized so often as typical of young people’s responses to the constant pushes and pulls they experience in their lives, may well be symptomatic of the latter. So those who promise to prepare young people to meet the unparalleled challenges they will face in the future – and most schools make just that promise in their glossy brochures and mission statements – really have their work cut out to deliver on that promise.

For our schools are to be responsive to the challenges of the Conceptual Age, it will take an epistemological shift in the design of our curricula, pedagogy and assessment. The imperative to ‘ask better questions’ will become more focal than ‘giving correct answers’. With the design of ‘better questions’ re-positioned at the *center* of the educational enterprise, educators can generate enhanced opportunities for thinking in ‘design mode’, not just in ‘truth mode’ (See Scardamalia & Bereiter, [in press](#)). Such a shift of focus will invite everyone – teachers and students – to ask more compelling questions than can be answered by means of a Google or Wikipedia search. ‘Should the Allies have bombed Hiroshima?’ has no correct answer but it is a question that has haunted us for more than half a century. ‘How would you explain plastics to Henry VIII?’ is a more playful query, once again having no ‘correct answer’, but some responses will be better – more thoughtful, more informed, more elaborate – than others. Those who can develop useful criteria by which to differentiate the quality of answers to such questions will be advantaged in their learning over those still dependent on ‘cramming for the exam’.

Singular Times

While the digital revolution has made it possible to access both useful and useless information at the touch of a keyboard, there are many more educational implications than this. As Rappoport (2012) explains, it is not just the issue of *Veracity* that creates a problem for educators, but the *Volume*, *Variety*, and *Velocity* of on-line data make it impossible for educators to create a knowledge base that will prepare young people to live well now and into the future. *Volume* matters because the current rate of data generation will continue to grow exponentially. *Variety* will matter, because, of the two broad types of data we currently engage with, *data 'at rest'* and *data 'in motion'*, the latter is exploding as more smart objects are developed (eg, storage spaces that make business decisions) and as software becomes more adept at deep analytics. The evidence is now in that, for the first time, the Jeopardy game is done better by a machine than a person – computers are starting to ‘get’ nuance. The *Velocity* or speed at which data moves is also growing exponentially; it is predicted to be 10,000 times faster than today if it is to meet the needs of entrepreneurial businesses in the next decade.

According to educational reformer and entrepreneur Lee Crockett (2013), there is no doubt that, in just a few years, our technology will be billions of times more powerful than it is today. Unbreakable, wearable devices are already being combined with long-term permanent storage in the form of batteries that are virtually transparent, allowing nano-generators not only to be sewn into clothing but inserted into body organs. So we will soon see molecular robots that can be injected into the body to kill cancer on a cell-by-cell basis, but we will also run the risk of other ‘intelligences’ being introduced into our biological make-up without our knowledge or consent. Put simply, the blurring of the internet and reality – the Singularity – is very close indeed.

All this creates unprecedented problems when it comes to the issue of the relevance of education for life beyond school. It is likely, according to futurist Ray Kurzweil (2005), that the imminent Singularity will see our planet’s intelligence becoming increasingly non-biological as well as trillions of times more powerful than today. In other words, the current capacities of computers are evolving in such a way that computing intelligence is becoming more pervasive, merging with human consciousness to change our very ontology as human beings. And they are doing so at a time when global crises of one sort or another threaten the planet’s very survival. As James Martin (2006) makes clear in his important book, *The Meaning of the 21st Century*, this is the century of mega-problems all of which have resisted previous push-or-pull solutions. A well-developed capacity for moral deliberation is thus crucial in this century and it will not come about through more standardized testing. Rather, it will require a conscious commitment to building the skills of systematic inquiry and ethical reasoning at every educational level.

The 'Too Hard' Basket

As our global problems become more complex and intertwined, there are some who argue that the shift in our shared culture is in quite the opposite direction. Philosopher Michael Foley, for example, has drawn attention to what he sees as a disturbing tendency of Western cultures in particular, namely the retreat from difficulty and challenge. In *The Age of Absurdity*, Foley (2010) makes a strong case that we are seeing a more widespread preference for 'low challenge' living at the very time the need for higher order thinking about Big Data and its uses has never been greater. He sees difficult thinking for deep understanding as repugnant to a fast moving, pleasure-seeking, self-absorbed world because it denies entitlement, disenchanting potential, limits mobility and flexibility, delays gratification, and distracts from distraction. Complex reasoning, on the other hand, demands responsibility, commitment, attention and thought, qualities he sees as very much in the 'too hard' basket of an increasingly self-absorbed social world.

Foley is not alone in expressing concerns about the trend in popular culture to reject difficult thinking. A growing body of neurological and sociological research is now focusing on the downside of living in the era of Big Data, noting in particular the not-so-welcome effects of the Internet. Nicholas Carr (2010) writes in his book, *The Shallows*, that the internet works as an ecology of disruptive and distracting (as well as highly seductive) technologies for changing what counts as intellectual work and, indeed, what is coming to count as thinking capacity. Carr sees the sort of deep and sustained thinking that we have associated with intellectual achievement as being problematically undermined by the Net's invitation to "the permanent state of distraction that defines the on-line life" (p. 112). His concern is that the "buzzing mind" is an effect of the Net's capacity to "seize our attention only to scatter it" (p. 118). While Carr acknowledges the unique contribution of digital tools to an expanding social universe, he is unequivocal about the dangers he sees in the emergent character of a Net-based social and intellectual world. The threat, according to Carr, is the Internet's capacity to turn us into the human equivalent of lab rats, constantly pressing levers to get the next tiny pellet of gratification with which to fill our lives.

Of course, there are those who would dismiss both Carr and Foley as grumpy old curmudgeons generating moral panic out of their own personal discomfort with the digital age. Whether or not we agree with Foley's thesis that the retreat from difficulty is a problematic effect, at least in part, of society's narcissistic obsession with the self, or Carr's thesis that thinking itself is being re-shaped by a digital environment of "cursory reading, hurried and distracted thinking and superficial learning" (p. 116), there is little doubt that the era of Big Data is replete with complexity and becoming more so. Earning a living in a highly competitive global marketplace demands engagement with more technology-enhanced processes, more complex design problems, more speedy non-routine transactions, more scrutiny of individual, team and organizational performance, less certainty of tenure and less career linearity, particularly in high-tech industries and those most exposed to frequent

market fluctuations. So too, civic participation in debates about global futures demands higher levels of scientific and systems literacy. Any trend to ‘easy success’ in the present can only serve to exacerbate the challenges that will inevitably have to be faced in a more uncertain and complex future.

W(h)ither Schooling?

Given the learning imperatives arising from Big Data, schools cannot provide young people with the information they will need to live learn and earn well now and in the future. What counts as useful, relevant or seminal knowledge has an increasingly limited shelf-life. Yet despite this fact, the cultural logic of formal education is still very much about loading young people up with yesterday’s facts and templates, rather than helping them to be “clever wanderers” (Bauman, 2006) in a complex and unpredictable world.

This does not mean that nothing from the past is worth knowing. We still rely on our nineteenth century disciplinary categories to think with, and they continue to offer us starting points for organizing information into fields, but they are insufficient, in terms of explanatory power, for engaging with a twenty-first century world of Big Data, with its unprecedented challenges and possibilities. The disciplines de-limit our children’s capacity for holding incompatible things together to make a third creative space. The sort of “high concept, high touch” disposition that Daniel Pink (2005) insists is so valuable to a creative future is best developed in trans-disciplinary learning environments where young people are invited to see the value of marrying high functioning with aesthetic sensibility. They also learn that they do not have to ‘cover’ all the associated skills and capacities if they avail themselves of the team-building possibilities that exist for them to share with other who are differently skilled – those who can speak a different language, who can do complex algorithms, who can provide the artistry or speak and write to an audience with greater fluency. In the Conceptual Age, teaming does not only enhance community and ethics but also commerce and enterprise. So pedagogy that mobilizes ‘the classroom brain’ – where students and teacher work together to produce successful, improvable learning outcomes – is more valuable than pedagogy still predicated on singular, silent deskwork.

In the context of data explosion, it is self-evident that asking young people to spend a great deal of their time memorizing bits of disciplinary data (for example, those needed to perform well on standardized pencil and paper tests of static disciplinary knowledge), is a ludicrously dated activity. This does not mean that there should be no curriculum content in the program offerings of schools and universities, but it does mean that the ‘coverage’ culture of the twentieth century classroom – the idea that we can and should educate young people by asking them to remember lots of discipline-bound ‘stuff’ – is a side issue when it comes to building capacity to thrive in a very different world of knowledge production. Smart editorship, by contrast, is a set of capacities that is built from long-term practice in dis-

cerning Signals from Noise, in being able to look at the first pages of a Google search and ask questions about what is *not* there that we might have expected to see, and why. Productivity is about a highly developed capacity to prune back from excess, to grow ideas rather than proliferate them.

Our Conceptual Age demands that young people (and, it follows, their teachers) aim further and further ahead of a faster moving target. Little wonder that there is growing disquiet among commentators from both within and outside the educational community about a formal education system that seeks to plan the future by relying almost exclusively on the lessons and habits of the past. According to sociologist Zygmunt Bauman (2004), such cultural logic is deeply flawed because a relevant learning culture must map directly onto what he calls the *liquid-modern* social world for which young people learn – that is, the world that can no longer be relied upon to maintain its predictable social shape. Bauman evokes the ‘rat-in-the-maze’ experiments that were the basis of traditional behavioral notions of learning to ask what would happen if all parts of the maze were to melt, warp and move. What if the partitions and the rewards were continuously shifting within the maze instead of being in fixed and predictable positions, asks Bauman (2004), and if the targets were such that they “tended to lose their attraction well before the rats could reach them, while other similarly short-lived allurements diverted their attention and drew away their desire?” (p. 21).

For Bauman, the warping, shifting and melting of the predictable structure and rewards of the maze is a metaphor for what has happened to learning. The capacity to learn and reproduce appropriate social behaviors is no longer the key to success that it once was. Going to a ‘good’ school, getting ‘good’ grades, doing a traditional degree in a ‘good’ university – all this is no longer a guarantee of the good life. Instead of opening up possibilities, much formal education is actually unhelpful because it assumes a fixed or predictable social world that no longer exists. For instance, in many schools we still prioritize memorization of facts at the expense of strategic agility when it comes to what and how we assess children’s learning. Yet now that there are no predictable pathways to guaranteed social rewards, we cannot sustain the notion that our children can and should learn as former generations did. Schooling systems that put standardized testing at the center of educational enterprise replicate the educational world in which pre-millennial generations came to the classroom rather than the present world.

This is a scenario familiar to those who have read Peddiwell’s 1939 classic satirical text, ‘Sabre-Tooth Curriculum’,¹ in which what is taught in schools has little or no bearing on a world utterly transformed beyond the classroom walls. To continue the sort of literacy practices and knowledge platforms which made for success decades before is to short-change our k-12 cohorts at every level. On the other hand, those teachers who are active learners themselves model what it means to be systematically curious. They actively support student learning by helping them steer a path as knowledgeable users of information. In an ecology of distraction and interruption, effective teachers know that controlling and commanding is as unhelpful as

¹ See <http://sabertooth-curriculum.wikispaces.com/>

setting students adrift in a sea of information, most of which will be of dubious value. The shift, then, is from Sage-on-the-Stage *and* Guide-on-the-Side to Meddler-in-the-Middle.²

A teacher who ‘meddles-in-the-middle’ is active and engaged. They seek to introduce their students into the pleasure of the rigor of complex thinking. With high expectations about the capacity of all of their students, they take responsibility for inducting them into communities of creative practice, regardless of their ethnic or social background, or their past performances on standardized tests. Meddlers-in-the-middle do not rush in to save students from the struggle that higher order thinking involves, but they do see ‘giving access to complexity’ as fundamental to their planning. Moreover, they do not presume that the highest achievers in the class are the best learners. Indeed, they anticipate that many of the students who are on the margins of the school culture may have more to offer in terms of creative effort. Students of teachers who are Meddlers-in-the-middle become practiced in staying in the grey of ‘not knowing’ and ‘not yet’. They do not rely on or expect constant praise: they learn as much from the instructive complications of error-making and uncertainty as they do from finding solutions and getting rewards.

What Price Relevance?

As the Conceptual Age continues to make unprecedented demands on what and how students and teachers learn, schools are becoming more important and less relevant than ever. Research tells us that formal education is still important because of the weight of evidence that a more highly educated population means a better lifestyle, better health, a bigger pay packet and a more productive economy. It makes for stronger workforce participation and a better chance of re-entering the workforce after redundancy.³ We also know that that young people still need high levels of traditional literacy and numeracy as a platform from which to build high level functioning in a ‘super-complex’ economic and social order. Yet much of the daily activity of schools is of dubious relevance when it comes to such a fast-paced and uncertain world.

As social scientist Mark Warschauer (2007) points out, we live in paradoxical times in relation to literacy. Whether we call this the Digital Age, or the Late Age of Print or the Post-Typographic Society, information literacy still depends to a large extent on print literacy. Indeed, Warschauer insists that competence in traditional reading and writing is often a springboard to success in the world of new literacies. In doing so, he (2007) challenges “romantic notions of the empowering potential of

²See ‘The Creative Workforce’ (McWilliam, 2008) for a chapter on this shift and examples of working as a Meddler in the Middle.

³See for example, the World Bank Policy Research Working Paper 4122 (February, 2007) that amasses a large amount of empirical evidence to show that a strong relationship exists worldwide between educational quality, economic growth and social stability.

digital tools and new media in and of themselves” (p. 44). It is not enough, Warschauer argues, to be able to create multi-media presentations with the latest digital tools, or to spend increasing amounts of time in front of a computer screen. While the capacities associated with ‘going digital’ are useful and important, they are insufficient when it comes to the skills needed to detect the valuable Signals amongst the burgeoning Noise. They can even be counter-productive if they are relied on to take the place of higher order thinking. The urgent imperative for schools and universities is to build the capacity to discern what is *really* worth knowing amongst all the misleading or poor quality information being generated from nano-second to nano-second. It also implies the need to ‘unlearn’, not just to learn. Templates that are useful one day become obsolete the next.

‘Unlearning’ is harder than learning. It means re-examining those things that have gone without saying as ‘true’ or relevant or important. Once we have been rewarded for particular skills, capacities or dispositions, it is counter-intuitive to jettison them and unsettling to see them displaced by a new set of priorities. For example, Lawrence Lessig’s (2008) insistence that text, image and sound are equally crucial to “remix technologies” and thus ought to have parity of esteem in the evaluation of student learning, is a bridge too far for those teachers for whom the written word, correctly delivered, is the ‘roast’, and sound and image the ‘garnish’. Likewise Lessig’s view that literacy in and for this century is better understood as the knowledge and manipulation of multi-media technologies. This is a far cry from literacy as correct spelling and punctuation!

By implication, then, the point of learning in the era of Big Data is neither ‘coverage’ (how many spelling) nor mastery (how hard was the spelling). Both become meaningless and unachievable fantasies when information growth outstrips human capacity to discern the helpful from the hollow. What counts more than ever is to use the fullest panoply of human and technological resources at hand to put curiosity to work in a systematic way. And this means, in turn, paying attention to disconfirming evidence – to ideas that run counter to familiar concepts, time-honoured templates and personal intuition.

To illustrate, let us look at a website that is available to all interested in unusual creatures of land and sea. The website <http://zapatopi.net/treeoctopus/> is dedicated to helping save the endangered Pacific Northwest Tree Octopus from extinction. There is nothing about its appearance or the formatting of its contents that betrays its status as a Big Data hoax, beyond its assertion of the existence of such a creature as a tree-dwelling octopus. It has all the hallmarks of a bona fide site for investigating animals – with data provided about ‘sightings’, and scientific data provided about its ‘brain to body ratio’, its capacity to adapt to the arboreal world, and so on. Quite simply, the information on the website would be hard to distinguish as bogus, given the apparent authenticity of the presentation. It looks like a trustworthy account from beginning to end. As education technology consultant Brian Mull points out, many young people (and older ones too) would ‘consume’ the contents of this and other dubious websites without any sense that they were being conned. It is only when ‘the truth’ is brought in from elsewhere that the uncritical web-reader is undeceived. For this reason, Mull (2013) argues, building the sort of skep-

ticism that breeds a healthy distrust of web-based data (or indeed, any data!) is not something we can leave to chance. It must be learned systematically and practiced routinely as a developmental capacity for distinguishing Signals from Noise.

How could it be that so many of us buy the ‘tree-octopus’ story? For it was evident in Mull’s workshop at the SGIS ‘Many Languages, One School’ Conference (Leysin, Switzerland, 8/9 March, Mull, 2013) that most of the experienced teachers who attended were taken in by a website that was presented as such ‘good science’. It is not simply the seductiveness of such websites, but the fact that the easiest monitoring we do, according to Daniel Kahneman (2011), author of ‘Thinking Fast and Slow’ is speedy, intuitive and biased. Acceptance of the truth of something that looks, sounds and feels like science we ‘know’, means that our minds do not have to do the hard and slow work of seeking disconfirming evidence – of re-assessing the ‘auto-pilot’ that is the dominant way we engage with the world.

If ‘Average’ is Over

Effortless thinking will not serve us well in the Conceptual Age. As economist Tyler Cowen (2013) sees it, the increasing productivity of intelligent machines and economic globalization are splitting modern economies into both very stagnant sectors, and very dynamic sectors, such that “they will either rise to the top in terms of quality or make do with unimpressive results” (p. 4). This cleaving of economic domains, and the identities and incomes that are produced within them, will make for a “hyper-meritocracy” (p. xi) of two distinct social classes. The ‘winners’ will be the small number of highly self-motivated individuals who are willing and able to add value to a highly computerized and automated world of economic productivity. The ‘others’ will include those with ‘average’ performance and aspirations who will find it increasingly difficult to maintain their social position, let alone gain any upward traction. They are more likely to be ‘slip slidin’ away’, in the familiar words of the Paul Simon song, to join the growing ranks of the under-employed and unemployed. Automation, says Cowen (2013), “is a wave that will lift you or that will dump you” (p. 6). In similar vein, recent research from Oxford University investigated 700 different kinds of work, to conclude that “nearly half of all jobs in the United States could be lost to machines within the next twenty years.”⁴

The social effect of this on average performers seeking secure and reasonably remunerated work opportunities is both undesirable but plausible. It is a trend borne out in a recent OECD Report (2015) that calls attention to the fact that “non-standard work” now accounts for more than half of all job creation. Business editor for *The World Today*, Peter Ryan (2015), highlights its finding that “a surge in self-employment and more temporary and part-time roles over the past two decades”

⁴See ‘Technology at Work: The Future of Innovation and Employment (Feb, 2015), <http://www.oxfordmartin.ox.ac.uk/downloads/reports/Technology%20at%20Work.pdf>, accessed 15 June, 2015.

means that “more workers have insecure jobs which tend to be lower quality, lower paid and the pay packet is more often than not lighter”. When it comes to employment and employability, then, the net effect of digital technologies is deeply disruptive of conventional patterns of a working life.

While the irrelevance of schooling to the times has been constant theme of contemporary educational discourse, calls for educational transformation are becoming much more urgent and vociferous. Author Gareth Hutchens, for example, is unequivocal in his insistence that “our education system is not equipping students with the skills needed to adapt” (Hutchens, 2015). Setting aside for the moment the perennial debate about the *real* purpose of schooling, a recent OECD finding that “20% of our 15-year-olds feel that they don't belong in school” is sobering indeed. More so when aligned with Gallup polling indicating that “by year 5, 25% of students have disengaged from learning... and by the time they reach year 12 that figure is one in two” (Haesler, 2015).

It is deeply troubling that there have always been those poorly served by the schooling system. However, the idea that technological progress is going to create many more casualties is acknowledged even among the strongest advocates for automating our industrial and commercial processes (Byrnjolfsson & McAfee, 2014). Cowen asserts that ordinary people are increasingly unable to cull from science a general, intelligible picture of the world, and that this gap will only continue to widen. In his review of Cowen's thesis, Rick Searle (2015) depicts this development as “a disaster” inasmuch as “science gives us the only picture of the world that is capable of being universally shared which is also able to accurately guide our response to both nature and the technological world”. It is a trend that has spawned a plethora of calls for a review of the entire education sector, “to start producing far more people literate in science, technology, engineering and mathematics subjects” (Hutchens, 2015).

However, there is more to infer for educators than the urgency of arresting and remediating the current flight from (and fright of) advanced mathematics and science (McWilliam, Poronnik, & Taylor, 2008). As Elizabeth Jacobs asserts, it is not simply learning about science and technology that is implicated, but *the capacity to learn more generally*:

High earners are taking ever more advantage of machine intelligence in data analysis and achieving ever-better results. Meanwhile, low earners *who haven't committed to learning* ... have poor prospects... A steady, secure life somewhere in the middle—average—is over. (Jacobs, 2015)

In other words, in the new generation of jobs the demand will be for high levels of cognitive labor, higher indeed than many professional workers currently utilize in accessing and processing data. Those of us who cannot produce original ideas and products that add value to automated and digitized processes will be at risk. ‘Adding value’ is not synonymous with ‘digital savvy’. Indeed, value-adding capacities may well be those that ‘personalize’ communications or add artistic flair to high-end functionality. What it will *not* be is easy!

If our young people are to thrive in a work world where remuneration is moving away from the single payroll to micro-revenues arising from a variety of short-term opportunities, they will need to understand and exploit the affordances of personalized learning made possible through digitalization. Formal education, with its lock-step and lock-in approach to programs of learning militates against the sort of high challenge, fast-paced learning needed by dynamic enterprises. For Cowen, 'Average is Over' renders the classroom even less relevant, given that the skills needed to work alongside and add value to smart machines are well beyond the literacies and numeracies developed through mainstream school curricula. If, as James Bessen (2013) argues, "workers who have mastered those skills are mostly self-taught, and only a minority of workers have the talents required to learn in this fashion", then this places a priority on long-term application and self-management. For our young people to function at the high level of cognitive curiosity and confidence necessary to future learning and employment opportunities, they will need to be practiced in both.

Successful, Improvable Schools

Schools and teachers bear the brunt of so much criticism in the media and elsewhere for what they are not doing to help students learn for these challenging times. "Schools are squelchers," says creativity guru Richard Florida (2004) from the safe distance of the Harvard School of Economics, and it is for this reason, he says, that we should look to life *after* school, not during it, as the time of creative possibility. Marc Prensky (2002) is likewise dismissive of schooling because of the sector's slow uptake of digital learning tools despite the fact that many teachers are now, like their students, 'digital natives'. Schools are "stealing dreams" says author and critic Seth Godin (2012), instead of helping young people "get better at the things that matter". Yet when we look at what Godin (2012) proposes as "ways to re-think schools" – for example, "homework during the day, lectures at night", "open book, open note, all the time" and "access to any course, anywhere in the world", it becomes clear that such 'correctives' would inevitably fly in the face of the custodial functions of the school in relation to the care of minors. If schools are to be sites in which learning cultures thrive, they will have to do so within the reality of their social contract as custodial agencies, however much we might wish otherwise. While 'on-line' education is now a vital part of the schooling enterprise, schools as 'real places' in which real people come together in real time is not an idea that looks like fading away any time soon.

So how might we work to improve what schooling is, at the same time that we look to what schools might become? The schooling that will best serve learners in and for this Conceptual Age will build student capacity to select, re-shuffle, combine, or synthesize already existing facts ideas, faculties and skills in original ways. David Perkins (1981), in *The Mind's Best Work*, names the skills most relevant to our times as: pattern recognition, creation of analogies and mental models, the abil-

ity to cross domains, exploration of alternatives, knowledge of schema for problem-solving, and fluency of thought. All of these capacities require a risk-taking disposition, not a disposition to routine thinking, compliance and 'easy success'. This is because crossing domains and the exploration of alternatives demand not only agility (mental, cultural, epistemological) but also the capacity to tolerate error and not equate it with failure. A risk-taking disposition allows young people to expect error-making and to learn from it, rather than to hunker down into the narrow thinking and routines that are sanctioned by a compliance and conformity culture dictated 'for safety's sake'.

The future is something we create together, not somewhere we are going. If we are to provide an education for these times and beyond, our schools will need to focus their energies on building collaborative learning cultures across entire school populations. What distinguishes a *learning culture* from a mere *schooling culture* is the centrality of the collective capacity for *creative imagining*. When our young people experience the authentic pleasures of the rigor of creative thinking, there will be no turning them back from learning. And that is precisely the disposition needed for living well in the Conceptual Age.

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Chapter 2

Digitalizing Tradition: Staging Postcolonial Elite School Identities in the Online Environment

Cameron McCarthy, Koeli Moitra Goel, Brenda Nyandiko Sanya, Heather Greenhalgh-Spencer, and Chunfeng Lin

Abstract This chapter probes deeply into the tangled historicities that animate British-bequeathed elite schools now operating in new competitive transnational educational markets in selected post-developmental states. The scenarios of this competition are increasingly moving online in photo and video-sharing websites such as YouTube, Facebook and Flickr and in the websites that individual schools are creating to consecrate their school heritages. Drawing from data gathered in a nine-country international study of schools across the world, the theoretical and methodological emphasis in this chapter is on extending the ethnographic focus of this research to a discursive and textual analysis of an emerging digital environment. We examine closely the work that elite institutions in two specific postcolonial societies are doing with their historical archives, preserved cultural objects, architecture, emblems, mottos and their school curricula as they marshal these cultural resources at the crossroads of profound change precipitated by globalization and attendant neoliberal imperatives. This change is articulated across the whole gamut of global forces, connections, and aspirations. It is in relation to and through these dynamics that postcolonial elite schools must now position and reposition themselves – acting and intervening in and responding to new globalizing circumstances that often cut at right angles to the historical narratives and the very social organization of these educational institutions with legacies linked to England. Globalizing developments have precipitated efforts on the part of these schools to mobilize their rich heritages and pasts as a material resource and not simply as a matter of indelible and inviolate tradition. History, then, we maintain in this context, cannot be reduced

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to the realm of epiphenomena of securely linear school chronologies. Instead, drawing on Walter Benjamin's "Theses," we look at the way in which postcolonial school histories are "active in the present" and the way in which schools in India and Barbados are adroitly and selectively managing their school identities in the light of globalization. The results of these interventions are not guaranteed. They often run up against the revolution of rising expectations of school youngsters and their parents, the taste for global cultures and global futures indicative of the global ambitions of the young, and the pressures of alumni and other stakeholder interests which must be navigated.

I grew up in a very small town called Harda, and I came to Rippon College because I knew I wanted to experience the **entire** world. (High School Student, Rippon College, YouTube video).

So you're reading about Mounbatten and you're walking in the library and you see his name inked on the patron's board, and you think, 'wow, I'm part of something special!' (Student, Rippon College, YouTube).

History is the subject of a structure whose site is not homogenous, empty time, but time filled by the presence of the now... (Benjamin, 1968, p. 261).

This chapter probes into the deeply tangled historicities that animate British-bequeathed elite schools now operating in new competitive transnational educational markets in selected post-developmental states. It grows out of and extends research first conducted as a large-scale, field-based, ethnographic study of the way in which schools in nine different countries (Singapore, India, Barbados, Hong Kong, Australia, Northern Cyprus, Argentina, South Africa, and England) are currently preparing youngsters for globalization. These schools all share one distinctive historical feature: they were all established during the high point of British colonial rule in the eighteenth and nineteenth centuries. While this larger research project gathered data through traditional ethnographic methods of participant observation, interviews, the shadowing of students, etc., the theoretical and methodological emphasis in this chapter is on extending the ethnographic focus of this research to a discursive and textual analysis of the emerging digital environment. In what follows, we continue to draw on that earlier ethnographic data but our principal focus is on evaluating symbolic materials culled from the digital domain. We specifically explore the digital making of school identity. Postcolonial elite schools are increasing their footprint in the digital environment. They are seeking to elaborate a digital presence, and construct an identity or brand through the creation of official websites, YouTube channels, and other officially sanctioned digital signposts. Students at our research schools, also, contribute to the digital "making" of school identity. Through online comments, personal websites and blogs, uploaded videos, and other digital markers, students sometimes validate and other times contest the "official" identity of the school. This digital identity making, re-making, and contestation is set against multiple backdrops of education. There is the backdrop of a global education market, where our research schools compete for elite students across all continents. There is the backdrop of the digital revolution, where schools

are increasingly under pressure to portray themselves as digitally savvy and produce students who are digitally competent. In fact, it is sometimes this pressure to produce digitally savvy students that feeds into the tension where students' digital representation of "the school" pushes against the school administration's official narratives about its history and identity. In this chapter, our research on the digital making of school identity is also set against the backdrop of postcolonialism. The scrim of global, digital, postcoloniality shapes the ways that school identity is made and contested online.

Utilizing data from the multi-sited ethnography on postcolonial elite education previously mentioned, we extend the field research into the digital presence created both in the official publicity mobilized by these schools and the informal and organizational communication elaborated by their students. We focus primarily on two schools that are part of this research mentioned above: one from India, Rippon College (RC), and one from Barbados, Old Cloisters (OC). We specifically illustrate how the legacies of colonialism continue to flourish and are morphed into the school cultures represented online, offering a thick description of how identity is being made and contested in the digital domain. To better understand the process of digitizing tradition, we offer rich and nuanced description of the ways in which elite schools in the contemporary postcolonial and global context are navigating and repurposing narratives of British tradition, heritage, and cultural embeddedness in their online representations.

We constantly work back and forth between data gathered in the "field," as it were, through ethnographic interviews, and document collection of images and texts culled from websites in the virtual domain. We draw on online images and text curated by the schools, as well as images and texts created by the students of these two schools as a way of exploring how digital identity making works and its points of tension. In a very literal sense, we are looking at the stories that are being told about these two schools through online images, advertisements, and narratives; the sometimes competing stories being told by students on the one hand, and the official school publicity on the other.

Through our research, we found that postcolonial elite schools such as RC and OC recognize that they need to create a digital presence. They are therefore grappling with the need to articulate themselves as both relevant and modern even as they are existentially tied to heritage and tradition. In fact, the focus on tradition is particularly revealing of the way these schools are embedded in the global, digital, and postcolonial landscapes. Both the Barbadian and Indian schools foregrounded their connections to a British colonial past as part of their online advertising and narrations of identity. Both schools also focused on a sense of national identity that has moved beyond the colonial past. The students of these schools, in their YouTube videos, online comments, and advertising of student events, evinced both a sense of ambivalence about this coming together of heritage and modern presence, as well as a keen sense of bricolage and play. Students often parodied heritage and tradition, as well as postcolonial politics, in their online writings and pictures about the school.

To understand the current state of the elite schools in this study, one must return to the colonial histories in which our research schools are situated. These schools, which were founded as British colonial schools, are reshaping themselves in the postcolonial context, holding onto their colonial roots and to the current British schooling system as well as embedding themselves within national and local contexts. Given their specific histories, national cultures, and contemporary status, these schools straddle the fine line of being local and global, reflecting a glocality (Arnové, Torres, & Franz, 2012; Bauman, 1998).¹ In distinct ways, these schools grapple with the need to project themselves not merely as local institutions, but as global sites of excellence that are part of a transnational market of education and schooling. Images of campuses, documentation of student activities, the scenes, connections, curricula, and transactions of these schools are increasingly moving online to interactive photo and video-sharing websites such as YouTube, Facebook, Instagram, and Flickr and in the websites that individual schools are creating to consecrate their heritages. By exploring the digital stories of RC and OC – the narratives created officially as well as those of the students – we see that a new visual vocabulary is emerging that captures the ambivalence of the current age where colonial, postcolonial and global all seem to be called forth at random as if to play their part in an un-choreographed dance drama. Schools portray both a sense of history and modernity in order to attract the global elite student. Students, on the other hand, sometimes validate this portrayal and at other times play with this official line. Students talk about the honor of attending the school, and yet also describe a sense of being at an institution that is not quite fully in the present.

The rationale of this chapter, then, arrives from a re-thinking of the life world of these postcolonial elite schools in the age of digital communication. We argue that while their past and present are embroiled in intricate transactions navigated in the iconic moments of representation of their public images, other narratives spin out from the voluminous folds of the Internet, provoking a questioning of received tradition and the historicity of institutional memories of these schools. These questions bear upon the matter of whose history gets retained for posterity, and whose gets lost in the ravages of time. Harkening back to Walter Benjamin's question, if one were to ask "with whom the adherents of historicism actually empathize?" in these schools, we see that the answer still is: "with the victor" (1968, p. 256).

¹ Zygmunt Bauman has described glocalization as a redistribution of privileges and deprivations . . . of resources and impotence, of power and powerlessness, of freedom and constraint . . . a process of world-wide re-stratification, in the course of which a new world-wide socio-cultural hierarchy is put together. . . . What is free choice for some is cruel fate for some others (1998, p. 43). Glocal according to Bauman highlights the differences between rich and poor nations but can also be used to understand the distribution of knowledge in the use of technology, and in the process of learning.

The Structure of the Chapter

In the process of presenting our argument, we begin first by laying the theoretical terrain that informs our work – briefly outlining the value of using the postcolonial lens, and not just an understanding of schools as embedded in a global moment. Then we move on to scholarly work in the area of online representation. While there has been plenty of discussion on whether the Internet will alter, replace or parallel existing modes of cultural representation and discourse, we focus mainly on reviewing literature that shows how the Internet increasingly connects people in new ways across boundaries and changes the way ideas are communicated and exchanged, especially among youthful populations. Next, we turn to the actual cases of the school communities in question – RC in India and OC in Barbados – and their radical turn to the online environment to navigate inherited tradition in present circumstances. We explore the online world of these schools and their students by examining artifacts that we culled from video-sharing platforms like YouTube. Both the official school stories as well as the sometimes-countering stories of the students are explored. We look at the mobilization and use of online affordances associated with school websites and social media venues such as Facebook, seeking elucidation of what might be in the making for the world of instruction. We move between these sites and ethnographically gathered data to underscore ruptures and continuities between tradition and the modern in these schools. In recording what we have seen as the footprint of the virtual across a globally mobilized landscape, we grapple with the complex and nuanced ground of tangled historicities where change is articulated across the whole gamut of global forces, connections, and aspirations. Both official school publications and student narratives create a presence online that contributes to the making of school identity; but this identity-making is always/already embedded in a context where both schools and students feel pressure to be global, tech-savvy, and oriented toward a transnational economy, while also not losing an understanding of the colonial past. We conclude by noting a central tendency emerging in the digitalization processes associated with the schools under examination; that is that, as schools like RC and OC grapple with overlaid agendas to accommodate their new global identities within the narratives of their past histories, new agendas, new narratives and new identities are proposed in the social world and fields of online cultural production.

A Postcolonial Re-reading of History-Making in the Digital Era

The value of the term postcolonial is that “it re-reads ‘colonization’ as part of an essentially transnational and transcultural ‘global’ process” (Hall, 1996, 247). Postcolonialism may thus be viewed as offering an alternative framework for historical, political and epistemological research, based on the view that postcolonial

theory is an effort at re-reading traditional history and capitalist modernity – and it constitutes an inscription of global events *outside* the Eurocentric grand narrative on center-periphery relations. Postcolonial research is not necessarily only studying the influence of colonization on indigenous societies or how the West perceives the East (Said, 1979). It is in a large measure about how in previously colonized societies practices, discourse, and scholarship themselves are imbricated within a network of contradictory yet overlapping historical, cultural and political responses arising from the precarious conditions of colonization (Lowe, 2015).

Postcolonialism usually advances counter-narratives (Bhabha, 1994) on gender histories, epistemological formulations, political expediency, economic domination or cultural imperialism and engages with the complex field of hegemonic power relations within formerly colonized societies. The basic premise here in deploying postcolonialism is that it provides an opportunity to review the elite school environments as placed within a milieu of incredible cultural hybridities, transnational affiliations, emergent identities and social liminalities. Postcolonial theory helps predicate our work on an acceptance of heterogeneous conditions of space and time and insists on the active dialogical flow of agency across the center-periphery divide, placing emphasis on the visual domain and the virtual life worlds of real existing institutions and the asymmetrical relations that have emerged out of colonialism.

Crosscurrents of the digital revolution, media innovations and ever new global connectivities create more opportunities for circulation of images, videos and grassroots cultural productions than ever before and also generate possibilities for wider dissemination of parallel narratives. For young adults, like high school students, computers and handheld devices are seen not so much as technology as they are extensions of their own faculties. Entire conversations are held through text-messaging, relationships are built and maintained over Facebook, and their life possessions – now more often digital than material – are archived on media spaces like YouTube and Facebook. In this chapter, we look at online media presentations of elite schools in India and Barbados to develop a deeper understanding of the past and present of these postcolonial institutions and how their identities are shaped through students' re-narration of history and tradition – not merely the histories that they belong to, but those that belong to them.

YouTube, which has become the third most visited website in the world after Google and Facebook (Alexa, 2015; Cayari, 2011), affords teenagers and young adults a stable portal for their continuous search for entertainment and knowledge while also serving as a convenient and accessible archive. Past research has shown that user-generated online videos are developing as valuable tools for enhancing interactive expression and democratic discourse (Milliken, Gibson, O'Donnell, & Singer, 2008). Scholars focusing particularly on YouTube have pointed out that the video-sharing platform has not simply become a major web phenomenon, but that it is emerging also as a social networking site where video content is uploaded for a wide range of communicative purposes “embedded in various existing or emerging taste communities, media subcultures, and fandoms” (Burgess & Green, 2009, p. 24). The leading users of such a social core, or “YouTubers,” are important drivers of YouTube's attention economy, often co-creators of YouTube's emergent

culture with possibilities of creating a sense of community among users of video-sharing websites across geo-political regions. It is not only Google which has become the world's most popular educational and investigative site, but YouTube has also emerged as the most convenient entertainment and educational marketplace, to be culled from at will and yield from its bountiful archives of customized as well as prepackaged content. Its "democratizing" dimension is augmented by the ever-increasing proliferation of digital communication technology. While more nuanced studies do point to the fact that this democratizing effect is in no way universal and its boundaries defined by a plethora of factors – geographical, economic and social (Desplanques, 2009) – we call attention here to how, despite inevitable resistance, the application of new communication technologies is precipitating boundary changes to instructional environments and creating possibilities of self-representation through virtual multi-media learning environments (Barron, Gomez, Pinkard, & Martin, 2014).

Cultural and educational practices, always sharing a symbiotic relationship, have been rapidly changing form, their relationship constantly evolving on the Internet. Students traverse the websites in search of material for their classroom projects while educators often link classroom projects to online media venues to encourage informal learning techniques. By exploring the visual field existing in the digital realm, we try to investigate how schools are lifting themselves online and how, particularly, students are emerging as creators of the new readings of their institutions' history and tradition. These youngsters are in the process of digitizing their school experiences, privileging those particular aspects of school life that accentuate their own interpretations of traditions in relation to what they often articulate as an entrepreneurial vision of their future.

Such privileging, while common within school life, now has the potential of cutting across cultural and geographical boundaries – gaining new currency as students from different parts of the world upload their experiences on the internet. For instance, YouTubers promote and participate in various subcultures when they develop online communities on the basis of shared experiences in real life (Burgess & Green, 2009). In building communities by connecting to students from various parts of the world – though far apart in geographies but now closely connected because of similar orientation and agenda – students are now forging an emerging world community of colleagues from similar schools and spurring the sharing of traditions and histories.

The sure and steady evolution of these elite schools' identities on the Internet calls for an analysis that takes into account their roots in British colonial history. Established by settler populations and the colonial administration and its officers in the erstwhile British colonies in India or the Caribbean, these elite schools have to be placed within the coordinates of an intensely contested and rapidly changing space, shifting gears as their respective cultures and societies take twists and turns through some major shifts – from colonial rule to postcolonial self-government – finally landing onto a globalized capitalistic and neoliberal worldview. The two schools to which we refer, one in Barbados and one in India, are miles apart geographically and culturally, but nevertheless show a similarity in how their histories

and traditions have taken shape under the influence of their respective colonial, postcolonial societies and are renegotiated and remediated within the current globalized culture. These same connections can be seen in many other schools in our nine-country study, but which we are not able to explore in this chapter. In our next two sections, we explore the online arrival of the two schools under consideration, Rippon College and Old Cloisters.

Traditions and Contemporary Portraits: Online Productions Chronicle Rippon College History

Founded in the 1880s by a British officer in the colonial administration, Rippon College (RC) in India, was part of the project of establishing institutions for imparting British education to the indigenous princes of central India's monarchies, chiefdoms and Princely States. For the first twenty-eight years, the institution was exclusively dedicated to educating the heirs of various royal families of the British Indian Empire. The school holds on to this distinguished history not merely with numerous photographs of royal and colonial benefactors lining its Assembly Hall and corridors, but pictures of its early patrons also proliferate in RC's online offerings. In 1940, the Board of Governors of the school came together with a few other institutions and started the Indian Public Schools Conference. In preparing its students for approaching times and for a free, modern India, RC's admissions were thrown open to the general public based on merit – regardless of lineage, caste or creed.

While internet researchers have pointed to the growing culture of online videos, YouTube has been identified as gaining “meteoric popularity as an online video-sharing website,” receiving more than 2 billion views per day at the end of 5 years' of service in 2010, (Snelson, 2011, p 159), going up to 3 billion views per day in May, 2011 (Henry, 2011). According to YouTube's own statistics (YouTube Official Blog, October 22, 2015), the number of people watching YouTube per day is up 40% y/y since March 2014, the number of hours people spend watching videos on YouTube (watch time) has increased by 60% y/y – the fastest growth in 2 years, and the number of hours people spend watching videos *on mobile devices* has increased by 100% y/y. What is pertinent to our current study is that more than 80% of YouTube's billions of views each day come from users in countries outside the U.S., and the video productions they are watching are just as global.

Since YouTube has also been identified as a top video-sharing site related to various educational practices we focus on YouTube (in addition to our attention to RC's official website and promotions) as a stable platform to gather cultural artifacts from, looking for all videos with “Rippon College” in their title. Data was also collected from student blogs, social network postings and other organizations' postings of student activities found under the search term “Rippon College.” RC's Vision Statement on its website, affirms its commitment to combining the “best of traditions with modernity” within a democratic environment, but also adds a more current



Fig. 2.1 RC's majestic main building

ambience with the following mission: “To create global citizens with strong values, who are environmentally and socially conscious and who have the ability to constantly drive and benefit from change.” The student productions and presentations on the web, however, yield a strikingly vibrant but different narrative, pointing to two parallel cultures evolving from (a) the school’s story of its history and traditions and (b) the students’ own narration of the history not merely that they belong to but that is being built by them.

In our research for this chapter, we conducted Google searches, especially examining the Google Images section, and trolled YouTube to understand the history and the present culture of RC and how the school chooses to present itself. In Google Images, the school is represented by the circulation of photographs of its stately architecture, Coat-of-Arms, crests, British Raj / Indian regalia, statues, and royal patrons. If one were to limit oneself to the school’s official website, then RC’s main building, officially inaugurated in 1912 by the Viceroy of India and often referred to as the “Raj Wada,” for its majestic façade, would be the most conspicuous symbol (See Fig. 2.1).

Designed like a royal retreat, this landmark building becomes an iconic feature of most RC presentations. Student videos, on the other hand, while grounded in a sense of place with repeated focus on activities held in the central courtyard or spontaneous gathering of students in the hallways, are more dynamic. The students construct a field of cultural production of their own by focusing on recurring student activities: graduation ceremonies, competitive events, dramatic performances, and international Round Square visits. Round Square is a London-based international school fraternity with which RC is affiliated. This affiliation enables the RC students to become part of a wide international student community with projects and frequent exchanges between various schools of this worldwide network. In presentations on graduation, student productions deviate dramatically from the school’s presentation of its early graduates (see Fig. 2.2. “First Batch of RC Graduates”) both in form and content.

Fig. 2.2 First batch of RC graduates



As illustrated in Fig. 2.2, the official project is a much more traditional photographic arrangement, in sepia, of a group of royal patrons. Contemporary students, on the other hand, celebrate the 128th Batch of graduates (2010–2011) with aplomb – in a YouTube video unfolding to the tunes of popular Bollywood film music.

It is not as if the royal ambience has disappeared completely even after 60 years of Independence and over six decades since the integration of princely states into the Indian Union. The erstwhile royalty have often managed to retain a certain prominence in public institutions by becoming part of postcolonial political formations. RC's online world presents one such celebrated space and many of the Google images reflect a sense of this glory, pomp and regality. The photos and videos of well-choreographed special events, cricket matches, felicitation of visiting dignitaries, make it clear that this is no common ground that the students are treading. But it is undeniable that new icons are emerging and new traditions are in the making, as in the narratives told in the online videos uploaded to YouTube. Whereas the RC Business School is emerging as a contender for the central place within the visual field of the digital realm, almost replacing the iconic "Raj Wada," certain western traditions not noticed before in Indian culture are also being highlighted. One such tradition is the celebration of Halloween, a festival without any history in Indian culture. Several photographs uploaded by the British Council's "School Online" program portrays the event "Scary Scary Halloween Day Dress-up in Costumes" by RC Junior school students.

There is also the emerging story of a global student culture, accentuated in the Round Square affiliation. Many of the RC-related videologs on YouTube are those of international students talking about their Round Square visits – filling in the colors to this evolving tapestry of a world community of students who share their lives and school experiences by posting videos on YouTube, and connecting on the web through Facebook postings, blogs, websites, Twitter messages and Tumblr pictures. This also colors the official posts in the school newsletter “RC Daily,” where issue after issue is inundated with pictures on exchange programs and student visits to various countries like Scotland, Peru, Germany, Australia, Canada or South Africa.

Caught at the intersection of a colonial heritage and the tremendous cultural momentum associated with globalization, in the crossroads between royal patronage of the past and the neoliberal push from the capitalist present, the editorial introduction to a school publication is an interesting comment on the school’s inclination and where students are headed: “The struggle to become nobler, better, more qualified, more *Ivy League worthy*, more artistic and to feel better about ourselves is very much visible,” (Rippon College Newsletter, 2014–2015). Though identity work performed by RC has shifted focus from that of a haloed institution meant for the education of the royal heirs of Central India to a more contemporary clientele, the school holds its sway with current alumni lists including India’s several ruling politicians and business leaders. The newest addition to this elite class of patrons is the leading Indian conglomerate, Credence Corporation. By dedicating the central auditorium to its founder and iconic business magnate, Dhirenchai Patel, RC has pulled in substantial support for its Business School from Credence Corporation. Google images and YouTube videos abound online, dedicated to the state-of-the-art facility, libraries, lounges and smart classrooms of the Business School, pointing again to the changing direction of the institution from coaching “royal heirs” to preparing “global citizens”.

The online student world of RC might be a little difficult to animate in textual presentations like the current chapter, but it is nevertheless intense and vibrant – bearing the mark of youth and leaving its own stamp on the postcolonial institution’s history in the digital realm (See Fig. 2.3). One such realm is the world of Facebook where students experiment with the school’s colonial logos and Coat-of-Arms under the label “Rippon College Memes.” The caricatures tread a fine line between joviality and sinister parodies of historical emblems the school is long associated with. At other times, Facebook pages open up treasure troves with pictures of RC students mingling with alumni during Founders’ Day celebrations or images from festivals like “Utopia 2014” with breathtaking scenes of fashion shows, floral *rangolis*,² t-shirt painting and culinary contests, face paintings, *antaksharis*,³ *nukkad nataks*,⁴ dance competitions, sport competitions etc (See Fig. 2.4).

YouTubers, on the other hand, summon us to their digital world, painting their aspirations across a global landscape as they identify themselves as members of an

²Decorative floral patterns and arrangements.

³Impromptu music competitions.

⁴Street corner plays.

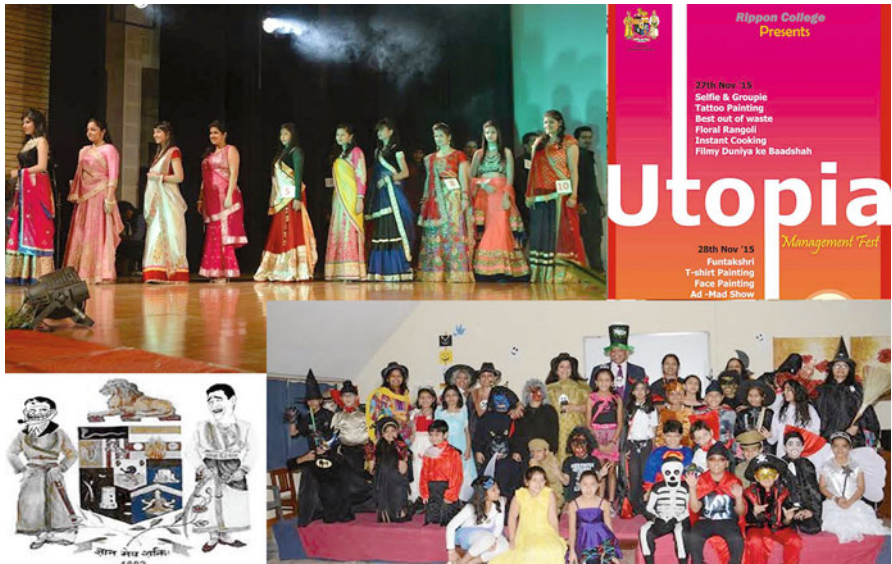


Fig. 2.3 Images posted on RC Facebook pages



Fig. 2.4 Images posted online by RC students

elite global student community. The student production titled “Tiltshift Summit 2014 @ DC (Happy)” masterfully illustrates the students’ outlook as they reach beyond the school universe even while holding on to the immense social capital it affords them. Opening to the rhythms of the British indie rock band, Bastille’s “Pompeii,” this is no amateur user-generated content but bears witness to nuts-and-bolts mastery of high-definition online video production. It is perfectly edited and compressed for smooth playback even on standard definition handheld devices. Students are shown dancing around the lawns or tennis courts, breakdancing next to the swimming pool, doing the wave or spin on a chessboard playground, as the video unfurls to Pharrell Williams’ “Happy.” They are preparing for the Global Alliance of Leading Edge Schools’ (GALES) 2014 Tiltshift Summit to be held on the RC campus. They are celebrating as much the legacy of RC’s elite heritage going back to 1882, and the facilities of its 118-acre campus, as they are exuberant about their connectedness to a worldwide community of students. GALES is an informal organization of leading schools around the world which aims at bringing together groups of students who want to look beyond the parochial concerns of their schools and national institutions to debate and discuss issues of fundamental importance facing the world, especially in education and educational leadership. The students in the YouTube video flaunt dozens of participant school names from countries across the world⁵ and their conviviality is best understood in terms of a zeitgeist that endorses inclusion in something far bigger than anything their predecessors could have ever imagined.

Their world is spontaneous, energetic, their immersion in a spirit of the age guaranteed with cultural capital and paraphernalia that relate them to youth across the world. The images that proliferate in the online student world, in blogs and social networks, are vividly indicative of this sense of sharing in a contemporary global community with pictures of students sporting “Proud to be RC-ans” t-shirts, RC caps, sweatshirts and backpacks (See Fig. 2.4.); videos highlighting smart classrooms and Coca-Cola stocked cafeterias; customer-friendly entrepreneurial skits; electronic western music programs and basketball courts. Elite-ness is however, steadfastly maintained, even in students’ portrayals, it is just a different elite-ness of being part of a global elite. It is, for many, a window on the world but they are constantly conscious of the historical status of their institution, an awareness running through much of the student discourse.

There’s a real kind of emphasis on history and historical study out here, and the idea that what you are studying is not just the history of India but a part of Rippon College legacy. So you’re reading about Mountbatten and you’re walking in the library and you see his name inked on the patron’s board, and you think, ‘wow, I’m part of something special!’ (Student, RC Indore, YouTube video, 1.30).

⁵The Punahou School (Hawaii), Montgomery Bell Academy (USA), Scotch College (Australia), Maurick College (Netherlands), Raffles Institution (Singapore), Langkaer Gymnasium (Denmark), Makuhari High School (Japan), Xavier School (Philippines), Johannes Kepler Grammar School (Czech Republic), Wellington College (U.K.), Wiedner Gymnasium (Australia), Shibuya Senior High School (Japan), Ekenas Gymnasium (Finland), Sant Ignasi-Sarria (Spain).

This validates the school's constant reinforcement of its imperial history in the circulation of images of the palatial main building, or its royal Coat of Arms or its colonial artifacts archived and curated in various sites in real and virtual spaces. It is articulated, too, in RC students' constant uploading of images that celebrate the school's prowess as illustrated in Fig. 2.4.

Schooling Ancient and Modern: The World Lifted Online at Old Cloisters

The Janus world that is evidenced at Rippon College in India in which the postcolonial elite school lifts the burnished ornamentalism of its past and its ambitions for the future online even as students drive forward on a larger, global canvas bolstered by the affordances of the digital age, also is articulated at Old Cloisters (OC) in Barbados. The online orientation of the elite school communities is not only a story of technological shifts affecting these educational institutions but they summarize the revolution of rising expectations that young people are articulating – their dream to go beyond the old terms laid out by these schools in past years. It identifies them as charter members in a new, neoliberal era where investment in the past, in institutional continuities, is not a finalist or static loyalty but a strategic, useable, alignment that can be modulated in the roiling games of ambition and in which the school and the nation – the old orienting terms of the past – are not enough. The young therefore are in part maneuvering around the commitment to membership in a national bureaucratic elite and the old pattern of final ratification in British elite universities such as Oxford and Cambridge and forging forward with desire for a wide range of positions in the new economy in which the North American university seems to be a more sure gateway. Instead of aspiring to law, medicine or the civil service they are articulating an investment in entrepreneurialism (as the RC students demonstrate above) and new exotic positions that range from underwater welding to modeling, finance and business. All of this is taking place at a school that historically has been famous for its “classical sixth” – students who won honors in Oxford and Cambridge matriculation exams for their prowess in Latin and Greek (See McCarthy, Bulut, Castro, Goel, & Greenhalgh-Spencer, 2014, pp. 211–227). Old Cloisters, as it goes online, performs a digital divide – a divide that cuts through all sectors of the school community. This divide is not so much a statement of class inequality as a statement of generational differences in investment in the past and present animating the school's establishment and the young in somewhat different ways.

As in our previous section, the illustrative material here is informed by a wide range of online and visual domain evidence, including YouTube, student and alumni websites, Facebook and Flickr as well as data drawn from ethnographic study and observation in the physical world. Like Rippon College, official histories of the school can be readily encountered online at Wikipedia, online newspapers, the

school's official website, YouTube, and websites of alumni associations operating in Barbados, New York, Toronto and London. Graduates of Old Cloisters at prestigious universities in the US such as Harvard also maintain an online presence circulating information about their accomplishments and giving off advice to contemporary students who seek to emulate them. Present-day students maintain a ferocious online presence on Facebook circulating the latest information on academic and sporting achievements, debating accomplishments and leisure outings. One is able to witness, then, a visual universe in which competing orientations of establishment versus youth are foregrounded. To illustrate this active tension we offer a vignette from the visual domain of the contemporary world of Old Cloisters. It is a world in which OC youngsters – deeply informed by the kaleidoscopic consumerist images drawn from television, online fashion sites, popular magazine – stage a “fashion show” in one of its most *hallowed* establishment spaces: the school hall. This pasarela in which the real existing world of OC young emulates and imitates the virtual world is noted below in a passage taken from our field notes on one of our ethnographic visits to OC:

Our Barbados team of researchers at Old Cloisters was invited by some of the sixth form students to view an extraordinary transaction of the current students with the past not only of their school but the island. We were led into the hallowed space of the assembly hall of Old Cloisters; a space as the school's historian, Ralph Jemmott (2006) notes, where the school's ornamental and cultivated past—its emblems, its plaques listing the names of the prestigious Barbados Scholarship holders and the portraits of its old, white British school masters going back to 1733—beams down from on high onto the school body comprised largely of Afro Barbadian youngsters. Picture this layered scene of images latent with allusions to the colonial past, trophies of the present, and the iconography and high water marks of the British public school in the postcolonial setting. But look again! This hall normally reserved for formal gatherings—morning assembly, the hosting of “speech day” in which the island's dignitaries, school officials, alumni and the parents congregate to celebrate the students' achievements and the continued success of the school—was now hosting something else. As a sign of the times, it is here that contemporary students chose to stage a fashion show engaging with their past and the ethnic history of the school in a form of self-orientalization (Potuoglu-Cook, 2006) as they signal their interests in exotic futures—modeling over the traditional career paths of lawyering or doctoring! It was a striking scene of hybridity as the models dressed in traditional costumes of many different ethnic groups—Chinese, Yoruba, Scottish, Native American—strutted across the dais as if they were on a catwalk. The student audience made up of their peers responded with a mixture of delight and orientalist curiosity, seeing their school friends as models of something alluring drawn from the circulation of images in the virtual domain. (Fieldnotes from third round visit to OC, November, 2012)

The performance of the fashion world at a school where students are being prepared for college entry into some of the most prestigious institutions in the world is only intelligible through an understanding of how deeply immersed OC's students are in a virtual world that they negotiate everyday of their lives. It is a world that diverges from school textbooks and the classroom learning experience. Students at OC live in this online environment. Some students told researchers, perhaps in exaggerated terms, that they spend “99% of the time” online. Much of this time was spent not just with video games such as “Call of Duty,” or downloading favorite music, but

looking at potential academic programs at universities in the US. Many students also used online sources to prepare themselves for the SAT exams (not offered by their school) as they worked to boost their exam scores to enhance the likelihood that they might be accepted into one of the elite universities in North America. One student, Blaise Pascal, for instance told researchers that he drew on the Khan Academy Math network to complement math teaching at Old Cloisters which he felt was not as innovative as in England or in the United States. Another student, Kelvin, told us that he and his peers were living in the era of the “Blackberry revolution.” For him, the world was defined by the online environment that was now driving the globalization process. This offered “opportunities” and “exposes us to different cultures.” Kelvin saw globalization as offering a world of convergence and online community: “you get to learn and share a lot”:

- Kelvin: Because right now, right now, I am kind of losing my grades in Spanish [laugh]... and I actually have a Spanish friend in Mexico City and every now and then she would help me to revise and stuff...
- MM: So, she is a native speaker?
- Kelvin: Yes...
- CM: And you are in touch with her ...How? ...Through Facebook?
- Kelvin: Skype and basically everything else...
- MM: How did you meet her?
- Kelvin: Well...it was basically on an online game... (Fieldnotes from first round visit at OC, November, 2011)

OC students though deeply affiliated and connected to their school, participating in its curricular activities as many of the photos and videos on Facebook and YouTube illustrate, were articulating an entrepreneurial vision that put them, not the school’s establishment, in charge of their curriculum as life’s project – as Kelvin illustrates above. In their entrepreneurial framework of reference, the curriculum is in fact not simply the school’s organization of knowledge in particular graded subject areas, but it has become life’s bundle to which students kept adding more components such as economics or law, management of business, digital and media studies, beyond the school’s humanities emphasis. Some of these courses of study were not offered at Old Cloisters and so the students took after-school opportunity to study at other institutions such as the Barbados Community College. Students alluded to the use of online to sustain and support important relations connected to how they were navigating their future. One student, Ginger, spoke at length about her relationship to a company executive of a new-age nutrition company based in Atlanta that her mom worked for, via her online connection, from Barbados. Ginger noted that this American company executive was helping her think about her future and a possible career in business. She in turn saw business as resolving the tension she felt in her curriculum menu between humanities subjects she was really good at and sciences in which she also excelled:

- Ginger: Well I do management of business, economics and literatures of English... When I got into sixth form I chose...I want to work at a Magazine and eventually own my own...So then I chose business to go with that and... literatures in English...
- M.M: ...Why the push to business...how then to business now?

Ginger: Because business...business...well business basically rules the world!
(Fieldnotes from first round visit to OC, November, 2011)

The students' entrepreneurial and enterprising spirit reflected itself in their participation in online arenas for the sharing of photos and videos of a wide range of activities such as debating, athletic meets, social philanthropy, and scholarship awards ceremonies, leisure outings and excursions (all settings in which they kept the flame of Old Cloisters burning brightly). This direction in their online orientation paralleled and contrasted with the official online presence of the school's administration.

Whereas students' online participation focused relentlessly on present activities and their ambitions for the future, OC's official presence online bolstered the past in order to ennoble the present. OC's administration participation in the online environment directly connected to the school's Britishness and emphasized the long history of academic success and the cultural ethos of the school in the past and in the present. One website entry noted:

Old Cloisters is a co-educational (secondary) grammar school in Bridgetown, Barbados. Founded in 1733, the school takes its name from a Bridgetown merchant, who intended it to serve as 'A Public and Free School for the poor and indigent boys of the parish.' Even in the Nineteenth Century it was recognized as perhaps the most prestigious secondary school in the British West Indies, attracting boys from neighboring islands, including Pelham Warner who later went on to become the 'Grand Old Man' of English cricket. Described as 'The Eton of Barbados,' since Barbados' independence in 1966, five out of Barbados's seven Prime Ministers have been alumni of Old Cloisters. (OC featured on OC Tube website, downloaded on October 17, 2015)

The Old Cloisters official presence online foregrounds key features of the school tradition: emblem, school crest, school song, school flag, the official curriculum of the school, etc. In one online entry, "Our History," there is this epigram in bold caps: "*BE MINDFUL OF THE BATTLES YOU CHOOSE... AND TUCK YOUR SHIRT IN.*" Here, the authors assert proudly: "The School was modeled on the paradigm of the large Public School in England complete with a Governing Body which included the President of the (Legislative) Council, the Speaker of the House of Assembly, the Attorney-General, the Rector of the St. Michael Parish, the Churchwarden and two members of the St. Michael's Vestry" (OC Old Scholars Association website, downloaded on October 17, 2015).

This extraordinary assertion of the past is also evident in the Facebook sites of present-day Old Cloister's students but in a way that departs from officialdom and emphasizes strategic assemblage of iconography from the colonial past, connecting it to a forward motion to the future, defined by possessive individualism. A particularly striking example comes from the online billboard announcement of the Old Cloisters 2015 Teen Pageant posted by the school's Key Club (the OC student organization is a branch of the world youth action group founded in California). Members of the school's Key Club are dressed in formal wear and foregrounded in front of a glitzy David Bowie-like the image of the Union Jack and London Bridge towering in the background (see Fig. 2.5).



Fig. 2.5 Old Cloisters ‘Majestic Britannia’ pageant

The advertisement for OC’s pageant announces the fundraising event as “A Night of Glitz and Glamour in Majestic Britain...” This is a themed pageant in which old England appears as new England – the place where Barbadian youngsters can go as “tourists.” Central to the pageant is a competitive fashion show in which students perform, on a catwalk, the latest styles circulating in the electronically mediated sphere online. Here again these resilient images of tradition seem to exist lightly for the youngsters as they march forward to the future. What is being privileged here is an image of success through risk and chance and through the navigation of the present-day terms of competing culture. The competitors are aiming for an

opportunity to be nominated to participate in the United Nations teen pageant. The quest for the global stage is intense. The school is not enough.

As in the case of RC, then, the OC visual domain reveals the dynamism in students' affiliation to their schools as they orient to globalizing futures online. These two case studies of the emergence online of two of the most established schools in the Global South bequeathed from a British colonial history reveal a new world of roiling students ambitions for futures that they do not expect their schools or national environments to directly fulfill, even as they benefit from the privilege and the access to the most prestigious tertiary institutions in the world that these schools guarantee them. One sees the continuing encroachment – with Halloween celebrations at RC and Britannia pageants at OC – of the relentless framing of new possessive individualism and new leisure cultures that are being disseminated across a wide swath of global space through online platforms. We see, too, RC and OC's establishment engagement with the new online environment reminding the students and the world of the special heritage and distinction of these two schools.

Conclusion

The focus in this chapter has been on two British-endowed elite schools managing their contemporary institutional narratives under the impact of complex historical, cultural and political processes. The globalizing present – with its intense connectivities and digital affordances – becomes the lens through which to see these performances of eliteness and convivial world-community membership orchestrated and mobilized by the establishment of our research schools and their main stakeholders, the students. In paying keen attention not only to the word and the text of school communication but also to the elaboration of these new domains of powerful visual images and iconography, one now is able to see how – fitfully – contemporary postcolonial elite schools are remaking their identities and how the students of our research schools are conducting themselves as Global Citizens of the Present. While the schools' staging of their images on official websites, through choreographic performances of complex histories and even more complex presents, is prolific, the online presence of the school students in India and Barbados is lively, spontaneous and distinct – bearing the mark of youth leaving their own stamp on their postcolonial institutions' history.

The schools in question – Rippon College and Old Cloisters – call forth their British origins and glorious traditions by the constant circulation of images showing past heritage. This is illustrated, for example, in palatial architectural inheritance (the Indo-Saracenic-style marble palace with Royal Coat of Arms) of RC and the high Georgian and Jacobean architecture and colonial artifacts archived and curated in various sites in the case of OC. However, the centrality of their colonial roots often vies with images that proliferate in online websites, blogs, social networks, sponsored by students – much more vividly indicative of their being embedded in a globally connected community. This presence of the past in the present and the

bursting forth of the current spirit of the times from the font of the past is perhaps the most valuable perspective to be retrieved from our study of these emerging online visual fields. Online productions are not mere *reflections* of these students' lives but their lives are *lived* online, augmented by constant viewer "posts," "likes," "shares" and "messages" creating an interactive, transnational version of school life. The global is working through local endeavors where technologies create collectives and communities. These draw on but also have ramifications for real world events and processes. We do agree with Zygmunt Bauman that globalization does not mean cultural unification, and neither does it necessarily lead to the production of a single global culture. As such, the global scene needs to be seen as a "matrix of possibilities" (Bauman, 1998, 43) yielding a plethora of choices – the "global yarn of cultural tokens" – with which today's youth, through selections and combinations, weave their very distinct and separate identities, reflecting the spirit of the digital age.

An exploration of the visual field, as well as textual analysis of online environments, allow us a nuanced look at how schools articulate their identities as tradition and heritage-driven, embedded in local contexts, connected to power, and yet modern, cosmopolitan and "cool." It is an awkward dance: to be both traditional and modern. By providing detailed analysis of our research schools' use of online spaces, and the many ways that online environments shape the schools themselves, we have sought to contribute to a keener insight into the crossroads of the digital, the transnational, the global, and the local. Postcolonial elite schools, such as RC and OC in this study, exist in a fraught moment of change reflected in their online environments – one in which these schools and their students now lurch towards globalizing futures with a mixture of official uncertainty and youthful exuberance.

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Chapter 3

“Players in the World”: Action for Intercultural Competence in Classroom Pedagogy

Ruth Reynolds, Kate Ferguson-Patrick, and Suzanne Macqueen

Abstract A key aspect of teaching students in the twenty-first century is preparing them for an increasingly global community, global economy and global workplace. Intercultural competence is essential for such a future. As Boix-Mansilla and Jackson (2011, p. 11) observed, it is crucial that young people view themselves as “players in the world”, participating in global events – not simply observing them; taking action “to improve conditions” in the world – not simply agonising over them; and reflecting on their actions and their participation, with a view to continue to improve and enhance this participation. This requires a pedagogy for agency – an active pedagogy. The need for the development of skills for interacting and communicating with diverse audiences, including with those from diverse cultural groups, is obvious if we are to develop twenty-first century learners. This chapter investigates the extent to which the notion of some kind of “action” in the development of Intercultural competence is communicated in educational policy and curriculum, and how “action” is enacted within school and classroom contexts. Using Australia as a case study, we present data from analysis of relevant education documents, as well as surveys with pre-service teachers related to their classroom experiences with Intercultural competence. Results suggest that despite the good intentions of policy-makers, more explicit direction about implementing action is necessary in syllabus documents, including ideas for active pedagogy, in order to ensure students fully develop true Intercultural competence and become global “players”.

Teaching for the twenty-first century enables students to learn to address key challenges facing an increasingly globalized world. Globalization implies increased interdependence in many areas of life; constant changes in national states and

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influential groups in the world; and “the growing moral sense of ‘oneness’ transcending national borders” (Fujikane, 2003, p. 143). As pointed out by Wang, Lin, Spalding, Odell and Klecka (2011) globalization in schooling has led to competitive approaches to developing school systems which will enhance national capacity to be economically competitive. However, globalization in schooling has also been seen as developing citizens committed to social justice focusing particularly on Intercultural competence, education for sustainability, skills for cooperation and collaboration and an emphasis on building attitudes and dispositions which link, rather than compete with, others. As Ladwig (2010) would term it, many of the latter are non-academic outcomes of schooling, including beliefs, norms, values, motivation and behaviours. These are not so easily ‘seen’ or assessed but are nonetheless important. A fundamental challenge for enhancing both these globalizing trends, enhancing globally competitive schooling and educating for linking peoples of the globe, is to develop global competencies. This includes the ability to investigate the world beyond their own experience, to recognise others’ perspectives, and to communicate with diverse audiences. These competencies require knowledge, skills and dispositions and importantly focus on action to transform the world and to bridge differences (Boix-Mansilla & Jackson, 2011). They require a unique twenty-first century pedagogy.

Twenty-First Century Pedagogy

Pedagogy is the art and science of educating, focusing on learning and teaching (Loughran, 2006), but it also encompasses the performance of teaching along with the theories, beliefs, policies and controversies that inform and shape it (Alexander, 2000, 2008). Thus twenty-first century pedagogy implies a new way of learning and teaching, a way that assists and enhances a different set of beliefs and theories more appropriate for a new century – a globalized century. The notion of twenty-first century pedagogy, as opposed to previous century pedagogy, does continue to provoke debate but there is some consensus that students of current educational institutions “will need to function well in the globalized world in terms of competition for opportunities and collaboration with individuals from different cultures” (Zhao, 2010, p.429). Kereluik, Mishra, Fahnoe and Terry (2013) analysed fifteen well known educational frameworks for developing twenty-first century teacher knowledge and pedagogy. They categorised the key features of these lists as Foundational Knowledge (to Know), Meta Knowledge (to Act), and Humanistic Knowledge (to Value). Cultural knowledge was identified as a subsection of Humanistic Knowledge, and was seen as able to be developed through using Meta Knowledge, achieved by acting. To implement this pedagogy, teachers will need skills in teaching interconnectedness between global issues across disciplines using a variety of strategies (information skills, communicating skills, assessing ethics and social impact, and self-regulation). Teachers will need for themselves, and their students, access to resources utilising skills of higher order thinking, and the use of culturally relevant

or culturally responsive pedagogy (Ananiadou & Claro, 2009; Gay, 2000; Merryfield, 1998; Morrison, Robbins, & Rose, 2008). Thus, Intercultural competence would appear to be an essential element of twenty-first century pedagogy and it would seem to imply some form of action. We now consider the various connotations of this Intercultural competence.

Intercultural Competence as Twenty-First Century Pedagogy

The ability to cross and re-cross different types of global “borders” (Giroux, 1992) including socioeconomic, ethnic, language, gender, and generational, as well as physical borders, requires a key competence for twenty-first century citizens – Intercultural competence. As Bhabba (1994) pointed out; “what is theoretically innovative, and politically crucial, is the need to think beyond narratives of ordinary and initial subjectivities and to focus on those moments or processes that are produced in the articulation of cultural differences” (p. 2). According to Bhabba these sites of contestation and collaboration are innovatively negotiated and these dialogues are where our societies emerge and change and so they are important twenty-first century spaces – the location of our culture. Intercultural competence, (defining competence as something that can be applied across multiple contexts, incorporating cognitive elements and technical skills, interpersonal attributes and ethical values) (Ananiadou & Claro, 2009), is an important twenty-first century capability where “intercultural competenc[i]es¹ obviously play an integral role in learning to live together” (United Nations Economic, Scientific and Cultural Organisation [UNESCO], 2013, p. 8).

Deardorff (2006) coined the definition of Intercultural competence most often cited: “the ability to communicate effectively and appropriately in intercultural situations” (p. 247), but the authors of this chapter would argue additionally that at a school level, it is a capability that requires a large degree of student direction, student engagement and essentially student action to be truly interculturally competent. Perry and Southwell (2011) argued that while intercultural understanding is primarily associated with cognitive knowledge and awareness, and the affective domain, Intercultural competence also includes behaviour and communication. Behaviour and communication imply action for a purpose, an important focus on agency. Similarly UNESCO (2013, p. 12) noted that Intercultural competence implied skills in implementing contextually appropriate behaviour, whether in words or actions. In 2007, the UNESCO *Guidelines on Intercultural Education* argued that the three guiding principles for intercultural education included the need to respect the cultural identity of the learners, and to provide “every learner with the cultural knowledge, attitudes and skills necessary to achieve active and full participation in society.. [and to]... [provide].. all learners with cultural knowledge, attitudes and skills that enable them to contribute to respect, understanding, and

¹The spelling of “competencies” varies. In UN documents it is spelled with no “I”.

solidarity among individuals, ethnic, social, cultural and religious groups and nations” (p. 32).

In order for Intercultural competence to be developed by students it must first be understood by teachers as “teachers need to know how to foster cultural competence, emotional awareness, and leadership skills to facilitate not just interactions, but meaningful interactions and relationships” (Kereluik et al., 2013, p. 133). Competence is not a quiescent notion – it is an active, participatory notion. Global competencies are active competencies and intercultural education is based on “practical, participatory and contextualized learning techniques” (UNESCO, 2007, p. 33). A proclivity to act is essential – “an openness, a willingness, and an ability to collaborate with those people who [are] different from oneself, which is underscored by enhanced intercultural skills and competence” (Cushner, 2011, p. 612), and is required for Intercultural competence. It involves the ability to “interact effectively and appropriately with people from other cultures” (Perry & Southwell, 2011, p. 455).

Active Pedagogy for Intercultural Competence

Acknowledging the need for some form of action to achieve Intercultural competence is important but there are still many issues with attempting to clarify the most appropriate approaches to developing such an action-based competency through schooling. Ferguson-Patrick, Macqueen and Reynolds (2014) and Macqueen and Ferguson-Patrick (2015) found numerous examples of how global perspectives, and in particular action for global change, were circumvented in pre-service teacher education and in schools they visited. Time constraints, concerns about being controversial, lack of good models to observe, pre-service teachers lacking time and funds to do more than the basic required for accreditation and overwhelmed teacher educators are just some of the constraints on active global pedagogy. Even if all of the above were not evident, best practice in teaching for Intercultural competence is not well established. Language learning is not necessarily sufficient for culture learning; Study Abroad programs do not necessarily lead to Intercultural competence; being disoriented by being in a different cultural context does not necessarily lead to a desire to learn about that culture; and cultural contact does not always lead to significant reduction of stereotypes (Perry & Southwell, 2011; Walton, Priest, & Paradies, 2013). However what does appear to be clear in the research literature is that simply developing intercultural knowledge and beliefs will not develop Intercultural competence. There is a need to act, to do something, to interact and be challenged, to be motivated and to be brave – to transform. There is a need to demonstrate and to encourage an active pedagogy in schooling for Intercultural competence including actively making contact and interacting with those who are perceived to be the “other” (Hewstone, 2015; Pettigrew & Tropp, 2006).

There are areas of the curriculum that provide precedents for active learning in authentic community settings as being “best practice” for solving “real world”

problems and real consequences. These precedents can contribute to pedagogical approaches for Intercultural competence. Education is for living – it is not apart from ordinary life – and for authentic engagement and meaningful interactions with the local and the global community. In fact Noddings (2002, 2005) asserted that assisting people to act in caring and compassionate ways is the moral imperative of educators if the values of responsibility and respect for the earth and its people are to be encouraged. In citizenship education (Banks, 2001), education for the environment (Fien, Yencken, & Sykes, 2002), peace education and in inquiry pedagogies generally (Reynolds, 2014) there are examples of how important active participation, locally and in community, is in transforming society. For example Osler (2011) pointed out that in citizenship education, a key principle in democracy pedagogy is that students practise democracy – that is they engage and act in democratic ways “in a democratic setting where participation is encouraged, where views can be expressed openly and discussed, where there is freedom of expression for pupils and teachers, and where there is fairness and justice” (citing the Council of Europe Committee of Ministers, 1985, p. 15). As Print (2015) pointed out there seems to be agreement that the two best school-based predictors of whether people become active citizens (engaged in voluntary work or forms of political/civic activism) are involvement in school democracy and experience of doing some form of community service. Osler and Starkey (2003) argued that an educated cosmopolitan citizen would “work to achieve peace, human rights and democracy within the local community and at a global level” (p. 246). This illustrates a very proactive conception of a citizen.

There are thus many precedents noting the importance of an active approach to achieving any societally – based initiative, and in a globalized world, where there is a need to be globally engaged and where we all need to become global communicators, there is a requirement to have an even stronger emphasis on twenty-first century engaging pedagogies. However there is little analysis of how action is supported as an approach to enhance Intercultural competence. As such we will be building upon the studies above to clarify what we mean by action or active approaches with an Intercultural competency focus. Essentially the work of Perry and Southwell (2011), Cushner (2011) and Kereluik et al. (2013) provided us with some clear frameworks for establishing the action needed for Intercultural competence which we used as a lens to identify action when we saw it in our case study. Cushner indicated that there were clear dispositions required to be interculturally competent – there was a need to be open and willing to develop the ability to collaborate with those people who [are] different from oneself and Kereluik et al. (2013) included having a creative and innovative outlook with ethical/emotional awareness to these dispositions. Although dispositions are hard to identify in curriculum documents, as well as in people, without actual interviews and observation we searched for indications of the development of these in the data sources. Perry and Southwell (2011) pointed out that Intercultural competence requires behaviour and communication, as additional to understanding, in relation to intercultural education. Behaviours that encourage communication between “others” are essential. Collaboration, implementing contextually appropriate behaviour whether in words or actions,

participating in meaningful interactions and relationships effectively and appropriately with people of different cultures to oneself and using skills of dialogue and negotiation in these contexts is essential for Intercultural competence.

We use Australia as a case study. The new Australian Curriculum incorporates Intercultural Understanding as a curriculum capability. We investigate how this capability is framed and whether the emphasis on action is apparent. We also investigate the manner in which pre-service teachers' perceptions of school activities incorporate an active approach towards embedding intercultural understanding in the classroom.

An Overview of the Australian Curriculum

The new Australian Curriculum, developed since 2009 by the Australian Curriculum, Assessment and Reporting Authority (ACARA, 2011) has used an extensive and collaborative curriculum development process to produce the Australian Curriculum. The *Shape of the Australian Curriculum* (National Curriculum Board [NCB], 2009), first approved by the Council of Commonwealth and state and territory education ministers in 2009, guides the development of the Australian Curriculum. This shaping paper reflects the position adopted by Ministers of Education collectively in their 2008 *Melbourne Declaration on Educational Goals for Young Australians* (Ministerial Council on Education Employment Training & Youth Affairs [MCEETYA], 2008). The Australian curriculum was developed from this declaration which argued that we should develop “responsible global and local citizens” (p. 9). The initial shaping paper (2009) stated that,

Intercultural understanding enables students to respect and appreciate their own and others' cultures, and to work and communicate with those from different cultures and backgrounds. It includes appreciation of the special place of Aboriginal and Torres Strait Islander cultures; respect for Australia's multicultural composition; communicating and working in harmony with others within and across cultures, especially in relation to cultures and countries of the Asia-Pacific; and appreciation of difference and diversity (p. 12–13).

The existing (2015) statement on Intercultural Understanding claimed,

Intercultural understanding stimulates students' interest in the lives of others. It cultivates values and dispositions such as curiosity, care, empathy, reciprocity, respect and responsibility, open-mindedness and critical awareness, and supports new and positive intercultural behaviours. Though all are significant in learning to live together, three dispositions – expressing empathy, demonstrating respect and taking responsibility – have been identified as critical to the development of Intercultural Understanding in the Australian Curriculum.

This recent version of the *Shape of the Australian Curriculum v4.0* was approved by the ACARA Board in late 2012, reflecting the evolving processes used in the development of the Australian Curriculum (ACARA, 2013). Although an Australian curriculum has been developed, each state or territory has taken this curriculum and adapted it for their use, ensuring they use the Australian curriculum, but at times adding aspects to it for their state. This has caused an interesting situation,

especially as the Australian curriculum has changed its planning decisions over the years of its development, with each state having to subsequently consider these changes. Credentialing, and related assessment requirements and processes, have also remained the responsibility of states and territories. The Australian Curriculum, developed over the past 6 years, has involved many iterations and has had extensive input and consultation including public feedback, state and territory forums, national meetings involving curriculum ‘experts’ and participation of schools in using and commenting on the curriculum during its development. It is mandated as described above – all states and territories agreed to its implementation, but have adapted it for their particular state.

The Australian Curriculum has a number of syllabus documents organised into seven learning areas for Foundation to Year 6 – the Primary/Elementary years of schooling (the area of schooling we focus on for this study), with three cross curriculum perspectives, these being Aboriginal and Torres Strait Islander Histories and Cultures; Asia and Australia’s Engagement with Asia; and Sustainability. More importantly for our study, seven general capabilities have been interspersed into these syllabi these being: Literacy; Numeracy; Information and Communication Technology Capability; Critical and Creative Thinking; Personal and Social Capability; Ethical Understanding as well as Intercultural Understanding. These general capabilities were developed with the same consultative process as the syllabi. With regard to Intercultural Understanding, it is depicted as having three components: *Recognising culture and developing respect* (what we call Recognition); *Interacting and empathising with others* (what we call Interaction) and *Reflecting on intercultural experiences and taking responsibility* (what we call Reflection and Action). See Fig. 3.1.

Fig. 3.1 Intercultural understanding in the Australian Curriculum (ACARA, 2014)



Educating Global Citizens in Australia

It can be seen that action for Intercultural competence is important for twenty-first century learning and living. To clarify the extent to which these active approaches are evident we move to use the Australian Curriculum and the enactment of that curriculum as a case study and ask these two research questions:

In what ways, if any, is action for Intercultural competence incorporated in the formal school curriculum?

In what ways, if any, is Intercultural competence developed or enacted in schools?

Methodological Framework

The authors of this chapter are teacher educator/researchers belonging to the Global Education Research and Teaching (GERT) team at the University of Newcastle (UoN), Australia. UoN is one of the largest providers of teacher education in Australia. Since 2010 GERT members have actively and explicitly incorporated Global Education (GE) values, issues and pedagogies in the undergraduate and postgraduate teacher education courses we deliver, and have concurrently researched our own practices as well as our students' understandings, attitudes and experiences in an effort to improve our GE approaches. GE seeks to develop engaged global citizens with a focus on: interdependence and globalization; identity and cultural diversity; social justice and human rights; peace building and conflict resolution; and sustainable futures (Professional Teachers' Council NSW, 2014). All of these aspects relate directly to intercultural understanding and capability. One of our goals, then, is to develop the Intercultural competence of our pre-service teachers, who can then utilise those skills with their future classes and develop the intercultural understanding of their own students. Our research began with a grounded theory approach (Strauss & Corbin, 1990) whereby we sought to understand our students' attitudes towards GE and determine the effectiveness of the strategies we were implementing. The research has developed as trends emerged in the data and research interests developed among group members. As the authors of this chapter predominantly work in the area of primary (elementary) education (ages 5–12 in Australia, approximately), we restricted the current research to primary curriculum documents, and pre-service teachers intending to teach in primary schools' experiences in public and private primary schools.

This chapter represents our efforts to clarify the extent to which action for Intercultural competence is evident in the current Australian Curriculum. The term "curriculum" is commonly used to encompass all the planned experiences of learning (including the written syllabus) as well as the so-called hidden curriculum and the teaching and learning experiences both planned and unplanned (Reynolds, 2001). This is a very broad field because "curriculum is social construction, firstly at the level of prescription itself, but also at the level of process and practice"

(Goodson, 1991, p. 168). In this study we chose to investigate what Goodson (1992) calls the preactive curriculum, that is the planned curriculum experience for study, and the enacted curriculum which explores how that curriculum is negotiated at school and class level in schools. We examined the discourses associated with “action” in Australian Curriculum syllabus documents as well as the documents preceding the syllabus, that is, policy statements regarding the intention of schooling and curriculum in Australia. We then examined pre-service teachers’ in-school experiences (Macqueen & Ferguson-Patrick, 2015) with regard to intercultural understanding, and sought evidence of such action in school activities. We thus studied the preactive curriculum and the enacted curriculum, what actually occurred in schools. Detail regarding specific methods follows.

Method

The preactive curriculum was investigated through a textual analysis (Fairclough, 2003). For the purpose of this chapter we have analysed the incorporation of Intercultural Understanding into the specific syllabi content descriptors in three areas. Coding of the content descriptors within the Intercultural Understanding capability area occurred by using the terms *Recognising culture and developing respect* (what we call Recognition); *Interacting and empathising with others* (what we call Interaction) and *Reflecting on intercultural experiences and taking responsibility* (what we call Reflection and Action). The last two themes we saw as implying some form of action because we determined that for students to either interact or take responsibility, they must act in some way.

We began with an examination of the discourses associated with “action” in the Melbourne Declaration of 2008, which purported to establish the future direction of schooling for Australian education, to ascertain if any “action” was envisaged with regard to intercultural competency. We also examined the associated Shaping Papers, prepared as a result of the adoption of the Melbourne Declaration to inform the syllabi compilation. Further we investigated the resultant syllabus documents for primary schools (English, Mathematics, Science, History, Geography, Economics and Business, Civics and Citizenship, Dance, Drama, Visual Arts, Digital Technologies, Design Technologies, Health and Physical Education) that may have incorporated this capability.

A textual analysis of the current Australian curriculum syllabi was able to be undertaken, filtering the syllabi for this capability to see when and where it was addressed. The online versions of the Australian Curriculum syllabuses are equipped with a filtering tool, similar to a “search” function, to enable users to more easily find particular content. We were able to list the “Intercultural Understanding” capability in the filter of each document, so that all content descriptors/items related to intercultural understanding (as determined by the syllabus authors) were listed. Then we could examine how it was addressed. We examined content descriptions (which include knowledge, understanding and skills, described at a year level or

band of years and which are compulsory) and then elaborations (provided to give teachers ideas about how they might teach the content and which are not compulsory) for evidence of “action”. These items were then coded by the researchers for matching one of the three components of Intercultural Understanding in the Australian Curriculum – Recognition, Interaction or Reflection and Action, as outlined earlier in Fig. 3.1. This coding for common patterns was assisted by using Nvivo software (Bazeley, 2007), and provided the data to clarify the pre-active curriculum.

Then, to ascertain what actually happened in classes and schools with regard to Intercultural Understanding, we conducted a qualitative survey with pre-service teachers after they had completed their second or third year professional experience courses, during which they each worked with a primary class across a wide range of public and private schools for a period of 4 weeks, closely supervised by the class teacher. Anonymous surveys were completed voluntarily by 227 pre-service teachers who had previously been enrolled in various primary curriculum and pedagogy courses we had taught. They were approached through courses in the semester immediately following the professional experiences. This survey invited open-ended responses to a number of questions related to twenty-first century learning. Of interest in this chapter are questions asking them to indicate what relevant topics and pedagogies related to intercultural understanding they had seen taught or had taught themselves whilst on their Professional Experiences in a wide range of primary schools. The authors then coded these observations to clarify any “action” that was observed and in particular any “action” associated with intercultural competency.

Results

We now present results on Intercultural competence from our two data sources, outlining findings related to its inclusion in the preactive curriculum through textual analysis and the enacted curriculum through pre-service teachers’ experiences of practice in classrooms.

Australian Curriculum: “Action” in Intercultural Competence

The *Melbourne Declaration on Educational Goals for Young People* (MCEETYA, 2008), the document upon which the ensuing syllabuses developed, recognised the fundamental role that education plays in building a society that is “cohesive and culturally diverse, and that values Australia’s Indigenous cultures” (p. 4). The writers of this declaration argued that Australian students should become “active and informed citizens” (p. 9) and “act with moral and ethical integrity” (p. 9) as well as be “committed to national values of democracy, equity and justice, and participate

in Australia’s civic life” (p. 9); “be able to relate to and communicate *across* cultures, especially the cultures and countries of Asia” (p. 9). It is these terms act, participate and communicate across that indicate the importance of action. Other parts of the declaration argue that students should “work for the common good, in particular sustaining and improving natural and social environments” (p. 9) and “be responsible global and local citizens” (p. 9). Thus the declaration puts action and active processes as a key focus for Australian curriculum.

The various Shaping Papers prepared by curriculum writers from the various states and territories also determine that action is important. The initial definition from 2009 as shown earlier claimed that Intercultural Understanding should be about students respecting and appreciating their own and others’ cultures, as well as working and communicating with those from different cultures and backgrounds. The final statement in the Australian curriculum (2015) is stronger, claiming that Intercultural Understanding should cultivate values and dispositions such as curiosity, care, empathy, reciprocity, respect and responsibility, open-mindedness and critical awareness, and supports new and positive intercultural behaviours. Supporting positive intercultural behaviours and developing responsibility allude to the importance of action in this paper.

Despite the seeming importance of action with regards to the Intercultural Understanding capability in both the Melbourne Declaration and the Australian curriculum Shaping Papers, on examining the syllabi, it is difficult to find many examples of such action. After the syllabi were filtered for Intercultural Understanding as described above, a table was drawn up to demonstrate how the content descriptors represented such a competence in the areas of *Recognition*, *Interaction (depicting action)*, *Reflecting and taking responsibility – (depicting action)* (see [Appendix](#)). Of the seven learning areas only one syllabus, Civics and Citizenship, indicated that *action* was an important part of Intercultural Understanding. In Year 5, students were expected to learn “*Why people work in groups to achieve their aims, and how they can express their shared beliefs and values and exercise influence (ACHCK027)*” and in year 6 they were expected to learn “*The obligations citizens may consider they have beyond their own national borders as active and informed global citizens (ACHCK039)*”.

One of these content descriptors (for Year 5) has subsequently been removed as a result of the changes to the curriculum organisation in version 8 of the Australian curriculum (late 2015 after commencing writing of this chapter). In what many saw as a political manoeuvre taken after a change of government at the national level, a review of the Australian Curriculum found that the primary curriculum, in particular, was overcrowded. Although the notion of capabilities was seemingly endorsed, the curriculum was reduced in size (Australian Government, 2014). The four syllabi for the Humanities and Social Sciences learning area (HASS), have now (late 2015) been merged into one HASS curriculum for years Foundation to 6. Civics and Citizenship, with the only real example of action that the authors found in relation to Intercultural Understanding in any of the syllabi, has now merged into this one smaller curriculum area. Additionally, and very disappointingly, when filtering for examples of Intercultural Understanding in the syllabus documents of Maths,

Digital technologies, Economics and Business (only studied from year 5) and Science (from Foundation to Year 6), we found there were no content descriptors for Intercultural Understanding at all.

In the newest version of the curriculum (2015), some examples of action (Interaction and Taking responsibility) were found – however none in relation to Intercultural Understanding and Taking responsibility. For example, in the HASS (Humanities and Social Science) syllabus Year 5 and 6 students “Reflect on learning to propose personal and/or collective action in response to an issue or challenge, and predict the probable effects” (ACHASSI132) and Years 3 and 4 students “Reflect on learning to propose actions in response to an issue or challenge and consider possible effects of proposed actions” (ACHASSI060) (ACARA, 2015). These are both linked to the Sustainability cross curriculum priority. The Year 5 and 6 content descriptor in the HASS syllabus “Reflect on learning to propose personal and/or collective action in response to an issue or challenge, and predict the probable effects” (ACHASSI132) (ACARA, 2015) has the following elaborations,

- assessing possible options as actions that people could take to respond to a local issue they have investigated (for example, the redevelopment of a disused quarry in the local area)
- analysing successful solutions to problems and considering if problem-solving approaches can be applied to challenges relevant to their personal or school context

Both of these again are quite passive in nature – they suggest assessing options people *could* take – rather than assessing an option they *have taken*. They also analyse successful solutions to problems rather than analyse whether their own solution was successful. This content descriptor has links to the general capabilities of literacy, critical and creative thinking and personal and social capability – but not Intercultural Understanding.

There are a number of examples (but less than six in the entire HASS syllabus) where we could relate Interaction to content descriptors. For example in the Year 3 content descriptor ‘The importance of Country/Place to Aboriginal and/or Torres Strait Islander Peoples who belong to a local area’ (ACHASSK062) **as a part of the History syllabus**, the elaboration states that students will develop Intercultural Understanding by ‘listening to Aboriginal or Torres Strait Islander Elders, grandparents and older community members tell stories associated with the local language groups and the land they belong to’. In the Year 6 content descriptor from the History syllabus ‘Stories of groups of people who migrated to Australia since Federation (including from ONE country of the Asia region) and reasons they migrated’ (ACHASSK136), **the elaboration states that students will develop Intercultural Understanding by** exploring individual narratives using primary sources (for example, letters, documents and historical objects), interviewing and recording an oral history, and presenting the journey and circumstances of arrival based on the sources (for example, through drama). Both of these examples of interaction relate to students taking action by actually communicating with Aboriginal and Torres Strait Islander (ATSI) or community members to understand local language groups

and / or migration. The content descriptors from Year 6 state things like inviting and liaising with members of the community, conducting oral histories, and listening to people from various cultures. Thus the analysis of primary / elementary syllabus documents does show some examples of Intercultural Understanding content descriptors, but these are scant and seldom linked to action.

Qualitative Surveys from School: “Action” in the Classroom

Results as to examples of globalization they had seen or taught whilst on their Professional Experiences demonstrate our pre-service teachers’ developing awareness of cultural issues. 40.5 % of respondents to the survey answered the question about globalization topics they had seen during professional experience, and 30.8 % provided detail on globalization issues or pedagogies they had taught. This may suggest that many did not see or teach any such content, or that they did not fully understand what was meant by the question. Of the responses received, some presented a superficial acknowledgement of cultural issues (‘Learning about the Olympics’, ‘I taught “Heads, shoulders, knees and toes” in Japanese’) but others demonstrated deep understanding and thoughtful consideration (‘Used Kagan’s collaborative learning tools; unit on Antarctica – scientists working together, and celebrations with a global focus – recognition of culture, ritual, religion and comparing similarities and differences’). Pre-service teachers identified the topics and experiences presented in Table 3.1 as being related to globalization and we then considered which ones could be considered relevant to Intercultural competence. We have analysed the examples provided by our students into the three components of Intercultural Understanding as defined by the Australian Curriculum and detailed earlier in this chapter.

Pre-service teacher responses show that they understood Intercultural competence to be about more than studying “other” cultures. Their comments relate also to the incorporation of perspectives from different cultural groups, improving social skills and incorporating technology to better connect with people and communities outside their immediate environs. Twenty-first century pedagogy is a value laden pedagogy (Reynolds et al., 2015), with a focus on inclusivity, diversity and tolerance, all necessary for Intercultural competence. When considering the three aspects of Intercultural Understanding (see Fig. 3.1), recognition of other cultures and interaction/empathising with others are seen numerous times in the data. On a surface level, the same can be said for reflecting on intercultural experiences and taking action. Some examples in this category do indeed involve the ultimate step of taking action; they tended to be related to the sustainability aspect of Intercultural Understanding. For example, some classes were involved in taking responsibility for sustainable living through the care of a vegetable garden. Deeper examination even of the cited activities can be disappointing. For example, a program on sustainable fishing sounded promising in terms of action, until the term ‘through case scenarios’ was read. Action in classrooms related to Intercultural Understanding

Table 3.1 Intercultural understanding and professional experience

Intercultural understanding components	Topics	Examples
Recognition		
Recognising culture and developing respect	Cultures – music, food	Learning about other cultures, religions
	Indigenous education	African music Smartboard workshop
	Refugees, immigration	Use of resources from around the world
	Identity	
Interaction		
Interacting and empathising with others	Conflict resolution	Gaining perspectives from students with ESL, refugee & immigrant backgrounds
	Bullying	Resolving conflict between students
	Tolerance	Cooperative learning strategies
	Cultures	
Reflection and action		
Reflecting on intercultural experiences and taking responsibility	Vegetable garden	Students building & caring for vegetable garden
	Recycling	Writing stories about issues
	Global warming	Counting methods from other countries
	Sustainable fishing	Sustainable fishing (case scenarios)
	ICT	Students considered their energy use Connected classrooms

appears scant. Recognition is the first step towards Intercultural Understanding, but interaction with people from specific cultural backgrounds is better than just learning about other cultures. There are some examples of this in the data, related both to members of the class (such as students from refugee backgrounds) and visitors from the wider community. Cooking and eating food from other cultures, as was listed, is more authentic than reading or viewing content on that topic, but would be most effective if happening with guidance of someone from those cultures: we are not certain that occurred. An African music Smartboard activity where students are involved in making music themselves is better for Intercultural Understanding than one where they just listen to such music, but we cannot be sure this occurred either. Since our survey required only a written response we are not privy to all the salient details about the activities listed, and are reliant on brief written descriptions by the participants. Future research may yield more definitive results if an interview or focus group component were to be incorporated so that further detail could be ascertained.

In summary, our pre-service teachers saw and taught content and skills related to Intercultural Understanding, and while recognition of other cultures was often mentioned, and there were some examples of interaction with others, sometimes including those with different cultural backgrounds, there was some reflection but little action.

Discussion

We have investigated the incorporation of action for Intercultural Understanding with regard to current policy, syllabi and practice in Australian schooling because this is an area accepted as important for twenty-first century learners. In Australia, as in other countries, considerable importance currently is placed on knowledge, understandings and skills of Intercultural competence, as it is recognised that we live in a global economy. This emphasis can be seen in various social and economic as well as educational policies, and has flowed through to school syllabus documents. Despite the clear intentions of the Melbourne Declaration (MCEEYTA, 2008) and ACARA (2014), however, our findings suggest that few Australian school students are likely to fully develop Intercultural competence if formal education is their only resource for this.

We have argued that for Intercultural competence to occur there is a need to act, to do something, to interact and be challenged, to be motivated and to be brave – to transform. We want our pre-service teachers to have an openness and willingness to collaborate with people different to themselves (Cushner, 2011) and as well as this knowing also the ability to act and to value (Kereluik et al., 2013). We endeavour to ensure they use culturally relevant and culturally responsive pedagogies and use action for a purpose (Perry & Southwell, 2011).

Despite pre-service teachers demonstrating some elements of Intercultural Understanding, we fear that in an educational context with a crowded curriculum and a focus on standardised testing of literacy and numeracy, teachers are increasingly likely to do only that which is mandated by the syllabus. Currently, that means learning *about* other cultures. Students attending schools in communities where there is little multiculturalism (consider rural and remote communities) may not experience interaction with cultural ‘others’, which is known to be important for reducing prejudice (Hewstone, 2015). Technology, such as “connected classrooms” can go only so far in attempting to bridge this gap. Most concerning of all, even students attending schools with students from diverse multicultural, immigrant and refugee backgrounds appear unlikely to fulfil the ultimate component of Intercultural Understanding, through never being afforded the opportunity to take action, while this essential component is implied but not mandated by the syllabus.

Implications

The stated intention for action with regards to Intercultural Understanding in the Australian curriculum requires a more action-based approach if students are to fully achieve such Intercultural competence and thus become “players in the world” (Boix-Mansilla & Jackson, 2011) – able to shape and influence the world. Change is needed to syllabus documents to clearly incorporate and require action if Intercultural competence is to be attained by our twenty-first century learners. Twenty-first century learning requires twenty-first century action for students to be culturally competent.

Appendix: Australian syllabus examples of Intercultural Understanding with action examples

Syllabus Content	Year level	No of identified Intercultural understanding content descriptors	Recognising	Interacting and example *(Action)	Reflecting and example	Taking responsibility and example*(Action)
English Example(s) of Action *	F-6	15	13	1 *F level-Replicate the rhythms and sound patterns in stories, rhymes, songs and poems from a range of cultures (ACELT1579)	1 Year 3 level- Create imaginative texts based on characters, settings and events from students’ own and other cultures using visual features, for example perspective, distance and angle (ACELT1601)	0
Science	No content descriptors F- year 6					
Humanities and Social Science (HASS): History	F-6	27	21	6	0	0
Example(s) of Action *				* F Inviting members of the traditional owner group to talk about Country/Place and places of cultural and historical significance to the Aboriginal or Torres Strait Islander community in the local neighbourhood, suburb, town or rural area		

(continued)

Syllabus Content	Year level	No of identified Intercultural understanding content descriptors	Recognising	Interacting and example *(Action)	Reflecting and example	Taking responsibility and example*(Action)
HASS: Geography	F-6	18	16	0	2	0
					Year 3 The similarities and differences in individuals' and groups' feelings and perceptions about places, and how they influence views about the protection of these places (ACHGK018) Year 6 level The effects that people's connections with, and proximity to, places throughout the world have on shaping their awareness and opinion of those places (ACHGK036)	
HASS: Economics and Business	No content descriptors	No content descriptors	F- year 6			
HASS: Civics and Citizenship	3	12 *Now 39 in whole HASS Curriculum F-6) there was 57	6	0	4	2

Example(s) of Action *					Year 3 level- Reflect on their cultural identity and how it might be similar and different from others (ACHCS010) Year 4 level- Pose questions about the society in which they live (ACHCS015) <u>These content descriptors have been removed in the new version 8 of the curriculum</u>	*Year 6 level – The obligations citizens may consider they have beyond their own national borders as active and informed global citizens (ACHCK039) This content descriptor has been removed in the new version 8 of the curriculum *Year 5 level- Why people work in groups to achieve their aims, and how they can express their shared beliefs and values and exercise influence (ACHCK027)
The Arts: Dance	F-6	6	4	1	1	0
Example(s) of Action *				* Year 5–6 Perform dance using expressive skills to communicate a choreographer’s ideas, including performing dances of cultural groups in the community (ACADAM011)		
The Arts: Drama	F-6	6	3	1	2	0

(continued)

Syllabus Content Example(s) of Action *	Year level	No of identified Intercultural understanding content descriptors	Recognising	Interacting and example *(Action)	Reflecting and example	Taking responsibility and example*(Action)
				*Year 5–6 Rehearse and perform devised and scripted drama that develops narrative, drives dramatic tension, and uses dramatic symbol, performance styles and design elements to share community and cultural stories and engage an audience (ACADRM037)		
The Arts: Media Arts	F-6	6	4	0	2	0
The Arts: Music Example(s) of Action *	F-6	5	0	3	2	0
				* Year 3–4 Practise singing, playing instruments and improvising music, using elements of music including rhythm, pitch, dynamics and form in a range of pieces, including in music from the local community (ACAMUM085)		
The Arts: Visual Arts	F-6	7	0	4	3	0

Example (s) of action*				* Year 5–6 Explore ideas and practices used by artists, including practices of Aboriginal and Torres Strait Islander artists, to represent different views, beliefs and opinions (ACAVAMI14)		
Technologies: Digital Technologies	No content descriptors F- year 6					
Technologies: Design Technologies	F-6	1 (still 1)	1	0	0	0
Health and Physical Education	F-6	5	4	1	0	0
Example (s) of action*				*Year 5–6 Participate in physical activities from their own and others’ cultures, and examine how involvement creates community connections and intercultural understanding (ACPMPO66)		
Maths	No content descriptors F- year 6					

* is to demonstrate where examples of action are included in the elaborations from the syllabus content descriptors

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Chapter 4

Deliberating Values for Global Citizenship: A Study of Singapore's Social Studies and Hong Kong's Liberal Studies Curricula

Theresa Alviar-Martin and Mark Baildon

Abstract This chapter examines the role and nature of values in civic education curricula in the Asian global cities of Singapore and Hong Kong. Using a qualitative, comparative case study approach, we situate civic education in broader contexts and analyze the ways values are represented in Singapore's Social Studies curriculum and the Liberal Studies curriculum in Hong Kong. Through our analysis of syllabus documents and broader societal discourses, we found several common core values across the two settings that simultaneously represented nationalist and global neoliberal discourses of citizenship. Rather than emphasizing political or civic concerns, curricular and societal discourses worked together to underscore self-management and the creation of orderly national societies attractive to global capital and necessary for economic growth in a competitive global economy. However, we found distinctions in each syllabus regarding approaches in values instruction. Documents in Singapore emphasized teaching values through transmissive methods, whereas, in Hong Kong, the Liberal Studies curriculum advocated a more deliberative pedagogy. The chapter poses broader questions regarding narrow, utilitarian forms of citizenship and possibilities for reimagining more critical forms of citizenship education in a globalized world.

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Education for Civic Values: East/West Tensions and Intersections

The philosopher and educator, John Dewey (1916), considered values education an important component of promoting the social norms that constitute democratic societies (Lovat, Toomey, & Neville, 2010). Central to democracy was citizens' ability to reflect on the meaning of values that may differ across societal sectors and deliberate on contentious public issues. He emphasized the need for schools to build in young citizens an awareness of their own values, the capacity to recognize the ways that values shaped actions, and to come to agreement in ways that addressed common concerns.

While the teaching of values is evident in citizenship curricula across societies, studies of democratic citizenship in Asia have often assumed binary frameworks, pitting Western values rooted in individual liberty against collectivist "Asian values." Attendant to these frameworks are assumptions of Asian passivity with regards to political engagement. Yet, Kennedy (2004) cautions against investigations of citizenship education framed through "the relevance or not of the Western imagination to non-Western countries" (p. 11). Citing Sen's (2010) historical evidence of democratic deliberative traditions in China, Japan, and India, he argues for contextualized analyses of the ways Western democratic values are compatible with indigenous values and support local cultures threatened by globalization. For Sen (2003) the histories of many Asian societies provide numerous examples of pluralism, public reasoning, and support for basic liberties to constitute core civic values and traditions. Brunn and Jacobsen (2000) have further noted a need to concentrate on the ways globalization affects the human condition; be it in shaping the nature of political engagement or in creating overlapping identities drawn from various cultural and value orientations (Banks, 2008).

Lee (2004) similarly questions dichotomized depictions of Western liberal principles and collectivist Confucian value systems. Instead, he forwards a relationalist perspective in understanding the individual citizen and the collective. Especially in Confucian societies, relationships to oneself, others, family, and the state are central to understanding interactions between the individual and society. Drawing on findings from the 1997 Pacific-Basin Values Education Study, Lee also identifies how Asian conceptions of "individuality" are concerned about self-actualization. This differs from Western notions of "individualism" that emphasize a citizen's rights and responsibilities. Although Lee (2004) contends that civic education in Asia may be apolitical, this characterization is by no means limited to the East. In the 1990s, perceptions about troubling trends in youth morality renewed interest in moral and character education in US public schools (Lickona, 1992), which critics later decried as instilling virtues such as respect for laws while overlooking political engagement based on social justice (Kahne & Westheimer, 2004).

Neoliberalism and Civic Education in Global Cities

The global spread of neoliberalism, itself a highly contested and contextual concept, further implicates tensions and intersections of Western and Eastern values, relationships between self and society, and the ascendance of depoliticized forms of civic education. An ideology, in some form or another, that seems to have captured nation-states and national educational systems, neoliberal perspectives often posit economic freedom as a prerequisite to political freedom, eventually leading to democracy (see Friedman, 1962). This neoliberal ethos promises social and political transformation, wherein industry, media, and education are deregulated, and where citizens become “self-governing subjects whose human capital becomes a passport toward realizing individual freedom in diverse transnational realms” (Ong, 2006, p. 231). Neoliberalism’s focus on autonomy, however, tends to overlook the preparation of young citizens regarding social rights and freedoms (Torres, 2009). As Ong (1999) contends, neoliberalism emphasizes the enhancement of young people’s credentials, skills, values, and mindset necessary for global capital. This has resulted in the viewing of students as social capital, and created “an environment of constant modulation...in which the human subject is in continuous training and monitored for persistent self-management” (Ong, 2006, p. 224). Scholars (Chia, 2011; Koh, 2004) have also noted the ways neoliberalism intersects with supposedly “Asian” values to legitimize “good governance” in its appeal to middle classes and as a way to address tensions between national interests and the demands of global markets.

While citizenship education research focuses predominantly on constructions of values through dichotomized East-west lenses, few studies have attended to situated applications of neoliberal principles in civic education programs. Especially within globalized settings where novel modes of communication spur transnational exchanges of ideas, there is a need to examine how civic education unfolds at the intersection of neoliberal trends, national values, and definitions of individuals and society.

Hong Kong and Singapore, as global cities, provide information-rich settings in which to investigate the nexus of neoliberal discourses and the education of young citizens in the twenty-first century. Global cities are positioned at the center of transnational flows of communication, culture and capital. The economies of global cities exercise tangible influence on global affairs (Sassen, 2014), serving as points of communication in a dispersed global economy for corporations, and providing a mix of specialized firms, talents, and expertise to service corporate needs. Within this context, schooling in global cities highlights contradictions that run through citizenship curricula, such as: “the free-market economy versus democratic and egalitarian values; social justice and responsibility versus individual freedom; and moral commitment versus truth or knowledge” (Shapiro & Purpel, 1993, p. xv). In this chapter we focus on two global cities as cases to examine these tensions and intersections.

The Study

Theoretical and Analytical Approach

Our purpose was to examine the societal contexts of citizenship education in Singapore and Hong Kong and the values stated in key curriculum documents for secondary school students that have the expressed goal of preparing citizens with a global outlook. Taking into account the two settings' positionality as Asian global cities, we employed theoretical frameworks that enabled us to reveal the influences of global and local discourses on citizenship education. The Octagon model of the International Association of Educational Achievement's Civic Education Study (IEA CivEd) provides one such framework (Torney-Purta, Lehman, Oswald, & Shulz, 2001), illustrating how the curriculum is framed broadly by a country's international position, including relationships in the global economy. These global factors inform discourses at the societal level about goals and values that are carried through official speeches, processes of communication and media, national narratives, and the nation's economy, social hierarchy, cultures, and religions. At the institutional level, official documents relay discourses about citizenship and curriculum intentions; whereas, the center of the model features students' interactions with parents, teachers, and other socializing agents. The Octagon, thus, illustrates local, national, and global discourses that inform constructions of citizenship (Torney-Purta et al., 2001) and sheds light on how emergent and dominant discourses about values might interact to give particular shape to local curricula and practices (Foucault, 1980; Parker, 2011).

The IEA framework highlights other contextual features that make the two global cities interesting cases for comparison. Both jurisdictions are former British colonies, share cultural orientations as predominantly Confucian societies, and have socio-political traditions of democracy and meritocracy (Chiu & Lui, 2009). However, Singapore is an independent city-state, whereas, since 1997 Hong Kong has been a special administrative region of China. Although central agencies oversee education policy in both societies, in Singapore curriculum development is relatively top-down, whereas Hong Kong conforms to a school-based approach that provides greater leeway, in terms of implementation (Gopinathan & Lee, 2013).

We analyzed historical, political, economic, policy, and curricular contexts and curriculum texts by asking: *What are key contexts that have shaped citizenship education in Singapore and Hong Kong? What are the values communicated in specific citizenship education curricula and how are they expressed?* We examined selected curriculum documents, curriculum policy statements, and official rhetoric that addressed national and global contexts as well as citizenship education. We located key documents by government agencies and officials that revealed the relationships between globalization and citizenship education. These documents included speeches by government officials, including the Prime Minister of Singapore and the Chief Executive of Hong Kong, government officials holding key positions in Singapore's Ministry of Education (MOE), Hong Kong's Education and Manpower

Table 4.1 Official civics curriculum documents included in analysis

	Document	Grade levels	Year of release
<i>Hong Kong</i>	Basic Education: Review of education systems reform proposal	K-12	2000
	Learning to learn (LTL): The way forward in curriculum development	K-12	2000
	Basic education curriculum guide: Four key tasks – achieving LTL (Moral and civic education)	K-12	2002
	New senior secondary curriculum (NSS)	10–12	2005
	Liberal studies subject in NSS	10–12	
	Curriculum and assessment guide		2007, 2014
<i>Singapore</i>	Thinking schools, learning nation framework	K-12	1997
	National education (NE)	K-12	1997
	Social studies subject in NE	K-12	2001
	Report of the committee on compulsory education	K-12	2000
	GCE ordinary level social studies	9–11	2014
	Information sheet on twenty-first century competencies	K-12	2014

Bureau (EMB), and other officials with education portfolios. Table 4.1 summarizes the curriculum documents that relate to citizenship education. In Singapore, we analyzed documents issued by the MOE, such as syllabi and documents that outlined National Education, Social Studies education, and twenty-first century competencies. Documents from Hong Kong included guidelines issued by the Curriculum and Development Council (CDC) pertaining to education reform from 2000 to 2014, the New Senior Secondary Curriculum, and the Liberal Studies document on civic education at the senior secondary level (grades 10–12).

We conducted discourse analysis to understand the key documents in relation to their broader contexts. Discourses consist of “terminology, values, rhetorical styles, habits, and truths” (Abowitz & Harnish, 2006, p. 655) that are revealed in language; whereas context refers to “the ‘social situation’ of language use in general, or the specific situation of a given (fragment of) text or talk” (van Dijk, 2009, p. 2). Discourse analysis adhered to the constant comparative approach (Glaser & Strauss, 1967) that entailed the examination of texts, comparing text fragments, and merging similar fragments into categories with the aim of illustrating the nature of formal civic preparation and surrounding discourses.

Mirroring the Octagon model’s nested contexts of curriculum (Torney-Purta, et al., 2001) and based on our research questions, in the first analytical stage we sought to sketch the historical, political, economic, and socio-cultural factors that surround civic education in Singapore and Hong Kong. The analysis thematically captured Singapore as an illiberal global city and Hong Kong as a Chinese global city where education has undergone varying degrees of politicization. The second research question focused on education policy and curricular documents in citizenship education. In this phase, we identified the goals of citizenship curricula and sought to ascertain underlying values. This entailed examining the curricular

documents while reviewing findings from the analysis in the initial stage, continually moving “from context to language and from language to context” (Gee, 2005, p. 14) in order to surface justifications for curricular intentions. The analysis of each setting yielded over 15 preliminary categories (Creswell, 2008) that was reduced to two categories: “the appreciation of values” and “instrumental values aligned with the state agenda” in Singapore and “deliberating plural perspectives and values” and “criticality versus priority values” in Hong Kong.

Contexts

Singapore: Illiberal Global City

Singapore has long served as an important node in international trade, straddling key trade routes between East and West. The end of British colonial rule and the failed merger with Malaysia abruptly thrust independence onto Singapore in 1965. Its under-developed economy and diverse multi-ethnic, multi-religious population posed immediate challenges for Singapore’s leaders. Social and political unrest in the early years of national independence resulted in political leaders emphasizing nation-building, political control, an ideology of pragmatism, and economic growth as necessary for national survival (Chan, 1971). Constant themes in Singapore’s historical narrative are vulnerability and the need for constant vigilance and discipline (Hill & Lian, 1995).

The ruling People’s Action Party (PAP) demonstrates a rationality of economic instrumentalism (Chua, 1995), emphasizing constant economic growth and material comfort to satisfy its citizenry. In recent years, Singapore has rebranded itself as a global cosmopolitan city. However, as Choo (2014) has argued, Singapore has primarily focused on economic openness while limiting other forms of openness, such as political freedom. “Out-of-bound” (OB) markers in Singapore continue to curtail political expression. The limits to political openness in Singapore have prompted some to refer to it as an “illiberal democracy” (Motalib, 2000).

Education in Singapore has played a significant role in forwarding the government’s “rhetoricist position to persuade its populace to accept the implementation of certain policies” (Koh, 2007, p. 180). The education system is highly centralized and remarkably responsive to the directives of the Ministry of Education (MOE). Education is viewed in instrumental terms to achieve both human capital development for economic growth and the building of social, communitarian reflexes to bind a highly diverse state (Gopinathan, 1999). Citizenship education has, thus, undergone a number of iterations with regular vacillations between developing moral values and “right conduct” and efforts to deepen national consciousness and a sense of commitment to the nation. For example, *Ethics* was taught from 1959 to 1966 to focus on character development and then replaced in 1967 by *Civics* that combined a focus on basic knowledge about the government with the aim of instilling a sense of civic and social responsibility (Sim & Print, 2005). With rapid

industrialization in the 1970's and 1980's there was concern that Singaporean youth were becoming too Westernized, which led to a new moral education program, *Being and Becoming* (in 1981) that emphasized "Asian values" (Baildon, Loh, Lim, Inanç, and Jaffar 2013). *Being and Becoming* was then renamed *Civics and Moral Education* in 1992 to provide greater balance between moral education and political socialization. The introduction of *National Education* in 1997 and *Social Studies* as a compulsory secondary school subject in 2001 can be seen as adding into the mix the need to develop human capital with the skills necessary for labor in the global knowledge economy.

National Education (NE) arose in response to concerns by the government that young Singaporeans lacked basic understanding about Singapore's history and the values that contributed to nation building. At the launch of *NE*, then Deputy Prime Minister Lee Hsien Loong (1997) argued that *NE* was necessary to "maintain the will to survive and prosper in an uncertain world." He called for systematically transmitting national values and attitudes as part of Singaporeans' "cultural DNA." The objectives of *NE* were to develop national cohesion, foster a sense of national pride, learn "the Singapore story," understand Singapore's unique challenges, constraints, and vulnerabilities, and instill the core values of meritocracy, harmony, and good governance (MOE, 2008). Nothing less than national survival was at stake. As Parliamentary Secretary of Education, Hawazi Daipi (2002) would claim, "A strong national identity, healthy values and racial and religious harmony are needed to withstand the divisive impact of globalization and the attractions of imitating the West."

Hong Kong: De/politicization in a Chinese Global City

Hong Kong is a former British colony that reverted to Chinese dominion in 1997. The territory brands itself as "Asia's World City" to highlight its reputation as one of the world's freest economies, its position as a regional base for numerous transnational corporations, and an identity that straddles Chinese, local, and global affiliations (Chiu & Lui, 2009).

Civic education in Hong Kong has featured historical variations in depictions of nationhood and degrees of politicization (Leung & Ng, 2006). In the 1920s, the Kuomintang Party and the Chinese Communist Party – both of which viewed the colonial British government in an unfavorable light – ran many of the local schools. To counter anti-British sentiments, the colonial government established a public education system and encouraged religious organizations to set up missionary schools. The subject, *Civics*, was introduced in 1925 and became an examinable subject in 1950. Although content included topics such as the nature of government and the United Nations, the curriculum overlooked political rights and mentioned little about political controversies. The subject, *Economic and Public Affairs (EPA)*, took the place of *Civics* in 1965. EPA entailed exploration of social issues, but centered on describing societal problems and the government's response.

The year 1984 ushered in a period of “politicization” of the intended curriculum, with the signing of the Joint British-Sino Declaration that outlined Hong Kong’s return to Chinese dominion in 1997. In 1985, the government issued the *Guidelines on Civic Education in Schools* that infused civic education throughout the curriculum. The curriculum reflected civil and social rights as the basis of Hong Kong citizenship, informed students about the nature of democratic government, and increased civic activities in schools and education in political and constitutional matters. The *Guidelines* likewise emphasized values relating to the development of “the self” and “the self and others” (Fairbrother, 2006). These changes mirrored wider political developments, such as the Tiananmen Square massacre that underlined the contrast between Hong Kong’s democratic laws and the suppression of individual freedoms in China. The 1997 Handover installed the “One Country, Two Systems” framework that granted Hong Kong autonomy over its economic system and political and judiciary institutions until 2047. Leung and Ng (2006) contend that civic education has since become “re-depoliticized” to emphasize Hong Kong’s Chinese identity. In a speech before taking office as Hong Kong’s first Chief Executive, Tung Chee Hwa, made clear his priority to install education as a driver for Hong Kong’s national renewal. By 2000, an education reform initiative, the *Basic Education Framework* paved the introduction of the primary and secondary curriculum guideline, *Learning to Learn* (LTL) (CDC, 2001). The reform shifted civic education programs by grounding Hong Kong’s national ties to a moral foundation. As Tung (1997) remarked: “We need to renew our commitment to the traditional Chinese virtues of modesty...emphasis on obligations rather than individual rights, and the willingness to sacrifice one’s interest for the common good” (n.p.). In LTL, *Moral and Civics Education* (MCE) replaced *Civics Education*. As one of the Five Essential Learning Experiences, MCE aims to develop “positive attitudes and values and provide the affective basis for students to learn more effectively” (CDC, 2001, p. ii).

The reforms brought about the introduction of the *New Senior Secondary Curriculum* (SSC). The SSC, beyond featuring the new civic/moral education emphasis, highlighted the necessity to maintain Hong Kong’s competitive edge in the global economy (EMB, 2005, p. 8). It cites how globalization “has led to unprecedented worldwide changes” and, thus, Hong Kong citizens need to “develop their adaptability, creativity, independent thinking and life-long learning capabilities” (EMB 2005, p. 6). The SSC features four core subjects, including *Liberal Studies* (LS), an interdisciplinary and issues-based subject (EMB, 2007/2014, p. 1). Although not a designated civics course, LS links back to the Five Essential Learning Experiences. This chapter will focus on the SSC framework and LS curriculum to unpack the values espoused with regards to students’ civic preparation.

Analysis of Documents

Singapore Social Studies

The GCE Ordinary Level Singapore Secondary Social Studies (MOE, 2014) syllabus for 14–16 year old students in Singapore is organized around two core ideas, “being rooted” and “living global,” with the primary aim to develop students “into well-informed, responsible citizens with a sense of national identity and a global perspective” (p. 3). To meet this aim, students are expected to understand Singapore’s socio-economic development and governance; learn from other countries’ experiences so that Singapore can be politically viable, socially cohesive, and economically vibrant; develop key thinking skills for lifelong learning; and become responsible national citizens with a global perspective who have empathy and are able to “participate responsibly and sensibly in a multi-ethnic, multi-cultural and multi-religious society” (p. 3). Responsibility is emphasized as the primary civic virtue in the context of understanding Singapore’s economic development, social cohesion, and governance. Values and attitudes in the syllabus are listed with each of the six themes that make up the syllabus: Singapore as a Nation in the World; Understanding Governance; Conflict and Harmony in Multi-ethnic Societies; Managing International Relations; Sustaining Economic Development; and Facing Challenges and Change. Each of these themes primarily focus on what the government has done or is doing to develop the nation, enact good governance, sustain economic development, and manage conflict and harmony, international relations, and challenges and change.

The Appreciation of Values

The Social Studies syllabus delineates core knowledge and understanding, thinking skills, and essential values and attitudes as learning outcomes. The outcomes are identified as necessary to examine local and global issues, but *appreciation* – rather than active enactment – of particular values is emphasized. For example, the syllabus wants students to “appreciate the implications of various decisions, actions and relationships,” respect and value diverse perspectives and backgrounds, and “appreciate the importance of living in an interdependent community with increasing global connections” (p. 4). In the context of the themes and subject matter and other learning outcomes, this emphasis on appreciation points to the need for students to be grateful for or hold in high regard the tough decisions and effective policies the government has made to manage challenges and change, conflict and international relations, and to sustain economic development.

Values in the syllabus can be characterized as individual values, societal values, and economic values. The first two themes, “Singapore as a Nation in the World” and “Understanding Governance,” primarily emphasize individual commitment to

the nation (with the value of commitment the only value listed four times across all themes), along with loyalty, responsibility, accountability, and integrity.

For other themes, values listed seem to be more societal (e.g., respect, empathy, harmony, trust, reciprocity, rootedness), with particular emphasis on understanding the importance of social cohesion and consensus and the need to maintain social order in a diverse society. A third set of values can be characterized as economic values: enterprising spirit, risk-taking, adaptability, and life-long learning. Most of these are a part of the “Sustaining Economic Development” theme, clearly with the emphasis on what individuals are expected to value and do to sustain Singapore’s economic development.

It is not apparent how these values are to be taught and there are no specified opportunities for students to deliberate over what values mean to them or to society or why they should appreciate particular values. It is not clear how they might actually help students examine local and global issues or meet other aims of the syllabus. There is no mention of the values of respecting human rights or having a sense of social justice. Although some iteration of the term, ‘global’ appears 19 times in the syllabus, at no time does it mention global citizenship or the responsibilities of a person living in a global society, other than highlighting the importance of having a “global perspective.”

Assessment objectives follow this treatment of values in the syllabus, but there is no suggested assessment of values and attitudes. Instead, students are expected to demonstrate relevant factual knowledge, be able to construct explanations (based on relevant knowledge), and interpret and evaluate information sources. In assessment-driven Singapore, what is not assessed is often not given due treatment in teaching and learning.

The six themes in the syllabus with content, learning outcomes, guiding questions, concepts, and values/attitudes are delineated in a table in the document. While the role of content and concepts in the learning outcomes are clearly articulated, values and attitudes are merely listed with little apparent connection to the content, concepts, and learning outcomes. They appear to be prescribed values that lend themselves to a transmission approach to values education (Sim & Ho, 2010), rather than opportunities for inquiry or deliberation.

Instrumental Values Aligned with State Agenda

For the theme, “Understanding Governance,” key learning outcomes include understanding government structure, principles of governance, and being able to evaluate the role of communication channels in policy-making. Students are expected to recognize that “policies change to meet the needs of society and nation” and be able to “evaluate the effectiveness of the policies in meeting the health care needs of the people and nation” (p. 10). The values/attitudes for this theme include self-reliance, resourcefulness, adaptability, responsibility, accountability, integrity, and prudence. However, there is no mention of citizenship as a concept within the framework of

governance. "Understanding governance," then, is largely a process of understanding how the government functions to meet the needs of the people, with very little consideration of citizenship, citizens' rights, or the roles and responsibilities of citizens (other than to vote and provide feedback).

The multidisciplinary syllabus highlights that three themes in particular develop the idea of "living global." "Managing International Relations" and "Sustaining Economic Development" use Singapore as an example to address the issues of defense and security and how to sustain economic development (note that it is not about sustainable economic development). The final theme, "Facing Challenges and Change" examines Venice as a case study on the rise and fall of nations and serves as a cautionary reminder for Singaporeans. Key values listed for these themes include: commitment, patriotism, vigilance, enterprising spirit, self-reliance, adaptability, and lifelong learning. Again, the emphasis is on citizens contributing to Singapore's cohesiveness and economic growth, rather than civic engagement with issues of security, economic development, and the nature of Singapore's future.

Along these lines, the values expressed by the Social Studies syllabus are quite instrumental; they are to make sure students understand necessary commitments to the state and the need for ongoing social cohesion and consensus along with the need to play their part to sustain economic development. Along with the content in the syllabus, values are designed to ensure students recognize the vulnerabilities and challenges faced by Singapore, the commitments and social discipline necessary on the part of citizens, and that enterprising, adaptable "worker-citizens" should leave political decision-making to the government. Citizens are expected to pull in the same direction with a sense of responsibility and self-sacrifice in the national interest (Quah 1990). Singapore's limited democracy and its "culture of elite governance" suggest that citizen participation in public affairs and civic consciousness of politics should be minimal (Barr, 2006). This is powerfully communicated in Singapore's Secondary Social Studies syllabus.

Hong Kong Liberal Studies

The Hong Kong *Liberal Studies* (LS) curriculum follows an issues-centered and cross-disciplinary learning approach. Its specific aims are to help secondary students:

- acquire a broad knowledge base, and understand contemporary issues that may affect their daily life at personal, community, national and global levels;
- be an informed and responsible citizen with a sense of global and national identity;
- respect pluralism of cultures and views, and be a critical, reflective and independent thinker; and
- acquire information technology (IT) and other skills necessary to life-long learning.

The curriculum spans three broad areas of study: Self and Personal Development; Society and Culture; and Science, Technology and the Environment. These are further organized into 6 modules that identify specific values and attitudes that teachers could infuse. Teachers choose focal issues based on students' backgrounds and interests, and assess learning through a written examination (70%) and Independent Enquiry Study (30%) that requires them to conduct research on a self-selected issue. Our analysis of the LS curriculum yielded two over-arching themes.

Deliberating Plural Perspectives and Values

The first theme refers to the range of views represented in the curriculum and the need for young citizens to evaluate conflicting viewpoints in their decision-making process. The LS document rationalizes the inclusion of multiple perspectives as a means for students to cope with "dynamic change...and develop both the capacity to reflect on their own culture and adopt a broad worldview that transcends spatial boundaries" (p. 23). For example, in Module 2 (Quality of Life), students' learnings are organized around questions such as, "*What are the different opinions of Hong Kong residents on the priorities which constitute the quality of life?*" The module's explanatory notes suggest examining the question through economic, social, cultural, political, or environmental perspectives; or through various configurations (majority versus minority, vocal versus silent, abundance versus scarcity).

Students' exposure to multiple views opens opportunities to unpack conflicting values. The theme, "Rule of law and socio-political participation" for example, highlights civic loyalty, such as "respect for the rule of law," "patriotism," and "solidarity" but also concepts that may challenge the status quo, such as "human rights and responsibilities, democracy, and justice" (p. 29). Beyond exposing different values, the curriculum exhorts students to be open to a range of opinions. Values referring to "open-mindedness" and "respect for different ways of life, beliefs and opinions" appear most frequently (10 times). This is apparent in the themes, "Chinese culture and modern life" and "Globalization", the latter of which queries, "*Why do people from different parts of the world react differently to the opportunities and challenges brought by globalization?*"

Given the plurality of views encouraged in the LS curriculum, the document underlines developing values and attitudes for deliberation. Across the document, the values of rationality, reflection, and respect for evidence appear 6 times, stressing that in a diverse society, the government and individuals hold responsibility for evaluating evidence in their decision-making process. The "Rule of Law" unit underlines the government's role in weighing demands from groups with diverse values and ideals, such as political groups, non-governmental organizations, the disadvantaged, industry and business, the middle class, and people of different gender, ethnicity and religion. The curriculum further stresses individuals' need for honing skills of deliberation in defining their identity; encouraging students to explore perspectives relating to adolescents' rights and responsibilities, gender

equality, messages communicated through media, and relationships with family, teachers, and peers as they form their own value stances. Similar to depictions of societal plurality, the document characterizes individuals' identities as complex and overlapping (Banks, 2008), and can encompass roles as participants in "local, national and global communities" (p. 26).

Criticality Versus Priority Values

Although the LS document exhorts teaching through and for different perspectives, the SSC document in which LS is located and broader official discourses contradict these statements by stressing the importance of values that bind citizens to the nation. Echoing Chief Executive Tung's calls for national renewal, the SSC document states, "since Hong Kong is part of China, the learning of Chinese culture and promotion of civic and national citizenship need strengthening" (EMB, 2005, p. 25) and "the moral development of students needs to be continuously strengthened, and positive values and attitudes need to be nurtured" (EMB, 2005, p. 30). The SSC document reminds LS teachers to articulate positive values "more explicitly in each unit", including "priority values in civic and moral education such as commitment, responsibility, national identity, and perseverance" (p. 41). The SSC builds on nationalistic discourses by stressing the collective goal of economic development in order to "sustain (our) development...as an international city amidst the economic restructuring and rapid development in Mainland China" (p. 6).

The SSC further reveals a dichotomizing of critical thinking with regards to social cohesion. For example, the document states a concern that "the use of an issue-enquiry approach (would)...encourage students to criticize... (It) would not be desirable to develop a culture of 'criticism' that is not constructive to society" (EMB, 2005, p. 42). It reminds teachers to help students "understand the consequences of adopting different positions...rather than being allowed merely 'to criticize' in a negative way" (p. 43). However, no further guidance is provided as to how teachers could reconcile the curriculum's deliberative and critical components, stating instead that "the choice of activities would have to match the nature of learning objective and also the learning styles and abilities of students" (p. 43). Notably, the phrase, 'critical thinking' is not included in the LS curriculum's list of values. It appears in the broad objectives, but is not revisited in specific modules or in the final IES assessment project.

Given the dichotomizing of criticality and priority values, and without clear guidelines in implementing the LS curriculum's deliberative approach, scholars speculate that teachers may be discouraged from exploring perspectives perceived as controversial (Leung & Ng, 2006). Leung and Yuen (2009) argue that although LS is more politicized relative to previous civic education curricula in Hong Kong, the "political education elements in the subject" remain "limited in scope and too conservative in tone" especially in light of aims "to nurture students who can make informed judgments on political issues and...understand the politics of Hong Kong

and China in a world context” (p. 45). They further contend that although the LS curriculum mentions human rights, it masks the need for students to take action to address human rights concerns. The “action-poor nature of pedagogies” in LS, they argue, “is insufficient” in cultivating “active citizens who...are willing to...protect their own and other citizens’ human rights when those rights are being infringed” (p. 45).

Discussion

This study sought to characterize the nature of values in the citizenship education curricula in Hong Kong and Singapore. Rather than examining values through Western/Eastern imaginaries, our aim was to gain a situated understanding of civic values in Singapore’s Social Studies (SS) and Hong Kong’s Liberal Studies (LS) curricula. Our analyses revealed striking contrasts and similarities across settings. When considering the two syllabi within broader curriculum documents and societal discursive contexts, the analyses illustrate expressions of values that are mostly apolitical, quite instrumental in terms of preparing students for a changing global economy, and that focus on personal responsibility and national commitment. The common emphasis on self-management, responsibility, and adaptability – rather than political or civic concerns – can be viewed as instilling neoliberal values necessary for the development of human capital and national economic growth in a competitive global economy (Ong, 2006). In many ways, these values intersect to be mutually reinforcing; they are values of commitment to national projects of economic development and growth as well as necessary for national cohesion and consensus to support these economic projects.

Lee’s (2004) notion of a relationalist perspective to understand individualist and collectivist value orientations reveals how values in both societies help citizens develop state-desired relationships to the global economy and to nationalist ideals. Because the nation is an ambiguous concept in Hong Kong, civic education has served to emphasize a sense of Chinese identity, moral obligation over individual rights, and the development of life-long skills that would enable Hong Kong to maintain its competitive edge as a Chinese city in the global economy. In Singapore, building strong national identity to withstand the divisive impact of globalization while at the same time developing the necessary human capital to ensure Singapore’s continued success in the global economy has been a key feature of its civic education efforts.

The values of responsibility, accountability and adaptability expressed in both syllabi also specify a particular relationship to one’s self and thereby constitute a form of governmentality through which subjects can carry out government policies and be governed (Foucault, 1991), rather than actively participate in the formulation of policy and governance. In both settings, we see emphasis on particular kinds of relationships to the nation-state and to global society. In Singapore the Social Studies syllabus works in tandem with broader curriculum frameworks (TSLN, 21st

Century Competencies) in forwarding values of being firmly rooted as responsible and committed national citizens possessing marketable skills for changing global economic conditions who will not raise questions of human rights or social justice or stridently challenge government policy. A persistent focus on economic productivity and growth combined with a highly centralized education system has resulted in citizenship education in Singapore taking on an “instrumental-strategic intent” (Choo, 2014). In Hong Kong, there is emphasis on “priority values” of national identity, responsibility, commitment, perseverance, and respect for others to ensure a particular kind of participation. Although Hong Kong subscribes to a school-based curriculum development model that grants leeway in terms of instruction, and although the LS syllabus offers students opportunities to form their own opinions about values advocated by official discourses, the SSC curriculum framework limits these opportunities by remaining ambivalent on the teaching of deliberative approaches and through its cautionary rendering of critical thinking.

Alongside these commonalities, a focused analysis on the SS and LS syllabi reveals telling differences. There is a strong sense of national values being prescribed in the Social Studies syllabus in Singapore. Values in the SS syllabus seem to be values cherished by the government that it wants students to learn through transmission (Sim & Ho, 2010). Because of the curriculum’s prescriptive nature, values represented in Singapore’s SS curriculum take on a form of statecraft that has little respect “for moral truths, per se” but for “what works in the interest of [the nation]” (Tan & Chew, 2004, p. 598). The national narrative of vulnerability due to concerns about social cohesion in a highly diverse society has been used to justify limits to political expression and civic participation. There also appears to be few opportunities to exercise civic or ethical reasoning in the curriculum.

Liberal Studies in Hong Kong provides a more student-centered focus on active learning. For example, instead of knowledge aims, LS wants students to “develop the capacity to construct knowledge” and “evaluate different aspects of life in Hong Kong with respect to the rights and responsibilities of individuals, social groups and the government” (p. 5). Most importantly, we find more curricular opportunities to examine a range of perspectives about public issues and deliberate over conflicting values. Students can explore authentic inquiry questions, like why people from different parts of the world might have different values and respond to globalization in different ways. Relative to Singapore, there is considerably greater leeway for students in Hong Kong to become exposed to both conservative values, such as respect for rule of law and patriotism, and liberal values of respect for human rights, democracy, and justice. Questions remain regarding the lack of directives in LS for teaching through deliberative approaches, allegations about its “depoliticized” and “conservative tone”, and “action-poor” pedagogy towards human rights-based societal transformation (Leung & Yuen, 2009). However, overall, we find the curricular flexibility in LS allows students to develop their own sense of civic identities and instills the potential towards political action. In fact, conservative political figures in Hong Kong have denounced LS for contributing to a political awakening among young protesters of the 2014 Occupy Central movement, which sought direct elections for the office of Chief Executive while expressing disenchantment with Hong

Kong's legislative body that is dominated by appointed lawmakers loyal to the Beijing government (Tsoi, 2014).

Conclusion

As conditions of globalization continue to shape economic, social, and political agendas across nations, this comparative study of two global cities illustrates how particular national contexts and discourses serve as moral and epistemological frameworks for civic education (Chia, 2011; Hayhoe, 2000). Lee (2004) argues, in many Asian countries “the concepts of guided democracy and paternalistic democracy feature the leading and educative role of the ruling party in its relationship with the public” (p. 29). He notes that Western constructs of citizenship focus on individual rights, autonomy, and individual responsibility, whereas Eastern views of citizenship are more apolitical and moral with greater emphasis on personal fulfillment. However, in our study of two Asian global cities' citizenship education curricula, we found that the values expressed do not particularly represent “Asian” values; but can be characterized as values framed by discourses of vulnerability, the need for national solidarity, and the overriding importance of national economic goals. Evidenced by the case of Singapore, a utilitarian and instrumental citizenship education curriculum seems to allow few opportunities for students to exercise their agency or freedom other than in the service of the state or as human capital for economic growth. Recognizing the need to negotiate the range of values that make up Chinese culture, a local or national identity as a Hong Konger, and those necessary to live in a highly globalized city, the Liberal Studies curriculum in Hong Kong offers more opportunities for meaningful deliberation of values and perspectives.

The limitations of a transmissive type of values education in Singapore and issues-centered learning approaches in Hong Kong underline the need for a type of citizenship education that provides young people with a range of opportunities to reflect upon or deliberate on the kinds of values, identities, or relationships they might want to nurture. As Lee (2006) argues, in such an approach to civic education, the curriculum would function as a means for young people to define for themselves the type of citizenship and values they deem important in society, rather than as an instrument that mediates between individuals and the established societal order. It is a type of civic education that bridges the positivist schism of values divorced from knowledge and skills (Appiah, 2006), while rejecting neoliberal tendencies to define students primarily as producers and consumers (Torres, 2009). In contrast to such discourses, we echo a type of civic education envisioned by Dewey (1916) and recaptured by Noddings (2005) and Nussbaum (1997, 2010), who argue for an inquiry approach to the teaching of values; where schools become sites for deliberation, and where curriculum creates opportunities for meaningful engagement with values.

This study suggests that a deliberative civic education program would first of all require the construction of values forwarded by the state as open for negotiation.

Civic education that adequately prepares students for the complexity of the twenty-first century and for living in a global society would also help students recognize the great plurality of values that exist in the world and even within their own society. Students would understand the central role that values play in all societies, that different groups of people have different value systems (that may differ from their own), and that sometimes these values will come into conflict with each other. Students would develop the competencies to understand their own and others' values, deliberate over what these values mean, and reflect on what values look like when put into action as well as potential consequences of their enactment. They would have greater opportunities to exercise and develop their capacities for ethical reasoning. Values, then, would be a more integral and meaningful feature of civic education characterized by critical self-examination, reflection, and public reasoning. Such a curriculum would be premised on the need "to doubt the goodness of one's own way and to enter into the give-and-take of critical argument about ethical and political choices" (Nussbaum, 1997, p. 62).

Faust characterized the tendency of schools to conform to neoliberal discourses as a form of dehumanization, arguing, "human beings need meaning, understanding, and perspective as well as jobs" (cited in Nussbaum, 2010). Similarly, narrow nationalist discourses also fail to recognize the range of possible identities, aspirations, and commitments young people might develop. The present study points to how civic education curricula, by overlooking opportunities for reflection and deliberation, limit students' capacities to envision their prospects for the future. A challenge, then, lies in how schools can become spaces where students are empowered to make full meaning of present life (Dewey, 1916) and actively construct civic values as they envision novel forms of citizenship, engagement, and society.

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Chapter 5

Signature Pedagogies in Global Competence Education: Understanding Quality Teaching Practice

Veronica Boix Mansilla and Flossie SG Chua

Abstract How might we support young people to understand who they are in an interconnected world, prepare them to consider multiple perspectives as they collaborate with others across cultures and languages to improve conditions, and provide opportunities for them to participate positively in civic life, school, and work? Preparing students for today's world requires not only that we think about what matters most for students to learn, but also what kind of teaching and learning will prove most effective. Building on Lee Shulman's idea of *signature pedagogies*, we propose a pedagogical approach uniquely tailored to nurturing deep, relevant, and compelling global learning and a concomitant framework for developing teacher expertise. We define *signature pedagogies* in global education as a pervasive set of teaching practices that nurture students' capacity and disposition to understand and act on matters of global significance. Signature pedagogies organize learners' experience to inculcate in them hallmark global competence habits of mind: investigating the world, taking perspective, communicating across difference, and taking action. They offer students ample opportunities to engage in "junior versions" of authentic practices in relevant fields, and represent instructional tropes, paths, or motifs. Using illustrative cases at the elementary school level, we describe two types of signature pedagogies in global education: *research expedition* and *purposeful comparisons*. *Research expedition* pedagogy focuses on learner's understanding and experience of a distant place – geo-physical and environmental qualities, built and natural landscapes, people and social organizations, as well as manifestations of culture in the form of taste, values, practice, relationships and beliefs – and helps them develop a sense of personal connection to it. *Purposeful comparisons* pedagogy builds on the premise that an individual can understand the world by examining a single phenomenon across multiple locations through the lens of a question that makes cross-case analysis necessary. It

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often involves creating a model or a frame that helps us distil relevant aspects of each case, identifying similarities and differences to inform our understanding. When such signature pedagogies are designed to be a regular part of the learning experience, they nurture understanding of the world and key global dispositions in learners.

What I thought, since all the movies that I saw, is that they would be more poor, that they [e-pals in South Africa] would not have a city, that their homes would be made out of dried up mud... I was really surprised because they looked nothing like that... they have a lot of the things that we do, they have video games and a city... I was really surprised.... 'cause they have good teeth, real clothes, full hair. [Working with our South African ePals] is cool because we can talk with people from different continents... We can see how people on the other side of the world live, and what they do, not at all as I imagined it...

Richard, Grade 4 New York

Overview

Preparing our youth for a time of unprecedented social, economic and environmental global interdependence requires that we reconsider what matters most to teach and learn and what kind of learning might prove most effective. A fast-growing literature on global competence instruction and assessment is shedding light on the opportunities and challenges we face. Introducing new countries and festivals into already crowded curricula or proposing forced connections between quadratic equations and farming in Namibia will not yield the deep learning we seek. Teaching for global competence goes beyond delivering new content through transmission-centered pedagogies. Rather, we argue here, it calls for a pedagogical approach uniquely tailored to nurturing deep, relevant, and sustained global learning.

In this chapter, we propose that successful preparation of our youth for the contemporary world requires that we seriously address four fundamental questions:

1. What are the global competence learning outcomes we seek?
2. What kind of instruction effectively nurtures deep and relevant global learning?
3. What does quality teaching for global competence look like?
4. How do we prepare teachers to teach for global competence with depth?

To address these questions we draw on an empirical study of exemplary practices in global competence education.¹ Through a series of case studies, we investigated how award-winning² global education teachers create conditions to foster global competence. To understand the promise and power of their pedagogy, we visited their classrooms, documented selected lessons and interviewed them before, during and after their units. We also interviewed students, and analyzed student work and curricular materials. Close analysis of these master teachers' practices through

¹This study was made possible by the Longview foundation. We thank Jennifer Manise for her unwavering support of this multi-year investigation and her leadership in the field of Global Education.

²Teachers were awarded the Fulbright Distinguished Teacher at the US Department of State.

individual case studies and comparatively across cases has enabled us to identify and illustrate a series of *signature pedagogies* in global education – i.e. characteristic forms of instructional practice that may prove uniquely potent in nurturing globally competent youth.

Here, we introduce a “signature pedagogies” approach to global education and illustrate it with two cases of exemplary teaching in elementary public school classrooms. We first revisit global competence as the capacity and disposition to understand and act on issues of global significance (Boix Mansilla & Jackson, 2011) and place this definition in the larger context of the learning theories that inform it. Next, we turn to quality instructional designs by introducing a *signature pedagogy* approach to teaching for global competence. We then illustrate signature pedagogies [herein SP] using two elementary school case studies. We conclude by examining the implications of a SP approach for teacher education, share currently unanswered questions, and outline next steps.

Educating for “Global Competence” – What Are the Learning Outcomes We Seek?

A Constructivist View of Deep, Long-Lasting, and Relevant Learning

We define global competence as *the capacity and disposition to understand and act on issues of global significance* (Boix Mansilla & Jackson, 2011).³ Developed collaboratively by Asia Society and the CCSSO, and informed by Harvard Project Zero’s research on learning and instruction, this definition builds on a few key premises about the kind of learning necessary for preparing our youth for the world. Firstly, global competence is cast as a capacity to understand – to use disciplinary concepts, theories, ideas, methods or findings in novel situations, to solve problems, produce explanations, create products or interpret phenomena in novel ways (Boix Mansilla & Gardner, 1999; Wiske, 1999). With its focus on disciplinary and interdisciplinary understanding, this definition embodies *deep subject matter* learning.

Secondly, if “understanding” speaks of *depth and flexibility in subject matter expertise*, “global competence” as a disposition speaks of *depth in terms of student ownership* and transformation. Dispositions involve the *ability* to think with information, the *sensitivity* to opportunities in the real world to do that, and an *inclination* to do so over time (Perkins, Tishman, Ritchhart, Donis, & Andrade, 2000). Dispositions are about the ‘residuals’ of learning beyond formal contexts (Sizer, 1984); they are about the “kind of person” a student will become (Boix Mansilla, Miller, & Gardner, 2000). Focusing on dispositions directs our educational efforts

³This definition was developed at the Council of Chief State School Officers. The Global Competence committee was led by Asia Society’s Tony Jackson. Its published articulation and exemplification was informed by research conducted by Veronica Boix Mansilla at Project Zero, Harvard Graduate School of Education.

to nurturing young people’s habits of mind or orientation towards globally competent thinking and behaviors.

Finally, as global competence focuses on issues of global significance and action to improve conditions, learning must be visibly *relevant* to students and the world. When *significance* is considered, global competence curricula becomes a call for authenticity, for carefully looking to the contemporary world for topics that matter most to examine.

Beyond Knowledge, Skills, Attitudes and Behaviors

Our treatment of global competence also favors an *integrated* view of learning, targeting a complement of practices such as “investigating the world,” “taking perspective”, “communicating across difference”, and “taking action” (see Fig. 5.1). Such characterization puts a premium on *meaningful and purposeful units of practice in the world*, thus moving global competence beyond itemized lists of “knowledge, skills, attitudes and behaviors” (Gibboney, 2006). While such lists may help teachers navigate the complex multidisciplinary space of global education, rich and



Fig. 5.1 The Global Competence framework

deep global competence learning pays attention to the inseparable interaction of knowledge, skills, attitudes and behaviors. This holistic view of global competence learning makes authentic purposes for learning more visible to students, whether they seek to understand human impact on the environment as an example of “investigating the world” or make sense of belief systems different from their own as a way to “take perspective.” Integrated practices of global competence like the ones proposed add relevance and meaning to students’ learning experiences, facilitating meaningful transfer of learning beyond classroom walls. Quality teaching enhances students’ sensitivity to opportunities to employ the competencies they have developed productively in life beyond school.

In sum, if as today’s professionals in education we are to prepare our youth effectively for the world, we need clarity about the kind of learning we are after. Recognizing that multiple articulations of learning priorities exist in today’s changing educational landscape, the constructivist approach we here propose puts a premium on global competence as deep, relevant, and long-lasting. Learning that highlights the key role of disciplinary and interdisciplinary expertise foregrounds an integrated view of complex learning capacities such as investigating the world or taking perspective, and aims at the development of habits of mind or dispositions—attending to the long term residuals of learning and transfer.

Teaching for Global Competence: How Should We Design Instruction for the Kind of Learning We Are After?

Conceptions of learning like the ones described above demand carefully tailored teaching approaches that effectively nurture the kind of learning sought by educators interested in nurturing global competence. Instructional recommendations abound in the global education literature today. They address generic teaching practices such as cooperative learning, interdisciplinary themes, community-based learning and portfolio assessment (Asia Society, 2011; Appleyard & McLean, 2011; Longview Foundation, 2008; Merryfield, 1994; Roberts, 2007; Zhao, 2012). They also include instruction specifically tailored to global content such as comparing civilizations (Asia Society, 2011; Koziol, 2012; Merryfield, 2002) or interpreting sources from distant places (Lapayese, 2003; Vainio-Mattila, 2009).

These recommendations offer productive instructional directions for practicing teachers and teacher educators. Yet, implementing them with quality requires that we understand how *exactly* a given learning experience is designed to maximize students’ global competence. For example, upper elementary school teachers teaching about ancient civilizations often design compare-and-contrast activities for student-selected topics: e.g., food, sports, activities, government, or natural resources. Such activities might develop students’ comparison skills and provide specific information about civilizations, but they fail to foreground *why* certain comparisons matter. Instead, comparing civilizations to understand why they rise

and collapse puts knowledge and skills in service of a larger inquiry with clear past and present significance. Engaging in purposeful inquiry and building a robust mental schema for the rise and fall of civilizations will support students to ‘think with’ the information they acquire to understand this broader phenomenon. Such schema would need to reject formulaic or oversimplified comparisons. Rather, multiple dimensions such as environmental fragility, relations with neighbors, political institutions, and levels of stability of a society would need to be considered in age-appropriate ways. Careful and critical comparisons would help students see how these factors have played out differently in civilizations like the Mayans and the Babylonians. More importantly, students thus educated may use their emerging understanding as a “lens” through which to reflect about contemporary developments –from climate instability, to overfishing, population explosion, war – that might put contemporary societies at risk (Diamond, 2006).

What makes for more versus less compelling learning experiences in global education? How can we design instruction or instructional environments that go beyond information acquisition and nurture young people’s capacity and disposition to understand and act in the world?

Signature Pedagogies in Global Education: Our Contribution

“Signature pedagogy,” a term advanced by Lee Shulman (2005) in the post-secondary education context, refers to a pervasive set of practices used to prepare scholarly practitioners to “think, perform and act with integrity” in their professional domain (Shulman, 2005, p. 52). Examples of signature pedagogies vary greatly across professional domains, and include diagnostic rounds in medicine, case method in law and business, critiques in engineering and art studios, each embodying foundational ethos of the profession. In its original application to professional learning, a signature pedagogy approach assumes that quality teaching is deliberate, pervasive and persistent; teaching reveals learners’ prior assumptions; it engages them in formative experiences and requires ongoing assessment. Signature pedagogies organize learners’ experience to familiarize and acculturate them with the core habits of mind and practices that they are expected to develop as a result of their education in a given field or discipline. While earlier research on signature pedagogies examined teaching practices in disciplinary and professional tertiary contexts, our work extends the notion of signature pedagogies to K-12 environments and specifically to global education.

We define *signature pedagogies* in global education as a pervasive set of teaching practices that nurture students’ capacity and disposition to understand and act on matters of global significance. They represent characteristic instructional “tropes”, “paths”, or “motifs” that are repeated over time in learners’ education to familiarize them with globally competent habits of mind: investigating the world, taking perspective, communicating across difference, and taking action in ways that are informed by disciplinary and interdisciplinary perspectives. In this paper we

introduce two SPs: “research expeditions” (or “travel pedagogy”) and “purposeful comparisons”.

A “research expedition pedagogy” focuses on understanding a distant place. Expeditions help individuals *experience* a given place – physical and environmental qualities, built and natural landscapes, people and social organizations, as well as manifestations of culture in the form of tastes, values, practices, relationships and beliefs. Through expeditions, learners typically observe, live and engage with a novel environment, often encountering unexpected contextual information not usually captured in textbook narratives or presentations. Ultimately, learners develop a sense of personal connection to the places explored.

A “purposeful comparisons pedagogy” builds on the premise that learners can advance their understanding of selected aspects of the world in which we live by examining a single phenomenon across multiple locations. Powerful comparisons are guided by a question that makes cross-case analysis necessary. They often involve creating a model or a frame that helps us distil relevant aspects of each case, identifying similarities and differences to inform our understanding. Insights resulting from these global comparisons are more than the sum of their local parts; they leverage learners’ developing capacity to explain the phenomenon in question or find more informed solutions.

As the cases suggest, signature pedagogies offer students ample opportunities to engage in “junior versions”⁴ of key practices in relevant fields (e.g. research expeditions in anthropology, cross-case comparisons in international relations). But what makes signature pedagogies powerful approaches to quality teaching for global competence? What distinguishes them from teaching designs that are not uniquely focused on global competence? Six principles that underlie signature pedagogies as proposed here address these questions.

Core Principles for Quality Practice

Our analysis and conceptualization of exemplary teachers’ practices reveal six defining principles of signature pedagogies in global education. We introduce them here and illustrate them in the next section.

1. **Clear global competence purpose:** Signature pedagogies focus deliberately on the development of global competence – the capacity and disposition to understand and act on issues of global significance – as its central aim, attending to deep, relevant, and long-lasting learning.
2. **Strong disciplinary foundation:** Signature pedagogies provide students with meaningful opportunities to engage, apply and *think with* disciplinary concepts

⁴In his book *Making Learning Whole*, David Perkins coined the phrase “junior versions” to describe the best ‘threshold experiences’ that provide students with opportunities to see the ‘big picture’ of the issue, topics, etc., under study.

and modes of thinking in developmentally appropriate ways. Disciplines may range from social studies, to English, biology, mathematics, the arts, and beyond, depending on the nature of the issue pursued.

3. **Attentive to learning demands:** Signature pedagogies are purposefully designed to address global competence learning demands, including, but not limited to, overcoming stereotypes, managing emotions, and understanding complex causality.
4. **A case-based core:** Signature pedagogies do not teach about “the world in general” but about global issues *in context*. Resembling case-based pedagogy, they focus on specific issues and contexts—environmental crises in the Peruvian Amazon, the impact of sea levels rising on coastal communities in New York and Cape Town.
5. **Spiraling presence:** Specific signature pedagogies appear often and in increasing complexity throughout a student’s learning, providing opportunities to develop global understanding and dispositions with growing autonomy.
6. **Adaptive:** As with most innovative professional practices, signature pedagogies lend themselves to revision in response to emerging global trends or events, new digital tools, or careful reflection about learning.

Signature Pedagogies: Pictures of Practice

To illustrate how a signature pedagogies approach and the six principles above can organize and deepen instructional practice, we turn to two cases of exemplary global competence instruction at the elementary school level. As stated earlier in this chapter, the signature pedagogies below stem from an empirical examination of two experienced public school teachers and recipients of the Fulbright Distinguished Teacher award. In each case, detailed qualitative characterizations of teachers’ practice were placed in dialog with pertinent literature in learning sciences to reveal and progressively sharpen the six signature pedagogy principles introduced above and enrich the cases described below.

A Pedagogy of Travel

Nurturing Global Competence Through Research Expeditions to a Distant Place

How do we help young people understand distant places and people in meaningful ways? How do we support them to make sense of issues unfolding in faraway contexts and connect to them personally? Sara Krakauer teaches 5th and 6th grade Social Studies at Innovation Academy Charter School, a public school in Western Massachusetts. Her “Global Action” unit seeks to help students learn world

geography and culture through “travel” without leaving their classroom: students “visit” distant places such as Zambia and Peru to learn their geography, culture and history, through the lens of local issues relating to health, the environment and poverty. Sara leverages available technologies, media and her own travel stories to make these “virtual travels” possible. In her classroom, Google Earth, Skype, films, photographs, maps and graphics are regularly used. Sara explains.

My goal is to expose students to a wide range of perspectives and places in the world and help them see that their perspectives and their culture isn't the only thing out there.... I want to really give the students a chance to feel what it'd be like to be there [In Zambia, Peru or Guatemala], to get to know a place well rather than learn a little bit about lots of different places. What is special about this place? What are people there proud of, what are they struggling with? So I focus more on having a personal connection that means something rather than just learning facts.

Learners who understand a distant place move beyond “just learning facts”. They are able to visualize and navigate local environments with nuance and develop a sense of the lives of the people inhabiting such places and their relationship with their natural and cultural habitats. “Understanding a distant place” involves learning to take the perspective of various actors to examine local spaces, issues or events. It invites a holistic or systemic approach to learning that goes beyond naming isolated rivers or cultural practices. Rather, it involves understanding a place and its people in dynamic interaction. Even among very young students, understanding a distant place in depth involves thinking with “big ideas” to make sense of the physical, natural and cultural dynamics of a given location. Among these younger learners, ideas such as “a community of people, animals and plants” or the notion of “fighting over what we should do with the forest” serve as precursors of more complex disciplinary notions of “ecosystems”, “interdependence”, “conflict” and “sustainability,” which are typically used in science and social studies.

Key Experiences in a Travel Pedagogy Arc

A powerfully designed travel or expedition involves at least four kinds of learning experiences that play out iteratively throughout a unit or project: finding purpose; being there; making sense; and connecting personally.

1. Expeditions begin with a purpose

Quality learning takes place when students' efforts are driven by a meaningful and engaging purpose. In her unit, Sara invites students to become “international researchers” who learn about people and places that are far away, communicate with people who are different from them, and identify problems and find solutions that are respectful of local people and their environments. “We travelled to the Amazon forest in Northeast Peru to study the conflict between indigenous communities whose traditions, culture and diet depend on local trees and plants, and [Exxon Mobil] an oil company that is contributing to deforestation by extracting and exporting oil,” Sara explains. Clarity of purpose enables students to identify relevant

sources of information, craft more informed and targeted questions for visiting experts, and understand why their learning matters. To ensure that students *share* the sense of mission for their travels and develop a genuine curiosity for the places they will visit, Sara begins the unit with the film *Africa's Child*. The film introduces students to concepts like malaria, life expectancy, birth rates, HIV/AIDS, sanitation, measles, vaccines, and water. Sara complements the film with personal travel stories, photographs, and local newspaper articles. This initial exposure helps students uncover the multiple dimensions of the place, culture and problem they will study, and raise potent inquiry questions. Children want to know: *Why do poor local farmers support deforestation in Peru? Why do some people in the city not care about deforestation?* These questions serve as a diagnostic assessment of the students' initial beliefs or preconceptions and set the stage for genuine inquiry.

2. "Being there": Helping students experience places and people

Traditionally, in social and environmental sciences, deep understanding of a place occurs through *fieldwork*. Today's technologies enable teachers to create multiple virtual proxies for actual field experiences. In Sara's unit, the "journey" to each new country begins in Google Earth as the class "zips across the landscape" from Logan Airport in Boston to Zambia or Peru, aerially seeing the destination country's various topographies, areas of wilderness, and development. Students "walk" or "drive" down the streets and visit places through YouTube videos, taking note of what they see. They experience local attractions through photographs, films, essays and music. To deepen their sense of "being there", Sara assigns students key roles: In Peru, "Journalists" monitor local news (e.g., the Herald or "el Sol") for important daily developments with particular attention to news about the environment, indigenous communities and the rainforest crisis. "Guides" investigating activities specific to the place (e.g., bull fighting and natural reserves) pay particular attention to experiences that might help them understand their focal issue in a larger context. "Treasurers" manage a limited budget for the group and teach others about the local cost of living, currency and exchange rates. They estimate costs for transportation or activities, prioritizing expenditures for the group. A series of weekly guest speakers and Skype meetings with people from their target places further enrich the students' sense of "immersion" in their place of study and the various perspectives on the issue under study.

Visualization is essential in supporting students to understand a place. "Seeing" Peru in multiple ways - cities, environments, maps, data, and relationships-is key to developing a sense of place. Sara's own documentation of her travels add a personal layer to this visual expedition. Quality "seeing" in a pedagogy of travel of this kind involves "slow looking" which awakens and engages the mind: staying close to an image of the Port of Iquitos by the Amazon river, or another of the banking district in Lima, can provoke powerful questions for further inquiry: *What do you see? How is this image similar to how you imagined Lima to be? How does what you see extend your thinking?* Such questions invite students to engage deeply with visual representations and prepare them to "read" places closely. Effective use of visuals

challenges students' assumptions about what life looks like in countries under study. According to Sara:

[The students] tend to think it's all mud huts in Africa and then they'll see a ten-storey bank or billboards. Often times the urban landscape is not something they associate with Africa [or Latin America]. We talk about the kinds of assumptions people make and why and how what they're seeing doesn't meet their assumptions... It's important because students won't care about a place unless they have some understanding of what it's like.

3. Making sense: Supporting students to advance and revise interpretations

Making sense of a distant place is challenging. Students must move beyond what they see, read and hear, to inquire, weigh possible interpretations, deliberate, corroborate, and consider context. A pedagogy of travel encourages students to ask questions that consequently "tool" their sense-making capacities: *How typical is what we are seeing? How does context (natural, historical, etc.) shape the lives people live (e.g., their needs, available resources, opportunities)? How do people in this region draw on the resources they have (e.g., natural, creative uses, resilience) in order to improve their lives? These questions invite students not only to critically examine the information they have, but also to begin to hold complex and contradictory ideas in the same mental space: how might "resources" come to mean different things to people in my community and in a different place? Why does "improvement" of life seem to be different for different people? What does "enough" or "wealth" really mean?*

Interpretations abound in Sara's class. Students discuss videos, images, and graphs. They compare simple data and create complex representations of their target place. Sara explains:

Videos were helpful in helping students see and connect. We also worked on graphing and mapping data on topics like life expectancy, access to clean water, rates of AIDS infection. Students created thematic maps to show data in different countries and compare them to Zambia, the country we were working on.

Similarly, after examining multiple videos of the Amazon rainforest and the impacts of deforestation, students produce rich descriptions of ecosystems. They learn to manage complex information and to "make sense":

I want to see the best ecosystem descriptions possible. What are the research questions you have about this ecosystem? What makes for a good ecosystem description? What will be valuable information? What do we need to find out about the threats to this ecosystem? – Sara

Students' co-construct and then apply criteria for quality descriptions to group presentations on specific aspects of the ecosystem. Collectively their descriptions informed the design of a three-panel wall mural. The first panel depicted the pristine rainforest, its various species, resources, and interdependencies. The middle panel included excavators and fallen trees. The third presented two visible paths, "what happens if the environment is not taken care of", and what if it is. Sara described this project with pride: "Seven students worked on this, creating different parts of the

image and sharing every part of the vision and research. They then created a stop-motion animation with their mural as the background.”

Helping students make sense of the places and people they encounter required that Sara also challenged misconceptions and stereotypes. Early in the unit, students researching clean water in Guatemala assumed that the issue lay with the Guatemalans’ ignorance of the importance of clean water, and subsequently created a video with the message, “here in America, we drink clean water. Let us send our clean water to you.” Sara quickly attended to this problematic perspective by drawing her students’ attention to the complex problem of water access: what is access to clean water, and why might somebody not have such access? Relevant sources (country reports, documentary videos, conversations with guests from Guatemala) became key to challenging her students’ preconceptions and supporting them to build a more complex understanding of the Guatemalan water crisis. Similarly, reading daily local news confronted students with front-page crises, violence and problems that risked reinforcing cultural stereotypes about the developing world. “We had to have conversations about this,” Sara explains. She asked students to consider why they were seeing primarily negative news. “The kids would come to understand that newspapers were not reporting the good stuff.”

Through close analysis of selected sources and classroom discussions where students advance and calibrate their proposed interpretations of the people, issues and places under study, an ongoing expectation to reasoning with evidence ensues. “What makes you say so?” “How do we know this?” In a pedagogy of travel, quality instructional design supports students to understand the dangers of unfounded assumptions when making sense of distant places as well as the importance of gathering additional data to more deeply understand a different people and place. A commitment to thoughtful interpretation also shapes Sara’s invitation to students to prepare a presentation that not only describes the issue and place under study but also helps explain how the local geography, natural environments and cultures shape the experiences and opportunities of people far away. Most importantly, the presentation are created with two audiences in mind: locals there, and locals here.

4. Connecting personally

A final essential aspect of the travel pedagogy here advanced involves inviting students to connect personally with the people and places “visited”. How does our life compare and connect to that of the people we study, and how do you communicate with and relate to them in meaningful ways? Sara’s students deepened their understanding of how the geography, culture, and people in a place shape local issues and their possible solutions. Peru is far from the students’ home in Massachusetts, and inevitably, ruminations about “people there” sparked conversations about “us here.” Students’ learning instilled a sense of proximity and a personal investment in Peru, Guatemala and Zambia. The Peruvian Amazon region, for instance, gained a special place in students’ mental representation of the Latin America region. Sara’s students spoke extensively about how their lives and that of others they had studied differed and how they felt connected through shared experiences such as love for family and for one’s place of birth, as well as more

mundane and simplistic ones such as “they do things outdoors and we do things outdoors.”

Direct interaction with local peers also challenged students to recognize their own assumptions and culture. For instance during a Skype conversation, a student in Botswana asked Sara’s class how they were dealing with the problem of guns in schools in the US. Students were taken aback and soon they recognized that the issue was real and that it was likely to have dominated the media accessed by their peers far away. Connecting personally involves viewing oneself through the eyes of others.

Finally, a greater challenge for younger students when seeking to connect personally with a distant place through these expeditions is seeing how both “we here” and “they there” are part of a broader global system in which their own actions might impact (thus connect with) other parts of the world in positive or negative ways. One student, Leah, feels that it is wrong for companies to drill for oil in the rainforest and understands that the oil goes to fueling cars and homes. Yet, when asked about connections between the issue she studied and her own life, she did not see our daily consumption habits as having far reaching consequences. She proposed, appropriately, signing petitions and planting more trees as helpful actions to be taken over *there*, but did not consider cutting down on our use of oil *here*.

In sum, a “pedagogy of travel” or research expedition invites students to understand particular places selectively, and is an accessible way to engage a complex global issue. Through a clear inquiry focus, a wealth of visual materials and immersive digital experiences of “being there,” delicate treatment of evidence and interpretations to “make sense” of a distant place, and a deliberate effort to connect personally with the locations and issues under study, a pedagogy of travel prepares students to understand, in Sara’s words, “that the world is not as big as it seems. That there are so many opportunities out there if they take a risk and go outside their comfort zone. The world is so full of new ways of thinking, new ideas, new beauty, places to explore and issues worth pursuing.” Ultimately, a travel pedagogy has the potential to instill in students “an appreciation for the world beyond themselves”, an ability to make sense of the unknown, to make connections beyond their own culture and communicate and act in more informed and considerate ways.

A Pedagogy of Purposeful Comparisons

Nurturing Global Competence Through Cross-Case Analysis

How can we support young people to engage with global issues that can seem impossible to ameliorate? How might we help them see local instantiations of such issues, and learn to advance better explanations or more informed solutions? Kottie Christie-Blick teaches 4th and 5th graders in Cottage Lane Elementary School, New York. Deeply interested in and committed to mitigating the impact of climate change, Kottie’s “*Climate Stewards Go Global!*” unit seeks to nurture students’ global competence by investigating the relative impact of climate-related sea levels

rising on coastal communities in New York and Cape Town, South Africa. Her unit invites students to understand how global phenomena such as climate change and sea levels rising play out in two locations, and the actions they might take in collaboration with their South African peers to mitigate climate change.

Learners make purposeful comparisons across cases when they are guided by an inquiry question that is meaningful and relevant to them. By studying how rising sea levels are at the same time similar and different for New Yorkers and South Africans, Kottie's students begin to understand how a single phenomenon might impact different natural and human communities. As they begin to identify trends or patterns across the cases, students begin to distill relevant aspects of each case into a model or frame that they may use to study other global phenomena.

Key Experiences in the Pedagogy of Purposeful Comparisons Arc

A powerfully designed cross-case analysis involves at least four kinds of learning experiences that may play out iteratively throughout a unit or project: finding purpose; creating models or frameworks for comparisons; understanding real contexts, making informed decisions.

1. Finding purpose: Focusing on comparisons that are illuminating

Why is the ocean rising? What will happen if it rises one or two meters higher? Will all coastal communities be affected in the same way? What can we do to mitigate climate change? Is one solution enough for all? How can we work with friends from around the world to find the best solutions? For Kottie's students, the problem of sea levels rising was a pressing and present one; they had firsthand experience with the devastating impact of Hurricane Sandy on their community that year. As they walked around the neighborhood to survey the damage, saw photographs of large yachts washed up from the Hudson onto people's properties and houses, and took note of crumbled away homes in the floods, they began to realize the importance of understanding why there was severe flooding even though there was not much rain during the hurricane. How might that be prevented in the future?

For Kottie, empowering her young students to take positive action against climate change is imperative. She understands that opinions may differ on the issue but is committed to supporting her students to develop a scientifically informed view. A priority for Kottie is making the complexity of the issue accessible to children aged 9 and 10. "Our planet is warming up," she explains, "with far-reaching implications for us all. The conversation in scientific circles now is how Earth will respond, how well the living things on Earth will be able to adapt, who will be the winners and the losers, and what we can do to slow down our warming climate." Her "*Climate Stewards Go Global!*" unit was designed to help her students understand the confluence of factors that led to the severe flooding in their own community, as well as the connection between "what they had experienced firsthand already, and this whole global issue of sea level rise and how that connects with global warming because they weren't sure of that connection yet." Collaborating with a classroom in Cape

Town, South Africa, made sense because rising sea levels visibly affected life in both coastal communities. More importantly, the comparison would enable the children to see how a common global phenomenon can have different impact and require distinct and locally relevant solutions.

2. Creating models or frameworks for comparison

To help her students visualize how the melting polar caps raise sea levels, and how such changes could affect landscapes and communities differently, Kottie adapted a model she had seen in the Nobel Center in Norway into a maquette for her classroom. She invited students to place tiny models of houses on the lower levels of the maquette, and then experiment with the rate at which the ice cubes placed on the higher levels melted and flooded the lower levels. When they saw how their “houses” were swiftly swept away by the cascading waters or the rising seawaters, the students became agitated, and many moved their “homes” to different parts on the lower levels, but found that the result remained the same. The students’ emotional response directed their attention to understanding why their “houses” could not be protected if the ice caps continued to melt and the sea levels rose. The students deliberated about how the landscape and economic resources would affect their ability to survive in the created scenarios. The experience brought several key ideas to life, from understanding causal factors that are distant in time or space from their effects, to the necessity of “preparedness” among inhabitants of coastal communities and the ways in which ocean rising would affect communities differently.

The maquette experience was followed up with various other cases of impact. Kottie showed them photographs of the devastation wrought by Hurricane Sandy in their own neighborhood and other locations. She also brought them on walks to survey actual scenes of destruction. Students read books on the impact of climate change, as well as watched a BrainPOP movie on global warming and its effects. As they studied impacts in communities far away as well as their own, students wondered: *what causes weather, how do we impact it, and how does it impact us?* As the students began to digest the causes and consequences of climate change across the cases they studied, key concepts like global warming, greenhouse effect, pollution, the Keeling Curve, and others began to make sense as relevant features of each case, and clear trends across cases.

3. Understanding real contexts

The maquettes illuminated the confluence of factors that shape the differential impact of ocean rising in various communities, preparing the students to compare real communities next. Kottie’s students communicated with their South African ePals through blog entries that began as carefully crafted introductions that scrupulously adhered to the guidelines that the teachers provided in an effort to ease their students into the task. Without exception, the introductions were template-like: name, age, family, interests, food, and questions. As the students became increasingly comfortable with one another and more confident about their ability to communicate with peers halfway around the world, Kottie invited the children to share their understanding of the causes and impacts of global warming in the two different

locations. The blog exchanges were opportunities for her students to develop the habit of comparing the impact of the same phenomenon in different locations. For Kottie, “it’s so important to bring a global perspective to it because it’s not something we can solve on our own. There are only 22 of them, how much difference are they going to make worldwide? They know it doesn’t give them enough power. When I start talking to them about what’s happening globally, in other classrooms, not just in the US, they start to realize that now they are part of something bigger than themselves, and they feel they have power now, not doing something on their own, but part of something bigger than themselves. Any authentic teaching of global problems needs that perspective.” Her students realized that they were not alone in their endeavor to combat global warming.

Her students also learned to recognize how global warming was neither “a myth”, nor an event in the far future. Rather, its devastating effects were actually happening now. One student shared how she used to think that global warming would affect only certain people, and how interacting with her ePal made her realize that it was a global rather than localized issue. The students also learned how the impact of global warming was differently framed in each context. For instance, while the rising sea levels were seen as a threat to communities living along the coastline and Hudson River in New York, it was a big concern in Cape Town because tourism – an important source of revenue for the city – was affected. By deliberately juxtaposing the two locales, Kottie was able to demonstrate how context was important in understanding responses to global warming.

By connecting American students with those in South Africa, Kottie’s unit helped them understand how context shapes the way we think. As the students learned more about one another through their blog interactions, they began to realize how their respective contexts inclined them to propose different mitigation methods. For instance, although both classes presented similar mitigation measures (e.g., riding bikes to school), Kottie’s students expressed surprise at some of their ePals’ proposals, such as growing bamboo which produce 30% more oxygen than trees. They later came to understand how their ePals’ more comprehensive grasp of mitigation methods was unsurprising given how climate change in South Africa was framed as one of the greatest threats to the country’s development goals, triggering governmental responses to climate change as early as 2004, and spurring local businesses and citizen interest groups to start movements toward sustainable living.

Making Informed Decisions

As her students came to understand how climate change could lead to changes that were often far away from the initial emissions, and how often the causes and consequences of climate change were intertwined, Kottie shifted the conversation to mitigation: what could they do about mitigating climate change *now*? The challenge to students was clear: *what can young people like themselves do to effectively make a difference*? Kottie’s students considered and proposed solutions that they could feasibly put into action: being less wasteful so that they needed to buy fewer products; presenting a persuasive case for why their parents should purchase hybrid vehicles;

looking for opportunities to speak to their family and friends about the impact of climate change, and inspiring them to participate in mitigation activities. Each action was carefully considered in light of how it directly slowed down climate change. For instance, Jessica, Shane, Kelly and Dan proposed how using less electricity helped because “power plants put a lot of carbon dioxide in the air when they burn coal, oil, or gas to make power”, and how growing plants slowed down climate change because “plants absorbed the carbon dioxide in the air. The bigger the plant, the more carbon dioxide it takes in!”

Additionally, Kottie’s students also worked in groups to discuss their ideas for mitigation, and worked towards a consensus about one idea that they felt they could reasonably commit to taking real action on. For instance, one group decided that they would commit to using less electricity by turning off the lights and powering down devices when they were not in use. The group also created an animated video (<http://staff.socsdblogs.org/christieblick/climate-stewards/>) to invite viewers to join them in taking action against climate change.

As a class, Kottie’s students also learned that by disseminating what they’d learned through oral presentations and written articles, they could reach a wider audience. They helped Kottie write an article that was published on the National Oceanic and Atmospheric Administration’s website (<http://oceanservice.noaa.gov/education/climate-stewards/talking-about.html>), and also requested to present information about climate change and mitigation methods at a school-wide assembly.

Signature Pedagogies Revisited: Deepening Instructional Tropes in Global Education

In what ways do the two units described illustrate foundational principles of signature pedagogies? How can a signature pedagogies approach yield the meaningful learning that we, today’s global educators, are after? Studying world regions and comparing cultures or civilizations are common *tropes* or *motifs* in global education teachers’ instructional repertoire. Preparing information-rich country reports, comparison charts, posters and presentations are ubiquitous activities in the global education classroom. A signature pedagogies approach invites teachers to reframe these common practices along six core principles so that they can effectively nurture students’ global competence in ways that are deep, relevant and long lasting.

Clear Global Competence Focus

Sara and Kottie invite students to understand and act on issues of visible global significance –e.g., malaria, deforestation, climate change and ocean rising. These real, contemporary issues awaken students’ interest and sense of themselves as current, not only “future”, global citizens. In both cases, teachers’ specific inquiry

questions set the stage for depth over coverage. Students do not “travel to Peru” to hang around and “discover what is there.” Instead, they must make sense of the conflict between a powerful oil company and multiple local stakeholders in the Peruvian Amazon. They contact peers in South Africa to share ideas about climate impact in their two cities. Their goal is not merely to gather information about each country but to understand a complex issue in rich and compelling ways. To meet this goal, students in both cases learn to establish the significance of the issues, seek out sources from other cultures (e.g., news or ePals’ blogs). They draw on such sources to make sense of the distant place, stakeholders’ experiences or climate impacts. They share their analyses and conclusions in class and to multiple audiences. Students in both cases begin to learn to take perspective and action. In both cases, too, learning experiences are designed to create multiple opportunities for global competence development.

Strong Disciplinary Foundation

Both cases invited students to engage, apply and *think with* disciplinary concepts and modes of thinking in developmentally appropriate ways. Sara’s students use geography as a lens to visualize the Earth, understand “place”, and explore the dynamic interaction of physical environment, the economy, and culture as they examine how regional landscapes and natural resources shape people’s experiences. Kottie’s students in turn become fluent in climate science, practicing essential modes of thinking such as drawing on empirical evidence to argue that global warming is not a “myth”, and modeling complex causal systems. In the area of information and communication technologies, students develop critical sourcing and respectful communication skills as they learn to navigate news outlets in Peru or communicate with ePals in South Africa. In each case, students begin to develop the habit of drawing on disciplinary expertise not as a means to “do well in school” but as a lens through which to make sense of the world. A fundamental reframing of the purpose of disciplinary instruction is at play in a signature pedagogies approach.

Attentive to Learning Demands

Signature pedagogies are designed to address global competence learning demands. For instance, both teachers anticipate that students will exhibit stereotypes about people in the developing world. They make students’ beliefs visible early in each unit and design learning experiences to target and transform these. Sara invites students to walk around and reflect on their reactions to Lima’s banking district where skyscrapers challenge students’ oversimplified ideas of rural Latin America.

Similarly, Kottie invited students like Richard in our opening vignette to draw their ePals before meeting them on Skype. Attending to learning demands, these teachers use cognitive dissonance to challenge their students to revise their social stereotypes. Additionally, Kottie anticipates that learning about climate change will require that her young students learn to manage fear and other complex emotions. Climate change can feel overwhelming even to adults, she explains. Yet she purposefully concludes her unit by empowering children to propose solutions and deciding on actions they can take themselves in the present. Further attending to learning demands, Kottie uses a concrete and interactive 3D model of coastal flooding that enables her students to begin to understand complex dynamics in accessible ways. Specific learning demands such as the distance in time and space between causes and events are addressed through richly concrete means.

A Case-Based Core

Fundamentally case-based, Sara and Kottie's units examine big and complex ideas in the context of specific local cases. In the "travel" and "comparisons" signature pedagogies above, concrete, multidimensional and "real" cases make complex global issues accessible and manageable. Because they are framed as problems that call for explanation and solutions, this case-centered approach invites students to go beyond collecting and summarizing information in a traditional "country report" or "poster". Instead, cases provide parameters for students to apply or *think with* the information they obtain in order to explain the roots of the issue, produce thick descriptions of a local ecosystem and its people, or propose locally-relevant solutions.

Spiraling Presence

Sara's and Kottie's units illustrate "travel" and "comparisons" signature pedagogies in the elementary school context. Multiple opportunities to experience quality travel and cross-case comparisons over time promises to instill in students not only the capacity to investigate a place and take perspective but also an *inclination* to doing so over time—to develop a habit of informed travel or leveraging comparisons. Signature pedagogies as here outlined can contribute to nurturing a global *disposition* by inviting students to "travel" often in a year or across educational levels to gain a deep sense of a place, its people, its potential, and its challenges. Students who encounter opportunities for well-scaffolded "travel" and purposeful "comparisons" like the ones here described are likely to become "better global expeditioners" over time.

Adaptive Practice

A final principle that guides our analysis of the cases above is the adaptive nature of a signature pedagogy. A pedagogy of travel or one of purposeful comparisons does not embody a fixed set of steps to be followed nor an established curriculum. Rather, each signature pedagogy is enriched by further inquiry. Teachers adapt their teaching designs in response to emerging global trends, new digital tools, or careful reflection about learning. A signature pedagogies approach to global education embraces the view of teachers as professional inquirers of their practice.

In sum, our exploration of exemplary global education teachers' practice so far has enabled us to identify, analyze, and illustrate two signature pedagogies that can directly inform instructional designs geared to nurturing global competence. The six foundational criteria proposed can guide teachers in their efforts to nurture student learning that is deep, relevant and long lasting. Teachers may ask: *Does my unit or project have a clear global competence focus? Is it grounded in relevant disciplines, nurturing application of big ideas and modes of thinking that characterize the domain? Can I anticipate the learning demands that this unit will present and plan accordingly? Can I identify particular cases and locations in the world that provide a rich and accessible representation of the particular issues I am interested in exploring with my students? Will there be enough opportunities throughout the year for my students to "travel" or "compare cases" so that they can develop a disposition toward deep engagement in the world? How could I adapt or improve my design vis-à-vis emerging global phenomena, or my experience of teaching and learning for global competence?* Clearly the travel and comparisons pedagogies here proposed are not the sole signature moves in quality global education. Other tropes can be envisioned such as a "social entrepreneurship" or a "global convention" pedagogy. Nonetheless the signature pedagogies outlined so far represent powerful examples of how quality teaching for global competence can be embodied in holistic and culturally relevant narratives (traveling, comparing cases) that give meaning and direction to the teaching and learning experience.

To Conclude: Added Value and a Note on Teacher Expertise

In this chapter we proposed that preparing our youth for the contemporary world requires that we develop an informed position toward four fundamental points. First, we must be clear about the kind of learning we seek. We argued that that global competence can be seen as the capacity and disposition to understand and act on issues of global significance. We made the case for a holistic articulation of such capacities, calling for learning that puts a premium on deep, relevant and long-lasting learning. Second, we proposed signature pedagogies as a promising approach to characterize the kind of instruction that effectively nurtures deep and relevant global learning. Drawing on our examination of award-winning master, teachers we

articulated two signature pedagogies – “a pedagogy of travel” and one of “purposeful cross-case comparisons” – as well as six principles on which they stand. We then illustrated each signature pedagogy with a detailed account of units taught in two public school elementary classrooms and applied the stated principles to each case. We conclude this chapter by turning to the potential contributions of a signature pedagogies approach to the field of global education and its implications for teacher expertise.

The quality of global competence instructional designs pivots on teachers’ assumptions about the content they teach, how learning happens, who learners are, and the purpose they assign to their educational efforts. Responding to this, a signature pedagogies approach to global education may contribute to the field in at least five ways:

- It commits teachers to nurturing deep, relevant, and long-lasting learning that goes beyond the acquisition and reorganization of information.
- It attends to the learning demands associated with global competence and addresses them proactively.
- It connects to well-known instructional tropes or motifs (writing a country report or comparing civilizations) that are already ubiquitous in K12 education and invites teachers to connect and then transform or deepen their practice.
- It echoes culturally relevant practices, such as traveling or comparing places, thus enhancing the likelihood that students will recognize opportunities to use what they have learned outside school.
- It positions students as inquirers able to explore a topic or place beyond their teachers’ own knowledge base, and invites teachers to serve as learning coaches or travel companions.
- It integrates students’ learning experiences, moving beyond a “collection of loose activities” into a holistic learning journey in which students participate actively.
- It views teachers as professionals able to make informed judgments about their instruction and to respond and adapt to emerging events, new technologies, or observations on student learning.

What do teachers need to know and be able to do in order to design quality instruction of the kind we see in Sara and Kottie’s classrooms? How can we reframe teachers’ expertise in order to capture the multiple forms of expertise that inform quality professional practice in global education? What do we learn about teacher expertise that may inform the preparation of current and future teachers to prepare our youth for the world? While an extensive treatment of these questions exceeds the scope of this chapter, it is worth pointing out that our preliminary analysis suggests at least four distinct forms of expertise embodied in these teachers’ practice: a flexible understanding of the disciplines they teach reinterpreted in global terms; an understanding of effective general instructional practices; an understanding of their students, their interests as well as the learning demands they confront; and last but not least, an understanding of the world in the form of informal, often experiential, expertise.

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Flossie SG Chua Flossie's work focuses on how we might prepare young people to live, work and play in our complex and dynamic contemporary world. She is currently a postdoctoral fellow in education as well as a research and project manager at Project Zero-Harvard University, and works on multiple projects in the USA as well as different parts of the world. Her work involves projects that explore and document emerging practices of progressive pedagogies focused on twenty-first century learning and the shared leadership structures in schools that support it, as well as collaborations that study and design structures and pedagogies that support young people to grapple productively and insightfully with complexity and ambiguity. In addition, she is the interdisciplinary specialist with ART21 Educators, a nonprofit designed to support K-12 teachers to bring contemporary art, artists, and themes into classroom teaching and learning, and broaden their curricular focus to include inquiry into contemporary issues and questions that demand cross-curricular knowledge and ways of thinking through contemporary art. Flossie is also an Instructor in Education at the Harvard Graduate School of Education.

Chapter 6

Voices from the Field: What Can We Learn from Leaders of Diverse Schools in Ontario Canada, Tensions and Possibilities?

Ann E. Lopez

Abstract The twenty-first century is well underway, people are on the move across the globe, and societies are becoming more diverse. This diversity is reflected in schools and classrooms all across the globe. Canada remains one of the most diverse Western countries in the world receiving 2.5 million newcomers between 2003 and 2012; and where large metropolitan areas such as Montreal, Toronto and Vancouver are projected to have a visible minority population above 50% by 2031 (Statistics Canada, 2015). These shifting demographics in Western countries, and the increasing diversity in the student population, have created new urgencies for school leaders. In Ontario Canada, the Ontario Equity and Inclusive Strategy calls on educators to see diversity as an asset, move beyond tolerance and celebration to inclusivity and respect, to making Ontario's education system the most equitable in the world. This chapter describes the critical work of school leaders in Ontario schools. Within a framework of culturally responsive and transcultural leadership, this chapter brings to the fore voices of school leaders who are practitioners in very diverse schools. It examines ways that they enact culturally responsive leadership, the possibilities that this approach offers and the inherent tensions. Diversity is a reality that cannot be ignored by educators. There is much for educators to learn from school leaders and their experiences in diverse contexts about the tensions and possibilities of school leadership in changing times and contexts.

This chapter focuses on the critical work of school leaders within the current context of population shifts and increasing diversity in schools. Shifting demographics in Western democracies and the increasing diversity in the student population, have created new urgencies for school leaders. Dealing with diversity is one of the main issues of twenty-first century education (Darling-Hammond, French, & Garcia-Lopez, 2002). Within the Canadian context communities and schools have become

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more diverse. Nearly six million people identified themselves as a member of the visible minority population, about (19.1%) of Canada's total population. The increase in the visible minority population was due largely to the number of immigrants who arrived in Canada in recent decades from non-European countries. Canada is a country of linguistic diversity and is becoming more and more a multi-lingual society in the wake of growing numbers of immigrants whose mother tongue is neither English nor French (Statistics Canada, 2011). A similar pattern is emerging in the United States. By 2044, more than half of all Americans are projected to belong to a minority group (any group other than non-Hispanic White alone); and by 2060, nearly one in five of the nation's total population is projected to be foreign born (United States Department of Commerce, 2015).

Increasing diversity of the student population in addition to demands for educational reform and accountability pose enormous challenges for school leaders on a worldwide basis (White & Cooper, 2012). There are calls for school leadership and the curriculum to be more culturally responsive and socially just. That is, school leadership and curriculum that connect to the lives and experiences of diverse students and communities, focus on academic rigor, and support students to participate fully in the social and political discourse that is currently taking place. Darling-Hammond (2006) suggests that teaching that engages students in the complexities of current societal realities is becoming increasingly important. As societies change students need the skills and knowledge to survive and succeed in an increasingly complex world. Darling-Hammond's assertion of 10 years ago is still relevant today as populations move across the globe changing the face of and social make-up of countries.

There needs to be more focus in schools on diversity as an asset, not in romanticized ways as "fun, food and holidays", but as an essential ingredient in preparing students for a world that is shrinking through the use of technology and migration. Schools must work to ensure that students from all backgrounds, particularly those who have been marginalized and excluded, feel included and valued in the educational process and that they matter. Events around the world and recent racial unrest in the United States point to the need for school leadership that is inclusive, just and responsive. Educators must now take into account how different populations are interconnected as a global community and the skills attitudes that students will need to successfully navigate these new realities.

Globalization has led to an explosion in the variety of sources of information available. People now live in multiple overlapping communities, and students are living in spaces that are highly diverse in language, information flows and cultural practices (Haan, 2012). There is a need for more globally minded learners and educators (Goetz, Jaritz, & Oser, 2011). Kress and Lake (2013) suggest that educators see the world as simultaneously local, global, political, economic, ecological, cultural and interconnected. Students in the twenty-first century must be educated to understand and think critically about schooling and society, think outside of a framework of conventional understandings, and engage in continuous inquiry and reflection (Burbules & Berk, 1999).

Educational leadership scholars and researchers, who work and research within a social justice and culturally responsive framework (Bogotch, 2005; Ryan, 2014; Brooks, Normore, Jean-Marie, 2014; Beachum, 2011, Johnson, 2013; Furman, 2012; Shields, 2010) have been examining ways to address the increasing diversity in schools. Dantley and Tillman (2010) argue that leadership must be socially just and by doing so investigate the challenges that we face in schools today and offer solutions. Ryan (2006), suggests that “inclusive leadership consists of a number of distinct practices. They include advocating for inclusion, educating participants, developing critical consciousness, nurturing dialogue, emphasizing student learning and classroom practice, adopting inclusive decision- and policymaking strategies, and incorporating whole school approaches” (p. 9).

This chapter brings to the forefront voices of school leaders who are practitioners in very diverse schools in Southern Ontario Canada within a framework of culturally responsive and transcultural leadership. It examines ways that they enact culturally responsive leadership and what we can learn from their experiences. In this chapter, I argue that there is much for educators to learn from school leaders in diverse contexts on the tensions and possibilities of leadership in changing times and contexts. Twenty-first century education must include a focus on culture that challenges taken-for-granted categories and representations (Kanu, 2009) and insert a critical approach that centers diversity and difference (Cochran-Smith, Davis, & Fries, 2004; Nieto, 2009). The chapter is organized as follows: First, I discuss the tenets of culturally responsive and transcultural leadership. I then discuss the research methodology. Next, I share the narratives of participants and lastly I conclude with a discussion and final thoughts.

Culturally Responsive and Transcultural Leadership

Culturally responsive leadership builds on culturally responsive and culturally relevant pedagogy (Gay, 2010; Ladson-Billings, 2014) that argue for greater inclusion of students’ identities and cultural background in teaching and learning. Culturally responsive and culturally relevant educators suggest that academic rigor, inclusion of students’ lived experiences and a focus on raising students’ sociopolitical consciousness should be front and center in the teaching and learning process. Culturally responsive leadership enacts an approach to leadership that moves the beyond the transactional functions of leadership to include practices that challenge the structures and systems that exclude and marginalize some students and actively involves the experiences of diverse students. Beachum (2011) highlights three key aspects of culturally responsive leadership. He suggests that culturally responsive leaders (a) develop emancipatory consciousness that focuses on educators’ awareness of the history and the detrimental impact of societal inequities; (b) gain equitable insights that focus on the development of attitudes that promote inclusion throughout the school community; and (c) engage in reflexive practices whereby educators critically examine the work that they do. Culturally responsive leadership practices do

not occur by chance, but through deep self-reflection, commitment to challenge the status quo, commitment to engage in new ways of knowing and doing, commitment to actively advocate for issues of equity and diversity, and commitment to stay the course (Lopez, 2015).

Transcultural leadership is not a new phenomenon and has much in common with culturally responsive leadership. Transcultural leadership like culturally responsive leadership recognizes that the various identities of students matter, that leaders must be sensitive to the diversity in schools (Simons, Vazquez, & Harris, 1993). Transcultural leadership embraces issues of diversity, respects and includes the differences of students (Goddard, 2003). A transcultural perspective interrogates difference, raises critical questions (Cahill, 2013) engages across difference (Torre, 2009). A transcultural approach has the potential to build capacity for individuals and groups to navigate and traverse shifting cultural terrains; connect across social and cultural boundaries and offers educators a way to address the challenges that they face (Hou, 2013). Drabble, Sen and Oppenheimer (2012) similar to Beachum (2011) posit the following as key tenets of transcultural education (a) the importance of culture, (b) challenging power, privilege and oppression, (c) positionality and self-reflexivity, (d) respectful partnership with others, and (e) cultural competence.

These frameworks and ways of theorizing the practices of school leaders open up spaces for critical conversations about culture, examine power and privilege, and place issues of diversity at the center of educational leadership. The notion of school leadership that this chapter examines includes teacher leaders as well principal leadership. For educational leaders embracing these approaches it means among other things, supporting and promoting culturally responsive curriculum, seeing culture as fluid and more than just “fun, food and holidays”, and working to bring about transformative changes in schools. A transformative curriculum disrupts taken-for-granted practices, require deeper and more systematic analytical skills strategically targeting oppressive practices (Bogotch & Shields, 2014). Dantley (2005) suggests that transformative leaders “critically assess the asymmetrical relations of power in the organizational context and deconstruct through critical hermeneutic those practices and cultural artifacts that engender an antidemocratic discourse in organizations such as schools” (p.15). This chapter is part of a larger study and draws on previous publications of some of these findings elsewhere Lopez (2015).

Methodology

This chapter draws on a larger research that was conducted with fourteen school leaders (teacher leaders and school administrators) who worked in various diverse schools in Southern Ontario, Canada at the time of the study. The study employed a qualitative research approach (Denzin & Lincoln, 2005; Carspecken, 1996). Participants were recruited through letters sent by email sent to school leaders that

I had come to know through various contexts and referred to me by other educators. Participants were selected who identified their leadership practices as culturally responsive and had more than 5 years of teaching experience. My own background as a former classroom teacher and school administrator in many ways positioned me as an insider in this research. I had also worked with four of the participants as a mentor on a prior research project looking at the experiences of educators of color aspiring to be leaders. The insider researcher conducts research within their social group (Naples, 2003). The insider researcher holds prior knowledge and understandings of the group, brings deeper insight to the research through the reflexive process of data collection and analysis in order to reach a deeper level of introspection that may assist them in the narration of their participant's stories (Greene, 2014). Researchers such as Banks (1998) and Chavez (2008) and others have sought to disrupt the insider/outsider dichotomy. My role as an insider in this research positioned me to be better able to analyze the narratives and stories of the participants. The following questions guided the research:

1. How and why do educational leaders embark on a journey of culturally responsive leadership?
2. What practices do culturally responsive leaders engage in and why?
3. What challenges and tensions do culturally responsive leaders face?
4. In what ways might culturally responsive leaders be mentored, supported, and sustained?

Southern Ontario and the Greater Toronto area is one of the most diverse parts of Canada and many would argue the world with many cultures, languages, racial and ethnic groups represented. The schools where the school leaders worked reflected the diversity of the region. The participants represented a diverse group of school leaders in terms of gender, race, social class, age, religion, language spoken, age and years of service. Participants self identified as male, female, Asian, White, Black, Muslim, Christian, and immigrant.

Data was collected utilizing qualitative research methods semi-structured- interviews and an open-ended questionnaire. Participants initially completed an open-ended questionnaire that was followed up later by semi-structured interviews. The questionnaires asked participants to respond to questions that provided responses relating to their practice as culturally responsive leaders. The semi-structured interviews allowed me to explore further and probe for deeper meanings and insights and to give participants the opportunity to reflect more deeply. Interviews were approximately an hour in length. Data was analyzed using the tenets of culturally responsive and transcultural leadership and then coded into themes that highlighted "possibilities" and "tensions" that school leaders who adopt critical approaches experience. Being an insider, I was mindful of my positionality in the data analysis phase. By explicating the possibilities and tensions of culturally responsive leaders, this work will add to the ways that leaders bring theory to action in their practice. A crucial aspect of this kind of research is the sharing of the findings with participants so that they can learn from others, not only more effective ways of engagement in their schools, but ways to deal with the tensions they face.

Voices from the Field – Enacting Culturally Responsive and Transcultural Leadership

Engaging in critical and inclusive practices is not easy. The aim of this research was to hear from practicing school leaders how they navigate the path of critical leadership and how they theorize their work as culturally responsive school leaders. Jean-Marie, Normore, and Brooks (2009) argue that it is important for social justice school leaders to tease out their work so that others can learn from it. One of the purposes of this chapter is to examine what we can learn from leaders who have dared to embrace critical forms of leadership, highlighting the possibilities and tensions so that others may learn. The purpose of educational research is to transform the lives of students, particularly diverse students who have been underserved. I highlight the possibilities from the narratives of the participants because I think it is important to be hopeful and optimistic. If we believe that change is possible despite the statistics on underachievement of some groups, then we are encouraged to act and take risks. One of the possibilities that emerged from the research was the ability of school leaders both in the classroom and the school to impact curriculum and pedagogy. I see leadership in this regard as moving beyond physical act of teacher itself to activism and agency (Lopez, 2011). For example, Pauline, a black female principal in a very diverse middle school in one of the region's most economically disadvantaged neighborhoods with a large immigrant population where English is not the first language spoken at home, suggested that her leadership style was culturally responsive and this was reflected in the instructional approaches of the teachers. One of the actions that she took was to ensure that the resources in the schools were culturally responsive, and that the staff were aware of her "leadership philosophy of inclusion and culturally responsive approach". She noted that her "leadership practices ensured that students see themselves reflected in the curriculum and their cultural heritages are embedded in the school. I ensure that instructional practices are cultural relevant". As principal, Pauline ensured that resources were allocated to buying resources that were diverse and included the diversity of the students and the community. Another participant, a female teacher with 7 years of teaching experience indicated that she "constantly seeks out resources that reflect the identities of the students".

Jonathan who is responsible for running one of the welcome centers in his school board said that he "welcomed new comers to the school board and felt that it is important to ensure that families are welcomed in the school space and their ideas brought into the classrooms". Southern Ontario receives a large immigrant population. Welcome Centers serve a space and place where newcomers to the country and the school board learn about the Canadian and the Ontario education system. Jonathan suggested from "this very moment of contact families become part of the teaching and learning process". Mary a female vice principal with over 35 years of experience worked in a school with racialized students predominantly from Africa, the Caribbean and South Asia described the importance of meaningful connections with the community in "supporting the families and helping the students to get a job

or improve their literacy skills for further education”. One of the actions that Mary took was to start a reading club at her school that included the students and members of the community. Mary noted, “I take great pride in involving the parents in the life of the school”. Mary also indicated that she started a parent partner workshop at her school.

Instituting parent partner workshops at our school help to bridge the cultural understanding and enable staff to respond to the students and how they learn. We utilize students’ backgrounds and histories to create events that include the community...and reflect the students and their families.

The parent partner workshops are not done in isolation, but reflect needs that are identified by the community. Parents participate in the workshops as participants and sometimes co-present with teachers. Another school leader, Cynthia felt that efforts to meaningfully include the parents in the teaching and learning process at her school had a positive impact on the students, and the overall achievement of students. Cynthia noted:

The effectiveness of culturally responsive leadership can be addressed from the point of view of family involvement in our school. The openness of our school to parent volunteers leaves us with the sense that the community sees our school as a hub for English Language Learners (ELL) adult learners and volunteers. The parents are welcomed in the school... they are encouraged to actively participate on the school council...they are made to feel that their views matter in all aspects of the school...we do more than hold barbeques...we ask our immigrant parents and parents of color what they think about issues ...they are welcomed to voice their ideas... we take their ideas them seriously and act on them...

The school becomes a hub for ELL learners as they use the library. It is a welcoming space that they can walk into and ask questions. Because of their involvement in the school as volunteers a level of comfort is built up and they do not feel marginalized because they do not speak English as their first language. Another participant suggested that as a culturally responsive leader she ensures that the “students’ histories and backgrounds are represented”.

I try to utilize the students’ backgrounds and histories ...I provide staff with resources that reflect the students’ identities...In our school we have reflective murals painted on the walls ...our teachers approach the students with care...checking on their biases and assumptions ...I challenge them to do that...We have strong ELL and special education teachers... Sometimes these students are not necessarily supported by all staff based on their needs... sometimes students are sent to the office and the teachers expect punitive consequences for behaviours that could have been corrected through culturally responsive practices...

Participants in the study identified creating a safe learning environment in their schools as having a positive impact on the students’ behavior, attendance and feeling of belonging and connectedness. Bernadette a teacher leader in a secondary school described how she created a safe learning environment in her classroom:

I get to know my students and understand them. I create safe spaces within my classroom by spending time at the beginning of the year to set expectations and co-construct norms of engagement. Also, through teaching and modeling conscious use of inclusive language students feel safe.

When students have a sense of belonging and connection to their learning environments, they are more engaged in their own learning and are more likely to achieve their educational goals. A positive impact of culturally responsive practices by the school leaders was the increased engagement of students. Polly, who served as Chair for English and Special Education courses in her school, observed a marked improvement on student engagement, achievement and learning outcomes. She wrote:

Culturally responsive practices improve student engagement, achievement and learning outcomes, significantly. I have witnessed greater levels of engagement, achievement and growth in the quality of the work that students produce, greater awareness of issues in the society that are of importance to them and their communities...they seem to be so much more engaged when the lessons connect with them...

June, an elementary vice principal suggested that she challenges issues power and privilege in her work daily. She suggested that her role as a teacher librarian provides her with an avenue where she can examine texts that are used in the school and suggest more culturally relevant and responsive resources. June also noted that it is important for teachers fully engaged in leadership to change their practices. June noted:

I model culturally relevant practices in my teaching and work everyday...I always embed culturally responsive practices in my workshops/courses. As I work with other educators, collaborating, mentoring and sharing resources...I ensure that I include materials that will cause them to think about their own position in the school vis-a-vis the students. As the teacher librarian for this upcoming year, I have the ability to purchase culturally responsive books...that will challenge the status quo. My goal is to create a library that carries culturally responsive resources and reflect the diversity of the student population. We talk a lot about the 21st century learner and often this discussion leads to a talk about technology. But even greater, is to prepare a generation who are either currently living in a diverse community, and or who are going to step out into a diverse world.

Leadership is about taking action and hope. Teacher leaders are best positioned to impact curriculum in meaningful ways (Lopez, 2014).

One of the main areas of tension that the school leaders indicated from their narratives was the lack of support in a systematic way. Many of the educational leaders in the study when asked what are some of their challenges, indicated the lack of support, lack of resources, and lack of training. They viewed themselves as culturally responsive leaders in their schools, but felt that they would have benefitted from greater support. Jill a relatively new teacher said that she experienced resistance in her school in trying to change the formal curriculum. "I often experience resistance on the part of colleagues. Many colleagues argue that curricular materials are already culturally responsive and there is no need for further diversification and work".

The data revealed that some of the school leaders experienced tensions in consciously engaging in practices that are culturally responsive for fear of being seen as too "combative". In some instances this fear impacted the work they wanted to do and change they wanted to create. It is important for school leaders to tease out the tensions in their practice so they can better understand what is possible and areas and ways that they might need support (Lopez, 2013). The school leaders who were administrators identified creating capacity among teachers as an important and chal-

lenging aspect of their work. Milicent, a white female principal in a secondary school with a large South Asian population with over 28 years of service said that she “provided resources and workshops for the teachers in her school that addresses challenging and controversial issues”. Milicent said that she “challenged teachers and department heads to develop curriculum that reflects the diverse student population. I provide resources where possible ... I think it is important to support teachers who are willing to take the extra step to change their practice”. Another participant who has been an educator for 35 years noted that some teachers are hesitant to change their habits and that is “frustrating”. She wrote:

To a lesser extent there are a few teachers who do not make the effort resulting in a level of intolerance towards some students. This is reflected in classroom climate where a number of students are sent to the office for behavioural issues resulting in disgruntled parents.

The connection between the culturally responsive practices and student behavior has been made by scholars such as (Gay, 2002; Howard, 2006; Nieto, 2002) and others. What is evident from the narratives of the participants is that culturally responsive practices must be embedded in all areas of school life and embraced as a whole school approach. In many of the schools where the participants worked this was not the case, was a source of tension and raises questions of how we support schools and school districts to embed these approaches. One participant noted that she felt that there was a “lack of sensitivity on the part of some colleagues...and a lack of flexibility to creatively engage with the curriculum in culturally responsive ways”. This speaks to the fact that these kinds of approaches cannot be done in a piecemeal way, but requires conscious focus and attention.

Discussion

The research that buttresses this chapter highlights some key aspects of school leadership that must be examined. It highlights the importance of school leadership in curriculum development, teacher development, making connections with the community, student engagement, leadership training, and support. It also reveals that school leaders engage in culturally responsive practices on a continuum, as all the school leaders identified areas of growth in their work. The research revealed that school leaders also need support on this journey. One participant noted that she would “like more opportunities to work with colleagues ... and practical professional development” as well as “more board and school-wide initiatives to promote culturally responsive practices”. Paying attention to issues of diversity and difference that address deep-seated challenges in education within twenty-first century contexts is paramount for students and, in particular, diverse students, if they are to achieve greater success. Schools are a microcosm of society and places where large number of students are socialized, and schools are able to promote the dominant culture values that support dominant discourses (White & Cooper, 2012) – such as globalization and discourses that focus on advances technology and so forth.

Diversity and difference has a place in this conversation to challenge and disrupt school practices in the current climate that serves to perpetuate and exclude certain voices and bodies from the center of the dialogue rendering them to the margins. I agree with White and Cooper (2012) who argue that the challenge for schools is to become pro-active rather than re-active. Culturally responsive and transcultural leadership provide an avenue for reflection on practice by school leaders, and support the theorizing of their work that centers issues of diversity and focus attention on inherent tensions and gaps.

These approaches provide school leaders with a way of engaging in praxis – theory into action. School leaders are able to understand their practice beyond strategies that react to events in schools. If change is to occur and be sustained, an action plan grounded in theory that points out ways that theory can translate into action is needed. Forde (2014) argues that the “theorization must be accompanied by critique which is imbued by ideas of social justice [diversity and difference], fairness and equality [equity] (p. 140).” Strong commitment to issues of equity, diversity, and social justice in schools calls for school leaders to attend to the fundamental inequities of schooling and to engage in practices that will transform (Riehl, 2000). I believe this must be part of the conversation on the kind of capacities that students will need to find their place in an ever changing world. Students must be taught how to border cross, relate to others who are different from them, understand the values of other groups and communities, how to build relationships in a diverse society based on trust and mutual respect, not on stereotypes. This will not happen by chance. School leaders must be actively engaged to find new ways to go about the business of schooling that will ensure the full involvement of all students and communities.

A benefit of this research to school practitioners is the modeling of ways that school leaders can engage in work in their schools, and identifying where more work needs to be done. Another impact of this work is placing issues of equity, diversity, and social justice at the center of the dialogue about twenty-first century capacities that tend to focus on technology as the main pivotal force for change. White and Cooper (2014) argue that schools assist in the replication of dominant cultural values, and as such, it is important that educators become aware of changes that are taking place in the world. I support their call that that it is important for administrators, teachers, students, and others involved in education to become involved in shaping the conversation of tomorrow especially as schools experience ever-increasing diversity and difference (Bates, 2001). Culturally relevant, socially just school leaders are critical as they play an important role in shaping the educational agenda and discourse of the future. This important work cannot be left to those who continue to reproduce notions of meritocracy in the preparation of students with the sole purpose of supporting an increased globalized world. Through the voices of the school leaders represented, this chapter encourages school leaders to take action, examine their practices and become more active in how education is shaped for the future. This work not only offers concrete suggestions and ways that school leaders can implement culturally responsive practices in their schools, but an approach to effectively evaluate that work.

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Chapter 7

Education for a Better World: The Struggle for Social Justice in the Twenty-First Century

Ian Davies

Abstract In this chapter I discuss the nature of the relationship between education and social justice in order to make an overarching argument about the necessity for a particular sort of educational professionalism. I argue that we need to achieve global citizenship through education. That argument is not bound by geography (my definition of global citizenship can happen locally and nationally as well as across state borders) or by precisely framed areas of professional activity (it will apply across all aspects of educators' work). My argument is that education for global citizenship is achieved through – and expressed by – democratic engagement for social justice. As such I wish to encourage teachers to be activists for a social and political ideal and to see this as an essential part of their role as professionals. There are four main parts to the chapter: the characterization of social justice; the key contexts that apply to social justice; the specific actions that should be taken in order to help bring about a better world – a global citizenship – through education; and, finally, conclusions.

In this chapter, I discuss the nature of the relationship between education and social justice in order to make an overarching argument about the necessity for a particular sort of educational professionalism. I argue that we need to achieve global citizenship through education. That argument is not bound by geography (my definition of global citizenship can happen locally and nationally as well as across state borders) or by precisely framed areas of professional activity (it will apply across all aspects of educators' work). My argument is that education for global citizenship is achieved through – and expressed by – democratic engagement for social justice. As such I wish to encourage teachers to be activists for a social and political ideal and to see this as an essential part of their role as professionals. As such their academic expertise, their pastoral role and other aspects of their work are in my view to be developed in relation to their overriding activist professional role.

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I am arguing that we need a certain sort of professionalism if we are to achieve a socially just version of global citizenship. I make this argument as I wish to avoid certain forms of professionalism that may be inappropriately elitist and exclusive. There is a wealth of literature about “the dominance of people from more privileged socioeconomic backgrounds within elite professions [which] has become more pronounced over the past thirty years” (Ashley, Duberley, Sommerlad, & Scholarios, 2015, p. 6). Professionals have in various ways always been subject to suspicion and at times this may be justifiable. It is a matter of debate, for example, as to the reason for the introduction of something like the Hippocratic Oath through which, in effect, doctors promise not to do harm. In many ways this sort of oath is inspiring and reassuring. But we need to ask why it is deemed necessary. Doctors and other public servants have not always been regarded positively. We may ask why we need to be reassured that doctors will not kill us. We see, perhaps, something similar in the oath taken by teachers in Singapore:

We the teachers of Singapore, pledge that: We will be true to our mission to bring out the best in our pupils. We will be exemplary in the discharge of our duties and responsibilities. We will guide our pupils to be good and useful citizens of Singapore. We will continue to learn and pass on the love of learning to our pupils. We will win the trust, support and co-operation of parents and the community so as to enable us to achieve our mission.

If we need to insist that explicit declarations are made to ensure that teachers do their job properly, we need to ask what these statements mean. A lack of trust, nationalist sentiments and particular ideological positioning may be in evidence as well as a general commitment to the common good. Professionalism may mean a variety of things. In this chapter, I argue for a particular type of professionalism that will allow for socially just global citizenship. This argument requires theoretical explanation and practical policy and pedagogical proposals.

There are four main parts to the chapter. In part 1, I ask ‘what is social justice?’ drawing principally from the work of Michael Sandel. In part 2, I explore the key contexts that apply to social justice, suggesting that professionals and all others interested in helping to make a better world through education need to: perceive (and help to achieve) an appropriate relationship between the nation and globalization; promote equality and diversity; achieve a particular purpose of education; and, ensure a particular relationship between education and the economy. These goals – about globalization, equality and diversity; education; and the economy are those that I feel characterize the nature of global citizenship. In short, if one works to establish a just and diverse global society through educational systems that relate fairly to the economy and other aspects of society then global citizenship is being targeted. In part 3 of this chapter, I go beyond the broadly based comments of parts 1 and 2 and argue for specific actions that I feel should be taken in order to help bring about a better world – a global citizenship – through education. I suggest that we need to develop a form of engaged or activist professionalism. In this characterization, professional attention would need to be paid to policy making; the governance of education; teacher education; curriculum, pedagogy and assessment

including special reference to the claims made about 'new' technologies. Finally, in part 4 of the chapter I suggest some conclusions and recommendations.

Part 1: What Does 'Social Justice' Mean?

Any discussion of a fair global society can only be developed by considering the nature of social justice. This is almost inevitably controversial. Use of the phrase 'social justice' may be seen as simply an attempt to promote one's own views. Allegations of bias and indoctrination are not uncommon in debates about social justice and arise frequently in educational contexts. The phrase itself is at times questioned. It is not always entirely clear what is meant by 'justice' and why it is appropriate for 'social' to be added as opposed to almost any other descriptor such as 'political' or 'economic'. And, of course the extent to which the achievement of justice has occurred is challenging. It is not straightforward to identify concrete indicators that would relate to all interpretations of social justice. The elastic nature of the concept of justice may go beyond the challenges of insisting on the use of one characterization (related, for example, to equality or, by contrast, equity) and whether or not we will ever reach what might be regarded as a satisfactory end point. Similar to debates surrounding health in which any upper limit on life expectancy or other less tangible indicator of quality of life would not be accepted, it is not necessarily possible ever to identify the final achievement of a just society. However, I do not make these points to suggest that clear thought and actions are not possible. Indeed, I will argue that social justice is important and coherent and that it should be thought about in a particular way. In short, a just form of global citizenship is not to be achieved through utilitarian or freedom-based theories but instead by cultivating virtue and promoting public reasoning (i.e., education) about common good. In making these arguments I draw heavily on the work of Michael Sandel, using principally his books on justice (2009) and on finance and economics (2012).

Sandel essentially makes an argument – cast immediately in relation to money (2012) but which applies in an overarching manner to the whole of society – about the need for fairness and the avoidance of corruption. The latter of these two points is about ensuring that things are done according to their purpose or nature. So, for example, it might be possible to buy and sell children but that would corrupt the essence of loving parent-child relationships and so would be unacceptable. It is relatively straightforward to see corruption in everyday events and procedures. However, Sandel's point about fairness is more complicated. In relation to fairness (or justice) Sandel (2009) gives three ways of looking at the nature of a just society. Firstly, he refers to usefulness or utilitarianism. Essentially this connects with the ideas of Jeremy Bentham (Burns & Hart, 1998) and others who are concerned to maximize utility or welfare (or, in short, ensure the greatest happiness of the greatest number). This position is obviously not entirely discrete from other philosophical perspectives and has many aspects that are attractive to many people. Sandel cites the

well-known scenario of the person who witnesses a runaway train that is almost certain to kill five people unless action is taken which would result in the death of 'only' one person. Many, when first presented with this scenario, adopt thinking associated with utilitarianism, choosing to save the five rather than the one and not raising (or, not being allowed by the guidelines for the scenario to raise) other issues. There are, however, significant weaknesses in the utilitarian position. It seems to view issues of justice as a matter of how to achieve a result in terms simply of numbers who benefit. The calculation involved in such a response might not be a feature of a good society at all. What is actually being done in such a process is to ignore the principle of what is deemed as good and who (as well as how many) are involved in informing one's response. There are fundamental issues that need to be considered that, when utility is given precedence, are often intentionally or otherwise ignored. In short, this approach would not achieve social justice and by extension not be deemed for the purposes of the argument made in this chapter to be part of global citizenship.

In light of his consideration of the defects of utilitarianism, Sandel reflects on the possibility that freedom of choice is seen by some as the key determinant and expression of justice. He explains that freedom of choice can mean either the actual choice people make or the choices they would make if it were possible to create a context in which one did not know one's own position and so would not know the impact of any decision. The former of these two options is, in practice, widely used and, for many, obviously unfair. The market solutions proposed by some economists often lead to increases in inequality and as such (to follow the approach used by Sandel that was cited above) to the corruption of the nature of an activity. Instead of developing society to the benefit of all, certain activities become associated with profit maximisation in ways that harm majorities. The second approach to fairness is most commonly, broadly, associated with the work of John Rawls (1970). It is not possible to support that approach in relation to a commitment to social justice and global citizenship as outlined here. One of the reasons for questioning Rawls is that it is, of course, impossible to remove oneself from the context in which judgments need to be made. His position is philosophically valuable in that theoretical insights may be developed. But the elucidation of the principles associated with this freedom is often neglected. If freedom is the ultimate arbiter of fairness then reliance on it seems in this case to allow for an assertion to be made without actually explaining or justifying. As such, there is the potential for the freedom of some to become enacted only to the detriment of others. For these reasons, social justice and, by extension, global citizenship cannot be founded principally on freedom based theories.

In light of the identification of these difficulties about utilitarianism and freedom-based theories, Sandel makes an argument for cultivating virtue and reasoning about the public good. He argues that:

A just society can't be achieved simply by maximizing utility or by securing freedom of choice. To achieve a just society we have to reason together about the meaning of the good life and to create a public culture hospitable to the disagreements that will inevitably arise... Justice is inescapably judgmental (Sandel, 2009, p. 261).

Now, of course, this position, although it is the one to which I adhere, leads us back to the points I made above. The identification of an action for the good society (even when it is linked to a fundamental principle) begins to look suspiciously like special pleading. One person's preferences may be forced upon others. This problem is thrown into sharp relief when one examines documents such as the Universal Declaration of Human Rights or the European Convention on Human Rights (Weaver, 2015). Pronouncements are usually not complete moral theories. They lack the coherence of a philosophical document. But also they do not provide guides to specific forms of action. As such reasoned judgment in relation to a particular interpretation of social justice is necessary – but ultimately not sufficient – for a complete resolution of what must be done in order to work towards a just society. And, it is crucially important to note that these issues may relate to particular perspectives on society. Sandel suggests that his work is about civic virtue. This is a neat conflation of societal (civic) and individual (virtue) perspectives. At a time when governments around the world are perhaps becoming increasingly explicit about their perceived need for character education (e.g., in England and long standing commitments in certain Canadian provinces and in some developments in Singapore and elsewhere), the distinctions between the public and personal, the individual and the collective need to be considered very carefully indeed. In the next sections of the chapter I suggest, tentatively and provisionally, contexts and action points that need to be considered as sites – and examples – of action. I suggest that a critical and committed professionalism is the way to go beyond utility and freedom in order to create the space within which education can be developed for a better world. In so doing, I seek to establish an argument for social justice that will achieve global citizenship based on education that is a form of reasoning together for the public good. Indeed my argument for a socially just form of global citizenship is that the need for reasoning together is inherently a commitment to a certain type of education.

Part 2: Contexts in Which Social Justice and Global Citizenship Through Education May Be Considered

I wish to make it clear that the contexts that I will discuss in this part of the chapter are not intended to provide an exclusive or exhaustive list of all the very many things that could apply to ideas and practices of socially just global citizenship. The consideration of the contexts that have been chosen as well as being exemplars or illustrative material of some of the key issues are also not within themselves considered to any great depth. With that caveat in mind, I suggest that we – as committed professionals and for all those with an interest in education – need to understand and promote an understanding of a range of matters that relate broadly across social and political and economic factors. I draw attention to four key areas, arguing that an understanding of them will help us to several things: achieve an appropriate

relationship between the nation and globalization; promote equality and diversity; develop a particular purpose of education; and, ensure a particular relationship between education and the economy. This understanding (that is necessary for education professionals) is what I am arguing for as an essential pre-condition for the achievement of a socially just global citizenship.

Perhaps the most obvious and most wide ranging and most immediately obvious context for social justice and global citizenship in the twenty-first century relates to issues of the nation and globalization. These matters are hard to characterize and there are very many complex questions and issues to be addressed. I argue that in order for us to be able to move towards appropriate levels of understanding and ultimately achieve appropriate commitments we need to make particular choices. In order for a socially just global citizenship to be achieved we need to understand the differences between key terms such as 'nation' (often related to historically based culturally informed territorial boundaries that carry a sense of community, either actual or imagined) and 'state' (often related principally to politically constituted areas). Similarly clear understanding is needed regarding the terms 'international', 'world', 'cosmopolitan'. It is inappropriate to use the word 'global' (i.e., going beyond the nation state) if 'international' is meant (i.e., literally, connections between the nations that recognizes a situation in which the nation is prioritised). If 'international' is used as a sort of quality mark (indicating a high standard) then that should be declared explicitly. The nature of globalization should be declared coherently and consistently by reference to interlocking economies, technologies and communication systems that affect cultural, environmental and demographic matters. It should be recognized that the existence of a globalized world may be new only in its current formulation (certainly ancient empires were created over the world as known at the time), in its speed of development, in the increasingly widespread pressures for cultural homogeneity with simultaneous agitation on the part of some for the recognition of diversity and the contestation over attempts to ensure advantages are made available to majorities. Finally, it means an acceptance of the continuing significance of the nation state and so there is a need to critically, explore and develop global and national identities. Within an acceptance of multiple loyalties and identities we should attempt to understand ourselves and others and promote the skills and dispositions of intercultural competence. Thus, the context of the inter-relationship between nations and global citizenship requires understanding and perspectives that incorporate the above.

The second context that needs to be considered in relation to the better understanding and achievement of social justice involves equity and diversity. Again there are fierce debates about the meaning of these terms and there are some, in my view unacceptable, attacks on the value of such things. Equality is an expression of similarity and equity a matter of ensuring that people are in the best position to avail themselves of the benefits that have been achieved by others. Both equality and equity are vital for a socially just global citizenship. Wilkinson and Pickett (2009) have shown convincingly that health and social problems are between twice and ten times as common in more unequal societies. The problems that occur in unequal societies curiously extend to very many areas of life. As the good society is not

achieved so ill health, unhappiness, bullying and many other problems occur. Diversity is in some ways a simple matter to deal with as it already exists in all societies (unlike equity). There are, of course, challenges about reactions to it and issues about how each individual and group can be recognized. Particular issues (Kymlicka, 2000) arise when diversity is considered in relation to the matters raised in the previous part of this chapter. We need to know what forms of education are appropriate within countries (especially for national minorities, immigrant minorities, and indigenous peoples). Within this point, there is an implicit recognition that we need to focus on the underlying structure of justice as well as acting appropriately regarding specific groups. In other words, justice in relation to equity and diversity is not something that is a matter only for individuals or for groups. It is something that needs to be characterized in the form of general philosophical principles as well as social and political initiatives. As such, we would then helpfully avoid negatively framed debates in which there is jostling for position of particular groups whether they be related to age, sexual orientation, able-bodiedness, ethnicity or other matters. As well as needing to pay attention to groups and individuals, there is a need to consider matters fundamentally so that the concepts of equity and diversity may be realised. Understanding a context within which equity and diversity are essential is important for the achievement of global citizenship.

Thirdly, the nature of education as a context for social justice needs to be considered. It is, of course, the case that throughout this chapter I am making an argument for education for a better world in the form of socially just global citizenship. But education – and schooling – is a context (intellectually and societally related and practically developed) which requires attention. I make this argument in order to go beyond the position of education as a vaguely and generally stated ‘good thing’. The nature and purpose of education may be perceived and realised in dramatically different ways. I wish to suggest that we need to be aware of those different positions and also to argue, with a good deal of hesitation, for one of the perspectives that I will refer to below. Smith (1996, 2000) refers to four key perspectives on education. He characterizes these as the liberal (focusing on the best that has been thought and said often from within western civilization); the scientific/managerial (emphasizing the preparation of students for future, often vocational, tasks and situations), the developmental (highlighting in a Rousseau-like manner the natural goodness of the child and using, if we consider the matter etymologically, the need to draw out – *educere* – that goodness); and finally, the social meliorists who see education as the means by which society may be improved. I consider these all to be valid and important and in reality for it to be impossible for one to be considered in exclusion to the others. However, in a chapter titled ‘education for a better world’ it may come as no surprise that I regard a particular sort of social meliorism as one to be the most valuable form of education. This links back to my arguments about the work of Sandel in which we should identify (cautiously and responsibly) the good life and show how it connects across the political spectrum of educational theorists to acknowledge the views, for example, of Freire for whom education could never be neutral and to many others who simplistically (and insufficiently) see education as providing, apolitically, the best way to develop society. However, I make a distinction

between social meliorism and utilitarianism in that the latter effectively excludes explicit identification of principle and deliberation about the best ways to achieve improvement.

Consideration of social meliorism leads me to raise a particular application of that approach and to address what are largely economic issues. I would like, deliberately to choose a quotation from the end of the previous century that highlights economic matters. This vision of the future is perhaps one that we are now experiencing. In 1997, the influential Dearing report included the following:

In the next century, the economically successful nations will be those which become learning societies: where all are committed, through effective education and training, to lifelong learning.

The simple assumption within the above is that there is a very close connection between education and economic matters. Politicians are keen to stress the link between a vibrant economy and a high quality education system. The implication is that a set period of years spent within a school is by itself not enough and instead that learning needs to be engaged with at all points in one's life. This, however, hides precisely what is intended by such a connection. Education is seen in the quotation above, simplistically, as the means by which individual earnings are maximised. Schools (and other more flexible learning environments) have become businesses (and students have been cast in the role of clients or customers). This economic characterization of education leads both to dynamic, plastic forms of engagement as customers shop around and also to an almost never ending institutional enrolment. Higher education is likely to expand endlessly in a search for customers. There may be certain advantages for a limited number of individuals to be gained from education systems that are driven by economics. And of course we cannot avoid the positive potential of linkages between education and the economy. Where we do not have a successful economy it is unlikely we will have social justice. However, a successful economy should not be equated with socially just forms of global citizenship. There must be commitment to learning not money; to engagement and not profit; and to value that in the form of justice.

In this part of the chapter, I have suggested that particular contexts need to be explored so that professionals (and others) can see the complex issues that connect with social justice and global citizenship. I have begun to identify the ways in which we might move towards the achievement of a just society. We need to understand issues about nations and global societies; equity and diversity should be prioritized; and we need to promote education with a particular purpose and which stands in a specific relationship to the economy. In the next part of the chapter I attempt to be more specific about those initiatives.

Part 3: Action Points

I have made the argument above that teachers need to understand and promote understanding of four key areas if we are to achieve a socially just form of global citizenship. I now want to suggest actions in particular areas. These proposals are not meant to be exhaustive but are instead an attempt to refer to matters relevant to the achievement of social justice through activist educational professionalism and include four areas (policy making; governance; teacher education; curriculum, pedagogy and assessment and with particular attention to the claims that have been made for 'new' technology).

Firstly, professionals need to be fully involved in educational policy making. The way in which policy is developed should not be a top down process in which experts insist on procedures to be followed by technicians. Broadly, all should be aware of the general model that is being used in society. One way of framing this awareness might be achieved by referring to Madisonian and Jeffersonian perspectives. Both approaches have value and weaknesses. Jefferson's commitment to the freedom of the people may actually be an expression of libertarianism which favours the powerful; Madison's balanced systems of governance may lead to gridlock and manipulation of stakeholders. Given the challenges of these positions, I argue (following Crick, 1962) that teachers interested in understanding and promoting a socially just form of global citizenship should embrace a political approach which involves the creative reconciliation of different interests. A wide range of influences can be drawn upon usefully in the development of the debates surrounding such initiatives. Professionals should be involved in the determination of the distinctions between legitimacy and power. This should be done in a non-linear, deliberative and inclusive process. These policies should be evidence informed and evaluated. This is a complex process but it is important to be aware of the empirical evidence that is available in relation to particular issues. This should help avoid the unhelpful extremes of policies based on whim or such devotion to evidence that is ultimately illogical in that decisions may not be informed by evidence of a new initiative which is not yet available.

I am making here a wide-ranging but precisely framed proposal that connects directly with social justice and global citizenship. I am making an argument for inclusive policy making in light of the fact that that often does not exist. Indeed, connecting to the arguments made above, there is a tendency in many countries towards the acceptance of freedom-based theories in policy development. Attempts to regulate are seen as restrictions on enterprise. There is, explicitly in England and implicitly elsewhere, a vision of the 'Big Society' in which:

...people, in their everyday lives, in their homes, in their neighbourhoods, in their work-place, don't always turn to officials, local authorities or central government for answers to the problems they face, but instead feel both free and powerful enough to help themselves and their own communities. (Cameron, 2010)

This freedom to act connects directly to the arguments put forward by libertarians and free-marketers and is not likely to lead to justice. It is an avoidance of

professionalism. It is more likely in its alignment with forms of communitarianism (Heater, 1999), to lead to manipulation of power by those who are already well-positioned to act.

The second action point I would like to consider is related to governance. The issue of school structures has been a strong feature of debates about schooling for many years. Currently, there is sense that policy makers are becoming discontented with attempts to manage school systems and instead are opting for a less directive or a more neo-liberal approach. Again, this connects with the freedom-based theories I have referred to above. In several parts of the world, the power of local government has been reduced and it is now possible for ‘free schools’ to be established (e.g., Charter Schools in the US and Free Schools in Sweden). This is in essence concerned with the removal of the professional. The stated motivation behind such shifts in policy may be admirable. In England, for example, there has been a strong concern expressed by the Minister for Education in 2010 for greater equality:

More children from one public school – Westminster – make it to the top universities than the entire population of poor boys and girls on free school meals. This waste of talent, this squandering of human potential, this grotesque failure to give all our fellow citizens an equal chance is a reproach to our conscience. It can’t be allowed to continue. (Gove, 2010)

This welcome commitment to the achievement of social justice, however, is cast within a particular ideological approach. Gove also asserted that:

We will tackle head on the defeatism, the political correctness and the entrenched culture of dumbing down that is at the heart of our educational establishment. ... Out of touch bureaucrats have imposed faddy ideologies on our schools which ignore the evidence of what really works in education. Teachers have been deprived of professional freedom. http://news.bbc.co.uk/nol/shared/bsp/hi/pdfs/07_10_09govespeech.pdf

The politicians’ solution, then, is for what in England are titled ‘free schools’ and ‘academies’. These schools allow for greater autonomy. They are free from local authority control, have the ability to set their own pay and conditions for staff, do not have to follow the National Curriculum, are not required to employ only those teachers who are qualified, have the ability to change the lengths of terms and school days and finally may have a sponsor. Schools, of course, are not, even now, entirely without restriction. There are expectations around achievement in public examinations and failure in that and in other important areas such as behaviour or in relation to practices that are deemed to be extremist lead to intervention from national inspection agencies (in England, Ofsted). If we were to adopt a utilitarian stance, it is fairly easy to show that this approach to governance is not working. Recent evidence from England (see Academies Commission, 2013) suggests that:

In a range of areas – school admissions, governance, accountability, financial oversight and system improvement – serious gaps are appearing which raise profound questions about the policy [of increasing Academies] in terms of effectiveness, equity and sustainability (Glatter, 2013)

This failure may also be seen in other countries. A fierce debate exists around US Charter Schools. In Sweden where public money is used for free schools a recent report suggests:

local autonomy is not matched with adequate public accountability....[The] school system [is] in urgent need of change (OECD, 2015)

However, it is important to go beyond utility and to explore the roots of this approach to governance. It may be the case that success is not being targeted in examination results, finance or accountability, but rather that the key indicator of success is the achievement of freedom (meaning the dilution of the power of the professional). It is an approach which relies on individuals rather than professional groups. The connection between the freedom based theories discussed by Sandel and the development of structures for school governance is very clear. The opportunities for those who are already advantaged are clear. If we are to achieve a socially just form of global citizenship, there is a need to see my proposals for action in the context of theoretical positions. I am arguing for a committed form of professionalism in specific areas.

The third area I wish to consider is teacher education and by so doing, I wish to expand the debate referred to above about professionalism. I am arguing for an activist educational professionalism in order to achieve a socially just form of global citizenship. I suggest that this involves – and I would hope this is not controversial – having an educated professional body. I am concerned about the initiatives within England, but also in other contexts, that reduce the status and capability of the teaching profession. Certain politicians in England have been extremely forthright about their need to remove perceived inappropriate professional restriction. Michael Gove as Minister of Education until 2014 referred to the work of academics and researchers as follows:

The Blob – the network of educational gurus in and around our universities who praised each others' research, sat on committees that drafted politically correct curricula, drew gifted young teachers away from their vocation and instead directed them towards ideologically driven theory. (Gove, 2013) <http://www.dailymail.co.uk/debate/article-2298146/I-refuse-surrender-Marxist-teachers-hell-bent-destroying-schools-Education-Secretary-berates-new-enemies-promise-opposing-plans.html#ixzz3Yo3is6g3>

In England, it is now no longer required for most schools (i.e., those that have achieved Academy or Free School status as well as independent fee paying schools) to employ qualified teachers. I find this extremely unhelpful. Teacher training will be increasingly school-based and, almost inevitably in this new freedom-based approach, there is clear evidence of problems with teacher supply and concerns over quality. There is a clear need for re-commitment to professionalism for a social justice purpose. Without the professions – exercising a degree of freedom from state control – we are unlikely to achieve social justice and genuine global citizenship will remain beyond our reach. We will instead have teachers as technicians who compete against others for shares within financially driven markets.

Fourthly, matters of substance to do with global citizenship are most explicitly seen in relation to the everyday matters of a teacher's professional work in curriculum, pedagogy and assessment. We can see again in this area a weakening of professionalism in light of attacks by policy makers. As outlined above, what happens in schools is now more likely to be decided by individual schools (as long as the

boundaries set ideologically by the state are not broken). The means whereby good work may take place is already known and has been declared not by professionals but by politicians who are promoting utilitarian and freedom-based approaches. Pollard (2010) has valuably and clearly suggested that we need to consider aims, contexts, processes and outcomes in relation to what he refers to as enduring issues, curricular concepts, pedagogic concepts and assessment concepts. He provides broadly outlined practical strategies in order to meet the following criteria:

- Equips learners for life in its broadest sense
- Engages with valued forms of knowledge
- Recognizes prior learning
- Requires the teacher to scaffold learning
- Assessment to be congruent with learning
- Active engagement of learners
- Fosters individual and social processes
- Informal learning
- Depends on teacher learning
- Consistent and relevant policy frameworks

These matters, of course, need to be considered in relation to specific initiatives. I suggest that the way to do that would be by allowing for professional reflection to inform the development of good practice. This would need to be done very carefully. Many have (instead of relying on professionalism) simply applied arguments about the need for freedom-based theories and utilitarian practice to suggest the need for an increased emphasis on technology in learning. Of course, I am not rejecting completely the potential value of technology. There may be some value in its use. Beldarrain (2006), for example, notes the transition from teacher as deliverer of knowledge, to facilitator of online interaction, reflecting the two tenets of constructivism: learning as an active process of constructing knowledge rather than acquiring it; and, instruction as a process that involves supporting that construction rather than of communicating knowledge. However, the benefits from such approaches are not guaranteed. Indeed, there are many worrying aspects of a technology-assisted approach to education. Politicians' commitment to Massively Online Open Courses (MOOCs) seem to illustrate only the freedom-based theories and utilitarianism that I am arguing will not lead to a socially just form of global citizenship. The absence of entry requirements, low cost, increased access to the best staff and massive enrolments seem to make this very attractive. What, however, is lost in this approach are standards, completion rates, and the experience of learners. Indeed, more broadly, technology may strengthen dictators as much as democrats (Morozov, 2011) and there is the potential for new technology to be an instrument of cyber bullying, unhelpfully altering the public/private divide, and encouraging teachers merely to access information and to develop their recitation scripts. What matters, again, is not the freedom to do whatever we want or the insistence of a simplistic assertion of what works but instead to do something valuable. And that may be achieved not through simple approaches to utility or through

freedom but instead by professionalism targeted towards what has been identified through deliberation as indicative of social justice.

Conclusion

The ways in which we think about schools and the experiences young people and others have beyond schools are vitally important. It is all too easy to react to current problems by adopting policies and practices that have the potential to make things worse rather than better. I accept that there are many current challenges. Robinson and Aronica (2015), rightly, point out that:

Our school systems are now a matrix of organisational rituals and intellectual habits that do not adequately reflect the great variety of talents of the students who attend them. Because they conflict with these systems too many students think that they are the problem, that they are not intelligent or must have difficulties in learning.

But the identification of a problem does not mean that we have also identified the solution. In this chapter, I have suggested that we should be clear about what we mean by social justice and then act appropriately, congruently with a particular understanding. By doing that and by identifying what needs to be understood and where action needs to be taken, global citizenship may develop. Sandel has shown that there is a superficially attractive but ultimately inappropriate commitment that one may make to decision making based on utility. He has also made significant challenges to the dependence on freedom-based theories. It seems that – due to commitment to utility and freedom – individuals in educational and in many other contexts are being cast as both customers able to pick and choose from a range of providers and as suppliers on whom pressure can be placed. This enterprising impulse is supported by policy makers who retain the ultimate power of control. Once we begin to explore the different meanings of – and perceptions about and indicators of – social justice we will be in a much better position to work for a better world through education. There is a need for a commitment to the value of judgment about substantive ideas on which a socially just society is based and that allows for deliberation and decision about specific issues. I have suggested that we should pay attention to key contexts such as globalization, equality and diversity, education and the economy; that we need to enhance professional and public deliberation on key areas including policy, governance, teacher education, and curriculum, pedagogy and assessment including reflections on specific initiatives such as the use of ‘new’ technology. Throughout, I have tried to develop these arguments tentatively and provisionally suggesting that we should avoid simplistic answers to difficult problems. Throughout, we need to think clearly and act for the good society and as we do these things, reliance on usefulness and freedom are not enough. If we want social justice, we can achieve it. This is not a simplistic, naïve expression or some sort of rallying cry. But is an expression of belief in the power of transformation

through learning. If we want social justice aligned with global citizenship, then we need professionalism, i.e., commitment and criticality developed through deliberation in the formation of principle-based judgments that rely on evidence.

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Part II

Policies: Constructing the Future Through Policy Making

Characteristic of our twenty-first century is not merely the prevalence of globalization but its intensification that has exceeded previous centuries. The result is increasingly borderless and networked societies (Castells, 2004), porous exchanges of knowledge, capital, and products (Scholte, 2005), as well as the permeation of global risks such as terrorism and climate change in everyday local realities (Beck, 2007). The sense of transplanetary connectivity has also led governments and policymakers to consider how best to prepare students for such a global age. All over the world, education reform efforts centre on ways to educate students for the twenty-first century. Attempts have been made to define a list of core competencies and skills needed for a global age. Some examples are the Organisation for Economic Co-operation and Development's (OECD) Definition and Selection of Competencies (DeSeCo) and Partnership for Twenty-first Century Learning's framework. Such twenty-first century lists and frameworks serve to construct a vision of future workplace needs that subsequently drive policy initiatives and curriculum reform. At the same time, visions and aspirations of the twenty-first century are not uniform but differ among education systems in various countries. A key research question to ask then is what beliefs and ideological values inform the construction of twenty-first century education?

Bottom-up Approach to Twenty-First Century Education Policies

In Chap. 8 “Global Leadership Training for High School Students in Japan: Are Global Leadership Competencies Trainable, Universal, and Measurable?” Yuko Goto Butler and Masakazu Iino describe how global education is conceived from top-down government mandates through the appointment of Super Global High Schools as part of the country's effort to nurture future global leaders who have the requisite competencies and skills to compete in the world. These global leaders must demonstrate high problem-solving abilities and good knowledge about global issues. At the same time, they argue that this project is aimed at developing a global

elite and assumes that global leadership competencies are universal, trainable, tangible, and measurable. Moreover, such schools favour Japanese nationals with privileged backgrounds and exclude language and cultural minority students. What the authors then propose is that education policies and initiatives must essentially incorporate a more ground-up, context dependant and multidimensional understanding of global leadership. Any initiative to equip global leaders should be multifaceted and incorporate diverse perspectives about the nature of leadership in various global contexts and among multiple communities and groups, privileged or otherwise.

The tendency towards developing global elites, inherent in many twenty-first century education policies, is paradoxically nationalistic in that it is aimed at ensuring a nation's continued competitiveness on the global stage. Ultimately such policies are informed by a human capital model of education that does not adequately incorporate the principles of critical cosmopolitanism as Eleni Oikonomidou and Rachel Salas argue, in Chap. 9 "Exploring Top-down and Bottom-up Cosmopolitan Traces in Schools on the West Coast of the United States." Further, they observe a disconnect between top-down policy mandates and the lived experiences of students in schools. They suggest a need for reconceptualizing top-down policy initiatives through the lens of a critical cosmopolitan framework. Such a framework would promote active interrogations of local and global conditions and would problematize potential elitism in global education initiatives. They advocate the use of such a framework to promote systematic investigations of local, bottom-up cosmopolitan experiences of students that can provide the foundation for policy and practice.

Evidence of a systematic ground-up approach is discussed in Chap. 10 "Exploring the Transformative Potential of a Global Education Framework: A Case-study of a School District in the United States" by Suzanne Choo, Deb Sawch, Alison Villanueva, and Caroline Chan. The chapter describes how, unlike in Singapore, South Korea, or many other countries where national mandates infiltrate local systems with a fair amount of consistency and fidelity, the US is comprised of nearly 14,000 individual school districts that do their best to fiercely maintain autonomy, especially in the face of what are perceived as federal mandates or "guidelines", such as the Common Core State Standards (CCSS). Even these standards, once adopted by 46 states, have since been vilified to the point that individual states may opt not to use them at all and do not have to align state tests with them. Further, what was once the, "No Child Left Behind Act" is now the "Every Student Succeeds Act" which expressly prohibits the Department of Education from attempting to "influence, incentivize, or coerce State adoption of the Common Core State Standards ... or any other academic standards common to a significant number of States" (US Congress.gov, 2015).

Yet, in the absence of any draconian federal, state or local mandates, the Westland Public School District (pseudonym) a high-performing public K12 district of eight schools and 5,700 students in the US, proactively enlisted both the local community and faculty to engage in a level of self-reflection, self-discipline, and aspiration unparalleled in most districts. This localized effort to foster ground-up engagement yielded an initiative that sustains itself today, after 5 years and nearly 100% participation. The District's use of an adapted Global Capacities Framework serves as an

organizing concept around which there is alignment and common language, allowing the District to manifest twenty-first century ambitions in curriculum, instruction, assessment and school culture. The initiative is in its fifth stage, evolving into a higher order and audacious endeavor: to build true ethical/global citizens who become their best selves as they work with others to make the world a better place.

The importance of a bottom-up approach is echoed in Chap. 11 “For Whom is K-12 Education: A Critical Look into Twenty-First Century Educational Policy and Curriculum in the Philippines.” Genejane Adarlo and Liz Jackson explore the transition from a 10 year curriculum to a K-12 program in the Philippines and how this new curriculum seeks to help students acquire twenty-first century knowledge, skills, and dispositions. By arguing that educating students for the twenty-first century involves not merely preparing students to compete in the global economy but empowering them to resist the effects of “globalization-from-above”, the authors center their analysis on the ways that education reform encourages “globalization-from-below” that equips marginalized communities to challenge and contest global injustices. A bottom-up approach to twenty-first century education then involves policies that are not merely attuned to the needs and aspirations of students from all social classes, it more importantly empowers those, particularly from marginalized groups, to navigate the challenges and injustices of globalization.

Developing Twenty-First Century Teachers Through Education Policies

The bottom-up approach to twenty-first century education provides a seemingly utopian picture of how schools can share ownership of constructing and enacting a vision of the future that may be aligned to the state goals. The challenge for bottom-up approaches is how teachers may be supported through top-down measures while retaining their sense of autonomy. In Chap. 12, “Preparing Students for the Twenty-First Century: A Snapshot of Singapore’s Approach,” Chew Leng Poon and her research team begin by providing a historical overview of key policies central to twenty-first century education in Singapore. The state’s overarching vision of education encapsulated in the phrase, Thinking Schools, Learning Nation (TSLN), led to the development of a Framework for Twenty-first Century Competencies and Student Outcomes. The authors describe how, rather than adopting a top-down approach to twenty-first century education, a decentralized approach was adopted. Schools were grouped into clusters with each cluster spearheading their own innovations. In this way, they describe how schools became centres of TSLN with the government providing top-down support for ground-up school-based curriculum innovations. Teachers were encouraged to own the teaching and learning process through teacher-initiated learning and the formation of professional learning communities that encouraged collaborative professionalism in schools. Teacher-preparation and in-service professional learning programmes were re-designed to

build teachers' capacity to develop students' twenty-first century competencies and they were encouraged to teach less so that students could learn more.

Recognition of the fundamental role teachers play in promoting twenty-first century reform continues to be reiterated in Chap. 13, "Towards Twenty-First Century Education: Success Factors, Challenges, and the Renewal of Finnish Education." Jari Lavonen and Tiina Korhonen suggest that Finnish teacher education is one significant factor contributing to the good performance and low variation in performance among Finnish students. Similar to the Singapore model, teacher collaboration networks are seen as important in supporting teachers' continual professional development, particularly in relation to their teaching of twenty-first century competencies. Such networks facilitate the sharing and creation of educational innovations through teachers' collaboration, inquiry, and problem-solving activities.

Tensions in Twenty-First Century Education and Their Implications on Education Policies

Policy developments and implementations are not without tensions that may emerge as a result of different perspectives about how best to prepare students for the twenty-first century. In Chap. 14 "Imagining the Cosmopolitan Global Citizen? Parents' Choice of International Schools in Kuwait", Carol Reid and Mohammed Kamel Ibrahim highlight the perspectives of parents whose children are enrolled in international bilingual schools in Kuwait. These international schools are becoming increasingly attractive to parents who regard them as platforms to securing a better future for their children in the local and global market. The chapter foregrounds the important implication that education policy must take into account the views of twenty-first century education not just from the state, school leaders and teachers but from parents as well. This is especially so given that their findings indicate that parents' imagining of the twenty-first century global citizen had commonalities with pragmatic cosmopolitanism in which their desire for their children to be confident, independent and to know their world was balanced with a concern that they would not be consumed by Western values. Such pragmatic cosmopolitanism navigates the boundaries of global readiness and local rootedness in oftentimes ambiguous and obscure ways that may challenge strategic and ethical forms of cosmopolitanism espoused by policymakers and scholars.

Aside from parents, twenty-first century education policies also need to be attuned to the aspirations of students. In Chap. 15 "Towards Being a "Good Cuban": Socialist Citizenship Education in a Globalized Context," Denise Blum, Rosemary Smith, and J. Ruth Dawley-Carr examine the tensions between state and students' articulations of the idealized citizen. Through examinations of current primary and secondary civics textbooks, they describe how the state's depiction of the idealized citizen embodies socialist values such as hard work, anti-imperialism, and patriotism among others. However, in the context of globalizing Cuba, they argue that

such views are challenged by young Cubans' lived realities in that they are no longer content to see themselves as "the most socially just poor nation" and so increasingly reject the State's depiction of the idealized citizen insulated from the injustices of western capitalism. Their yearning for greater political and economic freedoms in the country challenges the coherence of socialist ideals infused in curriculum, textbooks and state policies and highlights the need for incorporating young Cubans' global citizenship aspirations.

Ultimately, the seven chapters in this part provide rich insights into the different policy interpretations and implications of twenty-first century education in a range of countries from the United States to Cuba, Finland, Japan, Kuwait, Philippines, and Singapore. More importantly, they highlight the complex challenge of navigating the tensions between economic and ethical, top-down and bottom-up responses to globalization.

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Chapter 8

Global Leadership Training for High School Students in Japan: Are Global Leadership Competencies Trainable, Universal, and Measurable?

Yuko Goto Butler and Masakazu Iino

Abstract Starting in 2014, as part of the nation's effort to train future global leaders, the Japanese Ministry of Education, Culture, Sports Science and Technology (MEXT) designated 56 high schools as "Super Global High Schools" (SGH). Their goal is to develop global leadership competencies that go beyond simply fluency in English or acquiring specific knowledge, which were the goals of earlier projects. In order to understand the nature of the global leadership competencies that the SGH project is trying to develop, we examined the winning high school proposals in 2014, MEXT's evaluation criteria for those proposals, the characteristics of the schools selected, and the activities undertaken as part of the SGH project. We apply Anderson's (1991) notion of imagined communities to argue that the SGH project was developed based on an image of a global elite and that it reflects an ideology in which global leadership competencies are universal, trainable, tangible, and measurable. In reality, however, we argue that they are more likely to be multi-dimensional and highly context-dependent. Developing such competencies therefore requires substantial conceptual and practical changes in Japanese education. In addition, we find that the current SGH model focuses on select Japanese nationals that come from privileged backgrounds.

Starting in 2014, the Ministry of Education, Culture, Sports Science and Technology (MEXT) in Japan appointed 56 high schools as Super Global High Schools (SGH)¹ as part of the nation's effort to develop future global leaders. Unlike the Super English Language High School project that MEXT implemented 10 years ago, in which the primary goal was to develop and implement innovative English teaching

¹This is their original project name, not a translation from Japanese.

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practices, the new SGH project is based on a much wider concept of globally competent human resources. According to MEXT, global leaders need more than just a high degree of competency in English – they should also have strong interests in and knowledge about global issues and high problem-solving abilities (MEXT, 2014a).

To understand the nature or competencies of global leaders that the SGH project aims to develop, we conducted a series of analyses on (a) the SGH schools' winning proposals² in 2014; (b) the project evaluation criteria created by MEXT; (c) the participating schools' characteristics; and (d) the SGH activities based on the schools' websites. Applying Anderson's (1991) notion of *imagined communities*, we argue that the SGH project developed around an image of the global elite that is based on an ideology in which global leadership competencies are universal, trainable, tangible, and measurable, although such competencies in fact may be highly context dependent and multidimensional. The SGH project also targets only Japanese nationals with privileged backgrounds, with little attempt to shed light on potential talents and resources of culturally and linguistically diverse minority groups within Japan.

Background

What Is Super Global High School (SGH) Project?

The SGH project started in 2014 as part of Japan's larger effort to cultivate in its youth competencies and skills that meet the needs of increasingly globalized, competitive world. The project itself is conceptualized as research and development activities in search of workable models of global leader education for Japanese high schools. In 2014, with an annual budget of 806.5 million yen (approximately US\$6.7 million³), 56 out of 246 applications from high schools across Japan were selected.⁴ The SGH schools can implement their projects in up to 5-year terms and can receive maximum of 16 million yen per year.⁵ MEXT plans to appoint other groups of schools in 2015 and afterward. When applying, schools must indicate their vision of "global leaders" and specify their targeted global leaders' competencies concretely in the goal statement. The proposals are also required to have plans for collaborations (e.g., shared projects) with Japanese universities as well as collaborations with other types of institutions including international agencies, business entities, and nonprofit organizations both in Japan and abroad (MEXT, 2014b).

²SGHs were chosen based on proposals submitted by high schools.

³It was calculated based on 120 JPY = 1 USD.

⁴According to MEXT, there were 5022 high schools in Japan in 2012 (MEXT, 2012).

⁵An additional 54 schools were appointed as SGH-associates, but they do not receive any financial supports from MEXT.

Prior to the SGH project, MEXT implemented similar projects targeted at high school students: the aforementioned Super English Language School Project (SELHi) in 2002–2007 and the Super Science High School Project (SSH) (2002–present). The mission of SELHi was to develop innovative and effective English teaching methods for high school students, and during its 8-year implementation period, 169 high schools received special funding for their English pedagogical projects. Similarly, SSH aims to develop innovative math and science curriculum and activities; 30–40 high schools have been selected to participate each year. Importantly, both SELHi and SSH have focused on particular subject areas that are clearly distinguishable from the goals of SGH.

The relationship between the SELHi and SSH projects and the SGH project is not totally clear.⁶ However, MEXT released some documents on the outcomes of the SELHi project, and some of the results might have provided MEXT with insights that led it to develop the SGH project. For example, according a summary report made by the National Institute for Educational Policy Research (2011), MEXT's research division, there were common features among SELHi schools that achieved positive outcomes. Specifically, SELHi schools that achieved positives outcomes (a) built strong collaboration among teachers within a given school; (b) created professional development opportunities for teachers; (c) received consultation from external experts such as university professors; and (d) developed better learning and teaching environment (e.g., hired more teachers). The report also indicated that pedagogical approaches that led to positive outcomes included (a) conducting English-only instruction; (b) enhancing students' opportunities to use English; (c) providing instruction according to the students' proficiency levels; and (d) conducting assessment covering four skills (as opposed to receptive skills only). As we discuss below, strong recommendations for collaboration with external agencies and experts, as well as expansion of opportunities to use English, were certainly reflected in the SGH project.

Societal and Policy Backgrounds of the SGH Project

Japan has experienced the so-called “two lost decades” (MEXT, 2011) of economic stagnation after the burst of its bubble economy in the early 1990s. The nation also faces a decreasing and rapidly aging population. For example, the number of the 18-year-olds in 2011 was 1.2 million compared with 2.05 million in 1992. The number of Japanese students studying abroad has also decreased since 2004, while other Asian countries, such as China, India, and Korea, have been sending unprecedented numbers of students abroad (MEXT, 2011). To reverse the downward trend, MEXT has implemented a series of “internationalization” policies of higher education in Japan. For example, the Global 30 (G30) program, established in 2009,

⁶Some former SELHi and SSH schools were also selected as SGH schools (ten for each in 2014).

supports expanding English-medium instruction in both undergraduate and graduate degree programs of 13 Japanese universities (Iino & Murata, 2016).

The Super Global University Project (SGU), a major globalization educational strategy, was implemented in 2014. The project was initiated by Prime Minister Shinzo Abe, who views educational reform as essential for revitalizing Japanese economy and political presence in the globalized world. SGU's goal was to support select universities in Japan to strengthen their international competitiveness and to gain stronger presence and recognition in the global academic world. MEXT classified SGUs into two types: Type A and Type B. Type A SGUs (13 universities in total) aim at becoming world-class research universities and being ranked in the top 100 such as QS World University Rankings. Type B SGUs (24 in total) aim at implementing various innovative programs/approaches (e.g., advancing specific research areas and developing new English-medium instructional programs) in order to lead the globalization of Japanese society (MEXT, 2014c).

The business community, however, did not think this effort went far enough and demanded reforms of primary and secondary education as well as higher education, arguing that "it is too late to nurture eagerness, capacity, and knowledge at the college level or the workplace in order to produce innovative human resources" (MRI, 2008, p. 5). The SGH project was launched in response to the business community's demands for earlier outreach, and can thus be considered a head-start program for the SGU project.

After a series of discussions, the Council on Promotion of Human Resource for Globalization Development (CPHRGD), which was formed under the initiative of the Prime Minister's Office, declared that "global human resources" should obtain the following three major competencies and skills: (a) language and communication skills; (b) independent and positive minds, willingness for challenges, cooperativeness, flexibility, and responsibility; and (c) cross-cultural understanding and identity as Japanese. In addition, having general knowledge in a wide range of fields as well as expertise in a certain area, problem-solving skills, leadership skills, a high sense of morality/ethics, and media literacy skills are considered important. Moreover, the CPHRGD classified global competencies into five levels: (1) a minimum exchange level when traveling abroad; (2) a daily conversational level; (3) a regular business written and spoken exchange level; (4) a one-to-one intensive negotiation level; and (5) an intensive group negotiation level (CPHRGD, 2011). Based on these descriptions, however, it is not clear if these five levels refer only to foreign language skills (English in particular) or other global competencies as well. In any event, while acknowledging that people who can handle the first three levels of interactions are growing in number in Japan, the CPHRGD stated that there is a pressing need for increasing the number of people who can handle the highest two levels of interactions (MEXT, 2012). In response to such calls, MEXT promoted such global leader competencies in their global education projects, including the SGH project.

Our Analyses of the SGH Project

To understand the nature of global leader competencies that the SGH project targets, we examined (a) the goal statements of accepted schools' proposals; (b) the program evaluation criteria that MEXT created; (c) the types of schools selected as SGH; and (d) the content of projects described in the schools' websites.

Goal Statements in Accepted Proposals

First, we obtained all of the proposals for those schools that were accepted into the SGH project in 2014. We then conducted a text-mining analysis of their goal statements. The UserLocal text mining cloud service (<http://textmining.userlocal.jp/>) was used for the analysis by uploading text files of the grant application abstracts for all the accepted SGHs. We examined types of words that frequently appeared in the goal statements based on the premise that the frequently-used words in their proposals reflect those values deemed to be important. The resulting word cloud is shown in Fig. 8.1. (The original Japanese words are translated into English in the figure.)

The size of the words in Fig. 8.1 reflects the frequencies of their use in the proposals. As we can see from Fig. 8.1, the most frequently used nouns were *global*, *student*, *implementation*, *research*, *project*, and *problem-solving*, followed by



Fig. 8.1 Frequently used words in proposals Text mining result (Note: Nouns are indicated in *black*, verbs are indicated *blue*, *gray* in a black-and-white printing, and adjectives are indicated in *italics*. The original Japanese words were translated into English by the authors.)

development, verification, and collaboration. For verbs, *act, engage, plan, deepen, progress, aim, learn* and *think* were popular. Frequently-used adjectives included *high, wide, deep, able, strong,* and *desirable.* The words *global* and *student* were located in the center of the word cloud, surrounded by a number of action verbs and adjectives with positive connotations. What we can see from this figure is that, as far as the goal statements go, the SGH project seems to value developing students with positive thinking and active learning skills (e.g., *develop, act, engage, plan*) through projects, research, and problem-solving activities. Interestingly, English-language skills (or any other language skills, for that matter) were not particularly emphasized, nor was Japanese identity, at least in the project goal statements.

MEXT's Measurement Criteria for Project Evaluation

As part of their accountability, SGH schools are required to evaluate their proposed projects and activities based on a series of criteria every year and to report the result to MEXT. MEXT divided the accountability measures into goal-based outcome and activity measures. These measures, translated in English, are shown in Tables 8.1 and 8.2, respectively. As the tables make clear, each SGH can set up its own final targets while presenting rationales for their targets for each criterion. In the first criterion in Table 8.1, we inserted an example of reasoning used by one SGH in its report: “*We assume that the 80% of SGH students would be interested in such activities but that the 20% of them will actually engage in them.*” For the first six goal-based outcome measures, SGHs must report the extent to which the targeted outcomes are achieved at the student-level every year. Because not all students in many SGHs are participating in the project, the schools are required to report the outcomes among SGH and non-SGH students separately. For the final four measures, schools are required to report the outcomes after the fourth year of their project implementation and beyond; the schools need to follow their graduates and show if their SGH projects have a long-term influence on participants. The second sets of criteria, activity measures, are supposed to evaluate the school-level commitment of activities, although some measures overlap with those in the student-level outcome measures. See Tables 8.1 and 8.2.

Some interesting observations can be made by looking at these criteria. First, they place a strong emphasis on quantifying the outcomes of SGH projects. While such quantification may make it easier to see the “progress,” it may largely regulate the SGHs activities and may devalue or mask some unquantifiable or intangible outcomes such as creativity and flexibility. Moreover, quantification based on a set of criterion implies that competence of global leaders is something universal; in other words, that it is possible to apply the same sets of scales to any individual. Second, related to the first point, the criteria set by MEXT are built around a certain type of global leader; namely, those who wish to go abroad or study or work with foreigners. Indeed, examples of global leaders MEXT uses in its content about the SGH project are international civil servants, social entrepreneurs working on global

Table 8.1 Goal-based outcome measures set by MEXT

		Year 1	Year 2	Year 3	Year 4	Year 5	Target
1a. The number of students who actively engaged in activities for social contribution and self-improvement	SGH participants						
	Non SGH participants						
(Indicate how the target was set) (e.g., <i>We assume that the 80% of SGH students would be interested in such activities but that the 20% of them will actually engage in them.</i>)							
1b. The number of students who autonomously went abroad for study or training	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							
1c. The number of students who wish to go abroad to study or work in the future	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							
1d. The number of students who received awards from external domestic or international public institutions or conferences with a high public good	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							
1e. The number of students who reached B1 or B2 levels in CEFR in English.	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							

(continued)

Table 8.1 (continued)

		Year 1	Year 2	Year 3	Year 4	Year 5	Target
1f. Other objectives	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							
The following measures should be reported after the fourth year							
		Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
1g. The number of students who went to universities focusing on internationalization	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							
1h. The number of students who went to universities abroad	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							
1i. The number of students whose choice of major at universities was influenced by the SGH activities	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							
1j. The number of graduates who went abroad for study or work when they were at universities	SGH participants						
	Non SGH participants						
(Indicate how the target was set)							

Modified based on MEXT (2014b)

Table 8.2 Activity measures set by MEXT

	Year 1	Year 2	Year 3	Year 4	Year 5	Target
2a. The number of students who participated in overseas training for the project study						
(Indicate how the target was set)						
2b. The number of students who participated in domestic training for the project study						
(Indicate how the target was set)						
2c. The number of overseas universities and high schools that collaborated with the project study						
(Indicate how the target was set)						
2d. The total number of external personnel such as university professors and students who participated in the project study						
(Indicate how the target was set)						
3e. The total number of external personnel such as those who work at private companies and international institutions who participated in the project study						
(Indicate how the target was set)						
3f. The number of students who participated in international or domestic conferences or meetings concerning global social and business issues						
(Indicate how the target was set)						
3g. The number of foreign and returnee students from abroad in the project						
(Indicate how the target was set)						
3h. The number of presentations made as a model school						
(Indicate how the target was set)						
3i. Development of homepage on the web in a foreign language (indicate ○ if yes, △ if partially, × if no)						
(Indicate how the target was set)						
3j. The number of students who made presentations in a foreign language						
(Indicate how the target was set)						

Modified based on MEXT (2014b)

issues, managers in global corporations, politicians, and researchers (MEXT, 2014a). However, leaders in the global world are much more diverse than the preceding criteria or examples suggest, and their competencies can be much more multidimensional and context dependent. For example, in an online poll by *Time Magazine*, a group of Japanese workers at the crippled Fukushima nuclear power plant was chosen as among the 100 most influential people in the world in 2011 (the

group was ranked as 16th most influential; *Time*, 2011). These workers do not fit any of the global leader profiles described above. Leadership traits that are appreciated during a period of crisis are often different from leadership traits that are highly valued traits during more stable periods. It is not unusual to see a leader who is successful in one context fail in another context.

Types of Schools Appointed as SGHs

Out of the 56 SGH schools chosen in 2014, four were national, 18 were private, and 34 were public. Schools located in major metropolitan areas (Tokyo, Kanagawa, Osaka, Kyoto, and Hyogo) comprised more than 40% of all the participating schools.

In Japan, although more than 98% of the junior high school graduates go on to high school, high school education is not compulsory (MEXT, 2012). Thus, junior high school students have to take entrance exams to get into high school, and high schools are highly stratified academically. A standard score (T-score or *hensachi* in Japanese) – a scaled score with a mean of 50 and a standard deviation of 10 – is often used as an indicator of each high school’s academic ranking for entrance examination takers. We obtained all the SGHs’ *hensachi* in 2014 except for three public special schools called *chuto-kyoiku-gattko* (“middle education schools”),⁷ which are not allowed to have academic achievement tests for admission. The average *hensachi* score among SGHs was 67.3 (standard deviation was 5.8), meaning that it was ranked in the top 4%. While it is important to keep in mind that a number of private sources release high school *hensachi* every year, and that it should be considered as an approximation of a school’s academic levels rather than an absolute indicator, our *hensachi* analysis clearly shows that the appointed SGHs, at least in 2014, were academically very high-performing “elite” schools by and large.

A closer look at the appointed SGHs, however, reveals some more interesting tendencies among them. Out of 56 SGHs, 14 are affiliated schools of universities or colleges. This result is not too surprising considering that MEXT requires SGHs to collaborate with universities or colleges, and such affiliated schools certainly have an advantage in their project planning and execution. But there seems to be an additional important factor. Although the relationships between the affiliated high schools and universities/colleges differ across schools, the students in affiliated schools often have an admissions advantage at the attached universities/colleges;

⁷In Japan, both junior and high schools offer 3 year education (Grades 7–9 for junior high schools and Grades 10–12 for high schools). Partially due to repeated criticisms of high stakes entrance examination for high schools, MEXT started implementing “middle education school” – a combination of junior- high and high schools – in 1998. There are both public and private middle education schools. Public ones are not allowed to use academic achievement tests to select students; instead, they use interviews, essays, recommendation letters, or lotteries for admission (MEXT, n.d.). Middle education schools are still small in number and, somewhat ironically, getting into these schools tends to be a highly competitive process.

they may be even exempt from taking high-stakes entrance examinations. This is important to consider because SGH projects are usually added to the existing school curriculum and require substantial extra time from participating students. Being released from taking entrance exams for universities/colleges appears to make it easier for these college-affiliated schools to apply to the SGH project; they would have more time and effort to devote to the SGH project activities. In fact, many top high schools where students have to take entrance exams for prestigious universities did not apply to the SGH project in 2014. Although it is MEXT's intention to build strong connections between SGHs and universities, the entrance exam system itself appears to be a major obstacle for achieving those connections – at least for schools that are not already affiliated with a college or university.

Project Characteristics

Judging from information posted on each SGH's website, although the proposed projects varied in detail, they tended to have a number of common features. First, the majority of schools included some type of volunteer work or field work in less-privileged communities either abroad (often Asia) or within Japan, or both. Examples of such activities include sending select students to slums in the Philippines and joining a local NPO's activities to help orphans; engaging in field work in Indonesia and making a proposal on environmental protection to the Indonesian government together with local Indonesian high school students; and visiting various language or cultural minority communities in Japan and discussing difficulties that these minority residents encounter in Japan. In many cases, teachers who were in charge of the SGH project took the initiative for such field work; they found collaborating schools and external agencies such as NPOs and NGOs, and identified topics for the students' activities such as poverty, economic development, agriculture, pollution, education, natural and human disasters, and aging societies. Teacher-initiated projects may be necessary, especially at the beginning of the project, but they also tend to create projects where the teachers give students with privileged backgrounds opportunities to learn about less-privileged "others." Such an approach may be potentially in danger of creating an unnecessary division between those who are privileged and less privileged. The following comment appeared in a newsletter of one of the SGHs that exemplifies a learning outcome of such field work: "I felt very sad thinking about people in the Philippines who are on the verge of life and death. I appreciated how lucky I am and thought that people like us who are fortunate should understand the need of the local people and help them" (SGH newsletter, vol. 4, 2014, issued by A High School).

A second common feature among projects was the goal of creating opportunities to converse about ideas in English with students in other countries so that the Japanese students can improve their discussion and presentation skills in English as well as enhance their understanding of different cultures and regions. Many SGHs incorporate special English language classes to improve their students' communica-

tion skills in English by offering courses such as “enhancing presentation skills in English” and “debates in English.” Many SGHs also have Skype meetings with overseas students and agencies, create opportunities to communicate with international students living in Japan, and send students abroad to take English classes. Although English was not particularly emphasized in the SGHs’ goal statements, as noted above, there is no doubt that improving students’ foreign language skills, and their practical English communicative skills in particular, is a major objective in many SGH projects. Only a few schools offer foreign language(s) other than English, however.

Third, many SGH schools offer one-time lectures in and outside of schools where students have opportunities to listen to “global experts” such as company owners who have business abroad, college professors who work on global warming issues, or NGO members working with children in Cambodia. These lectures appear to serve as awareness-raising opportunities on global issues for the SGH students, at least at an early stage of the project. But it is not clear how such lectures contribute to the program’s targeted goals of developing global leader competencies among SGH students in the long run.

Discussion

Based on our analysis of accepted proposals, MEXT evaluation criteria, the types of schools accepted as SGHs, and the content of projects described on the schools’ websites in order to understand the competencies for the global leaders that MEXT hopes to develop through the SGH project, we can make three points. First, developing global leadership competencies as conceived by this program would require substantial conceptual and practical changes to the current education system. Second, the SGH project rests on a particular type of global leader image. And third, the project is meant only for Japanese nationals with privileged backgrounds; it excludes talented students who are language/cultural minorities.

New Types of Competencies: Are They Trainable at School?

As seen above, the SGH project envisions that a competent global leader is an autonomous problem solver, a positive thinker with a positive attitude, and has a high degree of interpersonal and communication skills. The global leader is interested in global issues and is willing to take action in collaboration with others. Such competencies that go beyond the traditional notions of academic ability are difficult to conceptualize in the sense that they are very diverse, dynamic, situation-dependent, and multi-dimensional. They are certainly not easily quantifiable on a set of scales.

The Japanese educational system traditionally has measured academic ability largely by standardized testing, allowing students to be rank-ordered in a single scale, as exemplified in its entrance exam system. Effort is traditionally believed to be more important than innate ability in Japan (Stevenson & Stigler, 1992), and under this belief system, high academic ability should be obtainable by anybody who makes enough effort. According to Japanese educational sociologist Honda (2005), however, new types of competencies in the changing world, or what she called *postmodern-typed competencies under the hyper-meritocracy world* (p. 22), cannot be acquired by effort alone. Instead, competencies such as interpersonal skills and mental skills (e.g., mental toughness to carry out a difficult task) may be related to one's personality and aptitude, or something that may be less controllable or easily changeable. Indeed, Honda's series of analyses on large-scale data indicate that these competencies are highly related to one's upbringing and family environment in Japan. For example, students with higher quality and greater frequency of communication with their family members tended to have better interpersonal skills (2005).

Honda's findings prompt us to ask whether the new types of competencies that the SGH project advocates can even be taught in school. If Honda is correct in saying that the new competencies largely depend on family background, effort would appear to be of little help. According to Kariya (2001), students from different social classes in Japan make different amounts and kinds of effort. If so, as Honda suggests, effort no longer should be conceptualized as a means to acquire competencies but instead as part of competencies that are deeply embedded in environment. If that is indeed the case, then providing support for families and communities as well as formal school programs would be indispensable for developing such competencies.

Relationships among various competencies related to being a global leader are complicated as well. While traditional academic ability appears to remain important, the relationship between traditional academic ability and new types of global competencies is not totally clear. Given the fact that the highest-ranked academic high schools where their students have to take college entrance exams did not apply for the SGH project in 2014, the teachers and students may have considered competencies for global leaders as distinct from traditional academic ability. Indeed, statistics show that high academic achievers in Japan are not necessarily good communicators, at least based on self-reported data (Honda, 2005). Furthermore, the existing entrance exam system makes it difficult to create space and time for working on new competencies, although the college admission process is gradually changing.

Considering the complexity of conceptualizing global leader competencies, it is not surprising that we have little understanding about how best to train such competencies, if they are even trainable at school. As we have seen already, volunteering and fieldwork are popular SGH activities, but it is not clear how such experiences contribute to students' global competency. MEXT never explains what "super" in the super global high school project means. But if it implies "transcendent" individuals in the global world, knowing about "others" appears to be far from suffi-

cient. It is advisable that SGHs monitor what and how their individual students gain and change as a result of their activities in very fine-grained fashion.

Imagined Communities of Global Elites

The targeted competencies in the SGH project rest on an image of a certain type of global elite, such as international civil servants, NGO and NPO members working abroad or with people abroad, managers of multinational companies, and researchers. Anderson's (1991) concept of *imagined communities* appears to be well suited for helping us understand the SGH project's goals – a mission of Japan as a nation. Anderson viewed nation-states as imagined communities because modern nation-states are not based on physical, face-to-face interaction among their members but instead on people's perception of their membership – how they imagine that they are in relationship to the state. According to Anderson, nation-states and nationalism originated with the innovation of printing technology and its convergence with capitalism, what he called *print capitalism*. In the pre-printing world, differences in vernaculars were immense. Print capitalism made certain local vernaculars *lingua franca* and promoted the standardization of languages. People created imagined communities based on the conception of such common languages, which in turn set the stage for nation-states. In other words, members in a given nation-state see themselves as affiliated in an imaged space due to their conceived commonalities, such as a shared language. Importantly, this imagination is a social process. Anderson stated that people in power often offer certain images to the rest of the people so that they can manipulate the citizen's identity formation in a certain way, while making other options unimaginable. If we accept Anderson's argument, global leaders portrayed in the SGH projects can be considered *images* that Japanese rulers strategically promote to their citizens. Listing a few concrete occupations in defining global leaders was one such strategy. MEXT's criteria for evaluating the SGH project set up certain types of global leader profiles. One can argue that the global leader community itself rests on imagination, just like nations do, in the sense that the global leader community is based on members' perceived commonalities, such as mutual economic benefits and proficiency in a *lingua franca* like English.

It is important to remember that the "global human resources" defined by the Council on Promotion of Human Resource for Globalization Development (CPHRGD), largely came out of concerns about decline in economic and political power of Japan – concerns that were most strongly articulated by business communities. It only makes sense, then, that a particular type of global elites and their competencies as perceived by the business community to be important were promoted in the SGH project. Such images certainly match Japan's national interest. That would also explain why "identity as Japanese" was included as part of the global leader competencies defined by MEXT.

The emphasis on English language competencies in the formation of the imagined global leaders is not surprising considering the power of English in international business and politics. As Pavlenko and Norton (2007) indicted, in the world of globalization, “English is implicated in this process of reimagination more than any other language,” largely due to “American cultural and linguistic imperialism” in recent years (p. 671). A type of communicative competence in English, such as a certain style of communication used during discussions and debates, is considered indispensable for members of the imagined global elite community and was promoted in the curricula and activities in SGH projects.

However, globalization has created not only permeable national borders but also multilingual and multicultural diversity within a given nation (Power, 2000). People increasingly encounter multilingual and multicultural communication in face-to-face interactions (both physical and virtual interactions such as using Skype). In such face-to-face interactions, desirable competencies should be defined locally or negotiated by the participants of the interaction. For example, having control over turn-taking or conversation floors may be desirable in one context but not in another context. Similarly, although MEXT considers that developing the Japanese identity is important in the SGH project, the process of identity formation is increasingly complex, multi-faceted, and context-dependent. One can argue that defining “the Japanese identity” is impossible or meaningless; thus it would not be appropriate as a goal of the SGH project.

Exclusion of Language/Cultural Minority Students

The SGH project is clearly designed for Japanese nationals with privileged backgrounds, and the project excludes language and cultural minority students in Japan (regardless of their nationalities). These language and cultural minorities can be the subject of global studies, but their resources and talents are not valued as potential global leaders. This is perhaps related to the mistaken belief that minorities are less likely to fit the image of global elites. In addition, under the current entrance exam system in Japan, many language/cultural minority students face difficulties getting into high schools, particularly academically high achieving high schools such as the SGHs (Butler, 2011). Minority students’ voices are almost unheard in the current Japanese education system.

The exclusion of language/cultural minority students from the SGH project is unfortunate. Minority students have substantial cross-linguistic and cross-cultural experiences that would be valuable assets to global citizens. Including these minority students in the SGH project would not only enrich the program but also help the minorities to create a greater number of their own leaders who can empower their communities and the larger Japanese community.

Conclusion

The SGH project was newly implemented in 2014, and it is premature to say anything about its outcome. In this chapter, we analyzed types of global leader competencies that MEXT attempts to develop at high school level by examining winning 2014 proposals, evaluation criteria, characteristics of schools selected, and project activities.

While the SGH project aims at developing competencies that go beyond high proficiency in English, we found that their targeted competencies were largely built around a particular imaged global elite community and that “global leaders” are conceptualized as something universal, trainable, tangible, and measurable; in reality, however, they are more likely multi-dimensional and highly context-dependent. Developing these new types of global competencies would require substantial conceptual and practical changes in Japanese education. Finally, the current SGH model focuses on select Japanese nationals with privileged backgrounds while excluding cultural and linguistic minorities from the project.

We suggest, therefore, that rather than treating global leadership as consisting of a certain number of definable, universal leadership competencies, educators, policy makers, and others should instead recognize and value teaching students about the diverse nature of leadership as it is situated in various global contexts. Through problem-solving activities and interaction with people inside and outside of their own communities, students should be expected to understand that global leadership is highly context-dependent and multi-faceted. Activities in the SGH project should be designed so that students can look beyond a fixed *image* of global leadership instead of aiming to attain pre-defined competencies. Welcoming diverse types of students in the SGH program, including students from diverse linguistic and cultural backgrounds, would help increase the participants’ opportunities to reimagine global leadership as robust, ever evolving, and deeply tied to specific contexts.

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Chapter 9

Exploring Top-Down and Bottom-Up Cosmopolitan Traces in Schools on the West Coast of the United States

Eleni Oikonomidou and Rachel G. Salas

Abstract This chapter focuses on the exploration of traces of critical cosmopolitanism in U.S. schools. The first goal is to examine whether critical cosmopolitan traces are evident in national, regional, and local educational policies with a specific focus on the West Coast. The second goal is to explore elements of emerging critical cosmopolitan dispositions and attitudes in schools through composite portraits of students. The portraits are based on research on identity construction of students in elementary and secondary educational institutions on the West Coast and the authors' informal interactions in schools. Finally, the aim of the chapter is to critically analyze and synthesize the two previous sections and identify areas of synergy and potential divergence. The authors make recommendations for policy, research and practice with a call for a redirection of top-down initiatives to the local, bottom-up realities of students' lives.

As all historical periods, the twenty-first century poses its challenges and possibilities to societies. Education as one of the primary institutions of socialization and preparation for adulthood is called to identify and cultivate critical skills for a successful participation in society. However, identifying both what those critical skills are and how to cultivate them are items of intense debates. Among others, are two main competing discourses: human capital and progressive education (Spring, 2009). On the one hand, there is the *human capital world model*, which with its emphasis on uniformity, standardized tests, and scripted curricula, associates education with a direct link to creating workers for the economy (pp. 16–18). While

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initially the emphasis of this model was solely the cultivation of job skills (with WorldBank being a main promoter), most recently there is also attention to social connections that aim to alleviate tensions within diverse communities (such as the OECD's agenda). On the other hand, there is the *progressive education world model*, which encourages critical analysis of the ways uniformity promotes the interests of the "rich nations" and advocates for local teacher control. In that model, education is associated with a promotion of social justice and "active participation in determining social and political change" (Spring, 2009, p. 18).

Educational policies at multiple levels often reflect the political climate of their days. Undeniably, in the age of globalization, education is no longer discussed within the realm of a region or a nation but rather within a global framework (Spring, 2009). Consequently, the integration of this "larger than national" viewpoint has entered the language of policy documents. To that effect, in K-12 circles in the U.S., the term "global competence" which attends to a cultivation of global knowledge, linguistic and intercultural skills, and dispositions of value and respect towards others (Partnership for 21st Century Skills, 2008) reflects such reality. Global competence could be correlated with the acquisition of functional skills that make one successful within the global economic market or with a civic ethical orientation, based on the educational model that prevails. If a human capital model prevails "the value of education [would be] measured by economic growth and development" (Spring, 2009, p. 18) and the main goal of the cultivation of global competence in schools would be the students' perceived ability to function successfully within the realm of the global economy/society.

If, however, a progressive model prevails, the focus would be on a critical analysis of existing structures and on the promotion of social justice (Spring, 2009). The progressive model operates within a local context. If we transfer the level of analysis from the local to the global context, we could establish a link between the progressive and the cosmopolitan lens. Such could take place through an analysis of the global status quo through critical cosmopolitanism. Critical cosmopolitanism is based on a critique of existing global economic and social conditions in light of the possibility of an alternative reality (Strydom, 2012). To that effect, Delanty (2012) defined critical cosmopolitanism "as an account of social and political reality that seeks to identify transformational possibilities within the present" (p. 38) while Rizvi characterized critical cosmopolitanism in relation to education as a (2011) "...critique of the various assumptions surrounding the traditional positivist view of education regarding the nature of knowledge, human beings, social relations and society, and the role that education plays in their reproduction" (p. 149). Given that a critical cosmopolitan lens is situated within a global framework, it could provide one potential lens to examining the promotion of global competence in educational policies within and beyond the human capital models.

While the term cosmopolitan is a debated one (Parker, 2011) as it attends to both dispositions and embodied expressions (Kromidas, 2011) and idealistic and utopian visions of a peaceful global society (Hansen, Burdick-Shepherd, Cammarano, & Obelleiro, 2009), in this chapter the term will be used to attend to three dimensions – *the perceptual, the intercultural, and the civic. These three dimensions are*

defined as follows: (a) the *perceptual* dimension attends to the ways in which a global framework of viewing one's life is (or should be) promoted in schools, where students do not necessarily identify only with one geographic or national location (Parker, 2011); (b) the *intercultural* dimension refers to the ways in which students engage (or should engage) with others across lines of difference at an interpersonal level promoting values such as solidarity, openness, justice, and fairness (Calhoun, 2007; Delanty, 2009; Donald, 2007; Hansen et al., 2009; Osler & Starkey, 2003); and finally, (c) the *civic* dimension focuses on the ways students actively participate (or should participate) in the improvement of living conditions for all (Beck & Grande, 2010; Camicia & Franklin, 2011; Osler & Starkey, 2003). A critical cosmopolitan framework allows for a way of thinking about the world and one's life within it that transcends local spaces while being situated within them, operates out of values of justice, solidarity, and fairness and promotes civic engagement within the context of these values.

The first goal of this chapter is to examine whether critical cosmopolitan traces are evident in national, regional, and local educational policies in the U.S. with a specific focus on the West Coast. The second goal of the chapter is to explore elements of emerging critical cosmopolitan dispositions and attitudes in schools through composite portraits of students. The portraits are based on research on identity construction of students in elementary and secondary institutions on the West Coast of the U.S. and the authors' informal interactions in schools in the same location. The last part of the chapter will aim to critically analyze and synthesize the two previous sections and identify areas of synergy and potential divergence. Recommendations for policy, research and practice will conclude the chapter.

A Void of Cosmopolitanism from Above: Multilayered Policy

Within the context of globalization, and the influence that multiple actors (such as intergovernmental organization, multinational corporations, non-governmental organizations) have on education (Spring, 2009), the integration of a global lens in educational policy expands from economy to society although the connection is oftentimes elusive. For instance, the mission of the U.S. Department of Education implies the competitive global economic scene by stating "*Our mission* is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access." (U.S. Department of Education, n.d.) (Italics in original, underline by the authors). Within and beyond economics, an alternative framework in which the global discourse enters educational policy at the national level in the U.S. is evident in U.S. secretary of state Arne Duncan address for the International Education Week, in which the title refers to a need for the promotion of globally-competent citizens (Duncan, 2013). Within the contents of the address, there is reference, among others, to a "nation's prosperity [that] depends on its people's ability to thrive in the global marketplace", to "education [being] the new currency", to "raising standards and "ensur[ing] that all students are

academically prepared, globally competent and internationally successful.” All of the above terms and nuances are associated with the economy. While throughout the speech there is also reference to “humanity” and “rich experiences with other cultures and languages” the dominant framework seems to be related to economics within a human capital framework (Spring, 2009). Similarly, the Common Core State Standards (CCSS) that are adopted by numerous states across the U.S., along with their underlined expectations supporting key areas of educational practice, attend to both economy and society. Here is the relevant focal excerpt: “Informed by other top-performing countries to prepare all students for success in our global economy and society” (Common Core: State Standards Initiative, n.d.) It is important to note that the term economy appears first while there is no questioning of the current global economic and social conditions. The criteria of evaluation of the top-performing countries tend to be based on economics. A critical cosmopolitan framework “identifying transformational possibilities”, (Delanty, 2012, p. 38) seems to be largely missing from the above language.

Trickling down to state policy, we see similar language appearing in mission statements of state departments of education. For instance, the last sentence in California’s mission indicates (California Department of Education, n.d.): “Together, as a team, we prepare students to live, work, and thrive in a multicultural, multilingual, and highly connected world.” And the state board of education in Nevada mission states:

The Nevada State Board of Education acts as an advocate and visionary for all children and sets the policy that allows every child equal access to educational services, provides the vision for a premier educational system and works in partnership with other stakeholders to ensure high levels of success for all in terms of job readiness, graduation, ability to be life-long learners, problem solvers, citizens able to adapt to a changing world and contributing members of society (Nevada State Board of Education, n.d.).

Once again, economy provides the undergirding framework and the language is situated within a framework of maintenance of the status quo. Students should be able to “adapt to” the changing world and to become “contributing members of society”— not to critically question the world and potentially transform the society (Delanty, 2012; Risvi, 2011).

Continuing down the funnel, we can see ways in which the global competence lens is translated at the school level. In some cases, there are schools that are identified as promoting global competencies. To that effect, we have international schools. An example of this is located within the Clark County school district in Las Vegas, Nevada. The newcomer high school, Global Community High School, uses the term global in its name, professes to provide a “Global Impact” on its website and to include elements of global competence in its mission statement: “The mission of Global Community High School is to provide a rigorous, relevant and diverse education to limited English speakers by modeling respect, building cultural community, and using innovative research based instruction while instilling the values of academic excellence and civic responsibility.” (Global Community High School, n.d.). In this instance, the focus seems to be somewhat divergent from the economic

association. Although it is not clear what “building cultural community” entails, or how students are to demonstrate “civic responsibility” it seems that the language in this school’s mission could be considered more closely associated with the aims of critical cosmopolitanism. However, it could also be that cultural community could be seen as a way to alleviate potential tensions within a human capital world model (Spring, 2009).

In some other cases however, there is a school within a school that aims to promote “global competence.” Through the promotion of specialized subjects in various high schools, one focal area in Northern Nevada is “Global Studies”. Here is an excerpt of the website description of the program:

This program is designed to prepare students for life in the twenty-first century. Students will be immersed in course work dealing with world politics/economics, ecological balance, global interaction/diplomacy and international understanding. During the 4-year course of study, students will study two world languages to the Advanced Placement™ level. Other required courses will include AP Human Geography, AP US History, AP American Government, AP Comparative Government, Economics and AP Environmental Science. ([Global Studies Signature Academy, n.d.](#))

In this case, the integration of a global competence seems to take place in multiple ways, ranging from economics to politics, and from languages to ecological concerns, although the aim of the approach is not clear. Another example of an exclusive program within a school is the Humanities and International Studies Program (HISP) located in a large urban public school in Northern California. This program promises a curriculum that provides: “a unique global perspective on learning and understanding – prepares HISP students for success at any college or university in the country” ([Humanities and International Studies Program, n.d.](#)). To deliver a “unique global perspective” the curriculum includes literary works from ethnically diverse authors, world history courses that provide an in-depth study into various countries, cultures and languages, field trips, guest speakers and an opportunity to travel overseas for an extra cost during the summer. This program is offered to the select 120 students who meet the writing and academic requirements, a mere 5% of the total student body of 2200 students comprised of 36.8% Hispanic, 24.9% white, 20.5% Asian with the other 19% a combination of American Indian, African American and Pacific Islander. This program’s aim seems to cultivate a global competence framework for the select group of students who are accepted.

In other cases, the infusion of a global competence framework is attempted through special classes. To that effect, in the state of Washington, the superintendent of public instruction has identified targeted classes. It is stated on their website, “International Education seeks to integrate global perspectives in a variety of academic disciplines that include [Social Studies](#), [Environmental and Sustainability Education](#), and [World Languages](#) .” (International Education, Office of Superintendent of public instruction, State of Washington). Student and teacher exchanges are ways in which the global competence perspectives are further facilitated.

It is evident that throughout the review of the selected material, the term cosmopolitan is not mentioned. Although the meaning of the term global competence is not always explicit, it seems that for the most part, the premises of critical cosmopolitanism are largely missing. Economy seems to take precedence over society in most cases reflecting the human capital model (Spring, 2009). Furthermore, when attention to ethical and civic dimensions is offered, those seem to be situated within a framework of reproduction of the global status quo. The promotion of a “critique of social reality and the search for immanent transcendence” (Delanty, 2012, p. 41) is absent. If one were to synthesize the language from the various sources mentioned above, at a perceptual level, one could see evidence for the promotion of a global framework. However, it does not appear that the foundation for the promotion of intercultural skills is indeed immersed in values of solidarity, openness, justice and fairness (Calhoun, 2007; Donald, 2007; Osler & Starkey, 2003; Denalty, 2009) or whether a civic dimension of global social justice is infused (Camicia & Franklin, 2011).

It is also important to note that the implementation of the global competence framework from the abstract level of policy to that of practice does not seem to be universal but somewhat sporadic and selective in nature. Some students (those who may attend the international schools or engage in learning in the special programs) are ‘chosen’ to cultivate their global competence and others are not. It seems that not all students in all schools are provided with similar opportunities to participate in the global competence discourse. Its promotion is somewhat elitist in nature and could be seen as another form of tracking.

Who determines who is chosen to participate and to what consequence to those excluded? Furthermore, how effective are various techniques used to actually cultivate global orientations, skills, and knowledge (Sobe, 2012)? How are these assessed? If such learning is considered critical for twenty-first century skill development, shouldn’t all students be included? Lastly, how do students themselves view, understand, and embody global competence? If a critical cosmopolitan lens is largely missing from the reviewed policies, where else could we find potential glimpses of its existence?

Hints of Cosmopolitanism from Below: Multidimensional Students’ Identities

A different entry point to examining potential traces of critical cosmopolitanism in schools could be offered by looking at students’ identities. Perhaps if we look through the students’ eyes we may be able to identify traces of critical cosmopolitan ways of thinking and being that may differ from policy mandates and could provide a foundation for an ‘alternative reality’ (Delanty, 2012). What would a student who engages in cosmopolitan ways of thinking be like? If one operates out of the global competence framework based on the human capital theory (Spring, 2009), what

may come to mind is a student who has knowledge of different parts of the world, is positively predisposed to intercultural communication potentially cultivated by engagement in foreign language learning, and has skills in understanding cultural ‘others’ and being understood by them potentially facilitated by travel abroad for study or vacation. These are characteristics that fit within the framework of global competence (Partnership for 21st Century Skills, 2008) and are to some extent promoted by the policies that were reviewed above. However, such a view appears to be quite elitist and limited in nature (Rizvi, 2008). It has been argued that none of the above characteristics and experiences can result in the cultivation of cosmopolitan dispositions in a deterministic way (Beck, 2002). It is uncertain if mere engagement in foreign language learning cultivates intercultural communication skills, beyond the technical level of language acquisition, especially if students do not have opportunities to converse with native speakers of that language. Also, if students are encouraged to connect with their peers from other countries and do not have opportunities to interact with their peers at school (because they attend selective programs that their peers may not be able to participate in due to academic requirements), then the cultivation of their understanding of the world will be partial and incomplete. Similarly, travel by itself, may not necessarily cultivate a cosmopolitan outlook in the global elite (Werbner, 2012) and study abroad may trigger but not determine cosmopolitan orientations (Oikonomidou & Williams, 2013).

If the above characteristics are problematic in identifying a student who could be considered cosmopolitan, which ones should replace them? If there is not one kind of cosmopolitanism but multiple ones (Sobe, 2012), how can we begin to recognize such in the context of schools? Below, student composite portraits¹ will be offered as demonstrative of potential multiple forms of student cosmopolitan orientations at different levels of schooling. The composite portraits are based on narratives that the authors have been exposed to in research and in their informal interactions in schools. Chase (2005) wrote “a narrative may be oral or written and may be elicited or heard during fieldwork, an interview, or a naturally occurring conversation” (p. 652). In constructing the composite portraits, the authors drew on data from interviews and focus groups with students from schools on the West Coast of the U.S. that aimed to explore their social and academic integration experiences. They also relied on the content of naturally occurring conversations through the schools in which they are engaged. The goal of the portraits is not to generalize to all groups of students but rather to discern possible ways in which critical cosmopolitan orientations may exist in students of various age groups.

The first person that we would like to present is Michael. Michael lives in Seattle, WA, and he currently attends preschool at his neighborhood. His teacher introduces him to dances and traditions of various parts of the world as she dedicates a week to learning about a different country and brings guest speakers. While Michael could get some exposure to human diversity through the curriculum, it seems that his real exposure to the development of an intercultural understanding comes through his friend Saaqib, who recently relocated from Iraq. Although Saaqib does not speak

¹All names are pseudonyms and the locations are randomly selected.

English fluently, they find ways to communicate and play together. Through the games that they develop, they learn about each other and become close friends. When others look down upon Saaqib, Michael is always there by his side and supports his friend in the peer group. Similarly, Saaqib, who is a little older, becomes a big brother figure for Michael. The two get even closer as the language barrier subsides. An intercultural relationship that transcends existing social barriers (Warikoo, 2004) is formed. Michael has never left the borders of his home country and does not know another language. He has a beginning understanding of ethical treatment of others and is curious about Saaqib's life and wants to learn more (DeJaynes & Curmi, 2015). He may not at this early age have developed an understanding of global interconnection but he exhibits emerging critical cosmopolitan orientations through his intercultural engagement and actions. He is aware of the power dynamics at his school and he stands up to support his friend promoting fairness and justice. Although not in any deterministic manner, his experiences could provide a foundation for the cultivation of an initial critical cosmopolitan orientation.

The next portrait that we would like to present is that of Maria. Maria is in elementary school and lives in Reno, NV. Maria is drawn to the written world. She loves to read books – fiction, non-fiction, comics, and any book that she can find. She is the oldest of four sisters and oftentimes enjoys being away from her younger siblings and reading in her room. When she reads about a location in a book, she goes to her mom's computer and tries to find out where that place is in the world. She locates a map and does a basic search to see pictures of the place and of its people. She dreams of travelling, one day. She has heard of a high school in her town that specializes in world languages and cultures and wishes to attend. However, it is quite far away from the school that she is zoned for and her parents informed her that such a transfer would not be possible. In order to attend that school, she would have to obtain transportation there and that is not something that her parents who both work can provide. Nevertheless, Maria finds refuge in the world of books. When she is out and about she loves to hear different languages being spoken. Last time she visited the local public library, she even found a book that would teach her how to speak Spanish. She wants to approach her classmates at school who are new to the country. She has started to work on it, although she finds the task quite daunting. When people ask her what she wants to become when she grows up she says, "I want to travel. What is a job that does that? Maybe a flight attendant?" Maria is polite and kind to all of her classmates. She is especially drawn to spend time with those who are new to her school and she loves to assist them while they learn the ropes of school life. Boundaries are permeable as she looks within and beyond those (Kromidas, 2011). In one of her books, she reads about a charity and when she heard that an earthquake hit a city on the other side of the world, she decided to do something about it. She talked to her parents and her teachers and led an effort to collect money for those who had been impacted. Although she didn't know much about that part of the world, she asked her mom to locate it on the internet and explore it together with her. With her actions, she demonstrated an initial commitment to improving life conditions for some far away from home, promoting global social justice.

Jose is a high school student who tried to gain entrance into the aforementioned HISP program in Northern California. Jose had attended the local middle school that fed into the large public high school that housed the HISP program. He sat for the HISP exam with his friend Zoe, who like many of the students in attendance in the exam room, was enrolled in the advanced courses and studies program in middle school. Jose's grades were as good if not better than Zoe's, his attendance was perfect, but his accent was heavy and he did not know how to gain entry to such programs. On exam day, Jose was excited and eager. After school, he found Zoe so they could walk over to the high school together for the exam. Zoe had forgotten and even seemed disinterested in participating but Jose convinced her to go with him, even lending her a pen to use to write the essay. As they walked across the field from the middle school to the high school, Jose dreamt about gaining entrance to the prestigious program realizing it could be life changing. Ever since he could remember, he had travelled back and forth between his parent's home country and the U.S. Jose is bilingual and bicultural and saw these attributes as strengths that could help him gain entry into HISP. When he was younger, he felt ashamed to have to share with his classmates that he had to leave the country and his community of friends every summer. While his friends at school were talking about elaborate vacation plans to exotic places, he was getting ready to visit his extended family. He was excited about the trip but he didn't want to admit that in front of his peers. He would rather divert attention away from himself and his whereabouts in the summer. Sometimes, he hid his ability to speak his native language in fear of being ridiculed by his classmates (Suarez-Orozco & Suarez-Orozco, 2001). Nevertheless, now he recognized that he wouldn't change his life for the world and that participating in two different worlds and living in two different countries was a valuable experience. Although at times he still feels that he doesn't belong in either world, he realizes that, in the end, this may be an asset. He feels that he can understand other people who are like him who have to cross borders and juggle languages at home, in school and in the community. Surely the HISP exam would afford him the opportunity to share his cultural and linguistic capital and knowledge. Unfortunately, Jose did not make it into HISP because of his performance on the written component of the entrance exam. His friend Zoe did but decided that the program was not for her and chose to attend a different high school altogether. Jose did not let this disappointment defeat him. He entered the general high school population and found an incredible amount of diversity making friends from other cultural and linguistic groups. He cared about people in his parents' hometown as he cared about people everywhere. He has also begun to explore leadership opportunities by joining his leadership team at school. At first he was scared and uncertain, but the cheers from his peers when he began to present in assemblies gave him courage and strength. With the support of an interested counselor he has already started to apply for colleges. He has also started his own non-profit organization that collects and sends clothes to the town where his grandparents live. His family and teachers are very proud of him. He feels that he is not doing anything special. Recently, in a school presentation, he heard about non-governmental organizations (NGOs) that are active around the world. He sees his future in one of them. While his friends in the

HISP program in high school travel overseas each summer to learn about different cultures, Jose has engaged in travel abroad too but not for studies, rather to visit his extended family and reconnect with his cultural and linguistic roots. It seems that his experiences may have cultivated a bi-national perspective and understanding. However, it is his own view of the world and himself within it that portrays a critical cosmopolitan lens. In the case of Jose, we see that the insidious remnants of tracking still exist – perhaps cloaked like a wolf in sheep’s clothing. Jose did not have the requisite writing skills needed to navigate the labyrinthine corridors of select academic programs, so entry to gifted or advanced studies courses were denied him. Nonetheless, Jose demonstrated civic engagement that is based on the values of solidarity, fairness and social justice at home and beyond.

What are some of the cosmopolitan characteristics that the above students portray? What is the origin of those? Wariko (2004) writes that “...cultural mobility creates an environment in which children develop skills to move easily between cultures and identities” (p. 378). While multidimensional in nature, the characteristics that the above students portray are indicative of emerging critical cosmopolitan orientations. The students portrayed desires for intercultural connections based on solidarity, openness, justice and fairness (Calhoun, 2007; Delanty, 2009; Donald, 2007; Hansen et al., 2009; Osler & Starkey, 2003), and a will to engage in civic action (present or future) to enhance life conditions for those close to them and those far away (Beck & Grande, 2010; Camicia & Franklin, 2011). The desire to engage in civic action to cause small change in the given context of peer interactions (in the case of Michael) or change the world (in the case of Jose) was evident in the lives of these students. The students were aware of injustices and did not aim to adjust to the current world conditions but rather work actively to change them (Delanty, 2012). A critical cosmopolitan orientation may be facilitated through one’s own experiences or through the experiences of others (friends, literary characters, or curriculum sources), as evident in the case of Maria and Jose. The desire for ethical intercultural connections portraying all of the above characteristics was displayed in the cases of Michael and Maria. It is important to note that the students described above did not engage in language learning or travelling experiences through a school program. They were not motivated to action by schools but on their own accord and for intrinsic reasons propelled by individual and collective concerns regarding social justice, fairness, and solidarity.

Looking at Twenty-First Century Skills Through a Critical Cosmopolitan Perspective

It appears that there is disconnect between the top-down policy mandates and the lived experiences of students in schools. Top-down initiatives promote somewhat uniform expressions of nebulous global competence through selective pathways (i.e. language learning, travelling) and school subjects (i.e. social studies, foreign

languages). On the other hand, students' experiences could provide foundations for critical cosmopolitan orientations that are more widespread and unpredictable (Kromidas, 2011), given that students' lives are situated within complex webs of interactions and meaning making processes within and beyond those promoted in schools. It seems that an ongoing strategic examination and potential infusion of the bottom-up cosmopolitan orientations may assist in the reconceptualization of top-down initiatives in twenty-first century skills. This section will attend to the challenges and possibilities of such a potential synergy based on insights from the selective examples used above.

If critical cosmopolitan orientations are considered to be important in schools, then it seems that they should be widespread across all schools, all subjects, and all student populations. A redefinition of the meaning of global engagements may be needed in such a case. For instance, not all student populations have the ability to travel overseas and engage in optional or required study abroad programs. Many times such programs are quite expensive and selective in nature. The cosmopolitan experiences or dispositions that students may bring to school are multifaceted as demonstrated above. Cultivation of those through relevant curricular and pedagogical experiences would provide a different starting point from that of travel and physical relocation (DeJaynes & Curmi, 2015). The use of the internet (as we saw in the case of Maria) and the engagement in critical intercultural interactions in the location where one lives could provide a springboard for certain cosmopolitan dispositions, as Michael and Jose demonstrated. While the students' intercultural exchanges may be considered superficial, they could provide the foundation for more in-depth engagements through the cultivation of what Delanty (2012) refers to as "critical dialogue or deliberation" (p. 42) in school. Continually examining and problematizing the potential elitist character of certain educational initiatives and schools could be one way to counteract existing sporadic attention to cosmopolitan views for the 'selected' ones (Popkewitz, 2008). Concurrently, infusing a critical cosmopolitan frameworks in all schools would be important. A critical cosmopolitan framework would be framed around an ongoing examination of current local and global conditions in light of a potential for their transformation (Delanty 2012). Under that framework, "[t]eachers [could] draw students and themselves into the ever-generative space where reality and imagination meet" (Hansen, 2011, p. 14) with a main goal to create a better world.

Similarly, the implementation of critical cosmopolitan views should not only be the privilege of specific school subjects (such as world languages or social studies). On the contrary, it seems that the infusion of such a framework across all school subjects would be important. The students' curriculum should be grounded in real life relevant examples that are analyzed in light of their global and local relevance. The ethical dimensions of curricular material and their implications for global social justice should be evaluated in light of their cultivation of global sensibilities (Noddings, 2005). A starting point would be to evaluate and supplement material that could be enhanced with a critical cosmopolitan view (Smith, 2002). Of course, the question of who is going to conduct such an evaluation is a central one. If cosmopolitan dispositions are considered critical for the twenty-first century, then

teacher educators should ensure that such frameworks are infused across all subject areas and cultivated across all prospective teachers. Furthermore, existing resources could assist in the implementation of a cosmopolitan framework across subject areas (Edelson, 2009; Karseth & Sivesind, 2010; Steelman, Grable, & Vasu, 2005; Tobin, 2011). And such should take place across all levels of schooling, starting with pre-school (Horsley & Baurer, 2010).

It is also important to consider cosmopolitan orientations not as a privilege of the global elite (Rizvi, 2008) but rather as a lived experience of many students. While traditionally, the framework may have been used to relate to those who have relocated across national borders (Nava, 2002), this does not have to be the case. As demonstrated above, if we dig a little deeper we can identify ways in which cosmopolitan views may exist across student populations and across gender, race, ethnicity, nationality, and so on (Nava, 2002). The implications of this for educational researchers are paramount. If we are to succeed in the synergy of theory and practice then we have to critically evaluate life in schools in light of twenty-first century skills. The relationship between the promotion of twenty-first century skills (Partnership for 21st Century Skills) and the active civic dimension of cosmopolitanism within the context of global social justice (Camicia & Franklin, 2011) may have to be reexamined, as well.

Looking at the possible dimensions of a cosmopolitan synergy in schools, the questions that arise focus on the positioning of implementation and curricular integration under the existing global climate of accountability, standards, and testing (Bottery, 2006). If indeed critical cosmopolitan orientations are considered important twenty-first century skills then evaluation measures that attend to them should be devised. There seems to be an ongoing challenge with assessing such skills (Silva, 2009). Would states, such as California, dealing with the abysmal results of the new Common Core-based tests, be willing to implement yet another assessment (Lambert, Reese, & Kalb, 2015)? Beyond looking at knowledge as measurable by tests, perhaps alternative frameworks will have to update what is (or should be) considered important in schools. Or perhaps, a critical cosmopolitan framework, which is based on an analysis of existing assumptions and practices about learning and on the creation of an alternative educational paradigm (Rizvi, 2011) would lead to the innovation of new assessment tools.

The focus of this chapter was to demonstrate how positioning a critical cosmopolitan theoretical framework within an analysis of twenty-first century “global competence” could allow for an ongoing reconceptualization of its dimensions in educational policy and practice. Conceivably, an ongoing systematic investigation of cosmopolitan frameworks through the local, bottom-up, personal lives of students could provide a solid foundation for future policy and practice. Is it not better to begin the process and dialogue needed to move schools toward a global perspective and critical cosmopolitanism from the bottom up, than to continue to perpetuate the top down status quo as it now stands?

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Chapter 10

Exploring the Transformative Potential of a Global Education Framework: A Case-Study of a School District in the United States

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Abstract This study examines the ways in which an entire US public school district has adopted a whole-school approach to global education. It explores how its school leaders and teachers aim to embed global education into the ethos and culture of schooling by infusing it into school programs as well as instructional content and practices. This study aims to address a gap in the research between intentions surrounding education for the twenty-first century, of which global education is a part, and the practice of implementing these intentions by studying how macro-level policies influence micro-level practices. More specifically, the authors investigate the dynamic interplay in which a macro construction of a twenty-first century initiative in a school system, and the accompanying use of a framework, is translated into everyday instructional and curricula practices in its schools. In this way, research focusing on a whole-school approach provides the platform for a more comprehensive and holistic understanding of global education that moves beyond examining the teaching of a subject matter or mere content knowledge to studying how schools develop common language and alignment around cultivating critical, creative, and ethical capacities students need to fully participate as members of a global community.

While global education has typically been studied as a singular subject such as the Human Rights curriculum designed by the United Nations Educational Scientific and Cultural Organization (UNESCO, 2007) or integrated into existing subjects such as Social Studies or Civics Education (Ho, 2009; Myers, 2010), this study examines the ways in which an entire US school public district has adopted a

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whole-school approach to global education. That is, how its school leaders and teachers aim to embed global education into the ethos and culture of schooling by infusing it into school programs as well as instructional content and practices. In this way, research focusing on a whole-school approach provides the platform for a more comprehensive and holistic understanding of global education that moves beyond examining the teaching of a subject matter or mere content knowledge to studying how schools develop critical, creative, and ethical capacities students need as members of a global community.

Even though global education is a significant aspect of twenty-first century education that has influenced major policy goals in many countries, Voogt und Roblin (2012) observe that these initiatives do not necessarily reflect what is occurring in the daily practices of teaching and learning in the classroom. Thus, this study aims to address this gap by studying how macro-level policies influence micro-level practices. More specifically, we investigate the dynamic interplay in which a macro construction of a twenty-first century initiative in a school system, and the accompanying use of a framework, is translated into everyday instructional and curricula practices in schools.

Theoretical Framework

How can global education be integrated across subjects in the school curriculum? A survey of models of global education suggests that there are three inter-connected paradigms in which the goals of global education are directed towards developing critical, creative, and ethical capacities.

The first paradigm centers on developing students' critical capacities to engage with the global in its various dimensions such as the spatial (involving analysis of the ways in which issues in one site are interconnected with others), the temporal (involving analysis of changes affecting the world across time), issues (involving analysis of contemporary concerns affecting the lives of individuals, communities, and the planet), and human potential (involving analysis of trends affecting the planet and its future) (Pike & Selby, 1988). It seeks to enable students to become aware of and to critique present global issues, interconnected global systems, and cultural value systems (Case, 1993). Exposure to interconnected knowledge about the world fosters critical capacities as students learn to problematize "self," "nation," and "other" as bounded concepts (Choo, 2013; Gaudelli, 2003).

Models of global education also focus on developing creative and entrepreneurial capacities in students so that they may participate actively in shaping their world (Gardner, 2006; Zhao, 2012). Individualistic justifications for creativity have long been popularized in research investigating creativity as a type of intra-psychological trait cultivated through encouraging innovative problem solving (De Bono, 1976; Puccio & Cabra, 2009; Sternberg, 2003); the invention of novel ideas or products (Anderson & Krathwohl, 2001; Cropley & Cropley, 2005); and the facilitation of personality traits conducive to creativity such as flow, play, projection, and

divergent-thinking (Csikszentmihalyi, 1996; Jenkins, 2006; Runco, 1986). In the last three decades, research has shifted from person-centered to socio-cultural conceptions of creativity as it has become increasingly recognized that culture has a profound influence on the development of creativity and vice versa (Glăveanu, 2010; Rudowicz, 2003). Creativity is embedded in culture, not produced by single individuals, but by social systems. This is because ideas or inventions must first be socially validated and emerge as a result of skills, values, and norms acquired through culture (Csikszentmihalyi, 1996, 1999). Thus, attention in education has been drawn to the possibilities of developing cosmopolitan creativity in which students are provided opportunities to envision possibilities beyond current realities bounded by territorial space and are challenged to collaborate with familiar and distant others to offer innovative solutions to real-world global problems.

Other models of global education place emphasis on the development of ethical capacities. This involves encouraging self-reflection so that students learn to examine their own assumptions and bias as they engage with global issues (Calder, 2000), nurturing a consciousness of the perspectives of multiple communities and cultural groups around the world (Boix-Mansilla & Gardner, 2007), and sensitizing students to the voices of marginalized or silenced communities (Kirkwood, 2001). As Martha Nussbaum (1997) argues, a fundamental agenda in education should involve cultivating empathetic sensibilities towards the other which is premised on a cosmopolitan sense of common humanity transcending territorial boundaries.

These different models of global education perhaps highlight the complex and multifaceted nature of our globalized twenty-first century. The challenge is how whole-school approaches to global education can be holistic in accounting for critical, creative, ethical and other dimensions of global education.

Methodology

This study employs a case study methodology (Yin, 2009) to examine the work of the Westland district (pseudonyms are used in place of actual names) which is a high-performing public school district in the United States comprising 5700 students and consisting of eight schools across the K12 spectrum. Since case studies “are generalizable to theoretical propositions and not to population or universes” (p. 15), the aim of the study is not to provide a model of a whole-school/district approach to global education; rather, the study aims to provide interpretive understandings of a phenomena to address the following research questions:

1. How is global education integrated in a school district that intentionally sets out to engage in twenty-first century educational practices? and;
2. What are some of the challenges that arise as a result of a “whole-school” approach to global education?

Adapting Yin’s (2009) framework for case study analysis, the following data was collected and analyzed between April, 2010 and September, 2014:

- Archival documents (three forms – documents related to school history, policies and curriculum);
- Semi-structured interviews (involving 18 senior management, heads of department, and selected teachers across subjects and grade levels with varying levels of experience);
- Curriculum documents (involving schemes of work, unit plans, lesson plans, and assessments);
- Classroom observations of one unit, defined as a series of lessons connected by a theme, involving five selected teachers at the elementary, middle and secondary three levels across four subject areas – English, Science, Mathematics, and Humanities or “Special Projects”).

Background

Schools in the Westland district have consistently been ranked among the top five best schools in the state of Connecticut and among the best in the United States by Bloomberg-BusinessWeek, Newsweek, US News & World Report and the Wall Street Journal. Their high school takes in students from grades nine to twelve and was accorded the “National Blue Ribbon award” by the US Department of Education for “achieving superior standards of academic excellence.” Average SAT scores rank among the top scores in the state, and students consistently score in the top 5 % of the state on state exams in years 4, 8, and 10. According to the Director of Secondary Education, over fifty percent of their students get into either the most highly selective or the second tier of highly selective colleges.

In 2009, as part of a private foundation innovation grant, the district sponsored a town-wide brainstorming session that would enfranchise the community as it worked together both to identify the skills, capacities, and dispositions that students would need for full engagement in the twenty-first century, and to suggest ways in which all schools in the district might cultivate and nurture these capacities. Participants included social workers, business executives from traditional and high-tech companies, physicians and other health care workers, designers, artists, writers, journalists, homemakers, construction workers, and unemployed workers. The sessions featured small group brainstorming sessions facilitated by school leaders in the district who guided discussions. Recommendations generated helped inform the district’s 2025 vision titled “Meeting the global challenge” with its aim stated as follows: “To prepare all students to reach their full potential as life-long learners and socially responsible contributors to our global community.”

Findings: The Integration of Global Education in a School District

Ground-Up Integration of Global Education

Too often, vision and mission statements are articulations of schools’ aspirational ideals that are plastered on the walls of schools and printed in school handbooks and websites. Often there is a disconnect between vision and the reality of teaching and learning. What is obvious in the Westland district is the intentional and systematic translation of the district vision into a concrete framework that is then infused in teaching and learning. The development of the framework encompassed four stages. (Fig. 10.1).

The first stage began in 2011 soon after the community brainstorming session when the superintendent issued a letter announcing the “groundbreaking initiative” and invited teachers to participate in its early stages around realizing four key goals:

- To develop a lens through which to assess students’ abilities and dispositions to think critically and creatively;
- To develop classroom assessments that challenge students’ abilities to demonstrate twenty-first century skills;
- To develop a systematic professional development program in collaborative teams, using exemplary practices and materials, as well as materials and presenters from high-performing schools around the world, to achieve a coherent K12 curriculum and instructional program focused on critical and creative thinking;
- To develop a system-wide culture of self-reflective practice and collaboration as part of on-going dialogue with scholars and educational leaders.

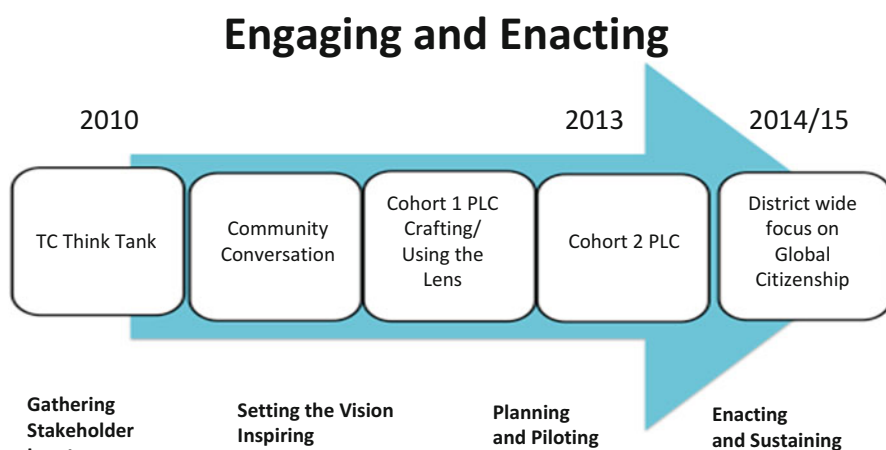


Fig. 10.1 Stages of the initiative

The second stage was intended both to ground the work of the district in academic theory and research and to inspire faculty at the same time. Approximately 65 teachers and administrators (representing 15 % of the total staff) volunteered to participate in the first two stages, based on a Theory of Action that included community engagement, school/university collaboration, teacher leadership and professional learning communities to activate and sustain momentum. In this stage, the volunteer cohort participated in a university Think Tank to steep themselves in the latest research on twenty-first century teaching and learning.

The third stage involved planning and piloting. During this stage, administrators and teachers leveraged their learning and worked towards articulating a twenty-first century framework. The fourth stage involved enacting and sustaining the initiative. The Superintendent reorganized the administration structure so that there was a Director of Secondary Education and a Director of Elementary Education. Part of their responsibility was to incorporate the framework, or what they termed "Lens," in curriculum writing as well as instruction. The framework was also made into posters that were made explicitly visible on school buildings and on every wall of classrooms. The language of the Lens was also referenced at Board of Education meetings, faculty meetings and departmental meetings. Additionally, the superintendent and vice-superintendent held regular meetings with the Principals and Assistant Principals, Department chairs and curriculum leaders in the schools to reinforce the importance of incorporating the Lens into planning and practice. Various subcommittees were formed to support the work of the framework such as a subcommittee examining how to support creativity and innovation. About six professional development days in the course of each year were organized around the different aspects of the Lens and twenty-first century skills.

This ground-up approach has led to greater ownership of the district's vision. The total participation of teachers by Year Four of the initiative grew to almost 85 %, as estimated by administration. The district started a series of "community conversations" because they felt that the development of the Lens required input from the community on an on-going basis. During one of the Saturdays, they invited hundreds of people from the community with different professional backgrounds, and small focus groups were formed to glean perspectives about how the district could better work towards preparing students for the twenty-first century. A key outcome from the community conversation was the awareness that students needed an expanded knowledge of worldwide affairs. This resulted in modifications of courses so that for example, a Global Themes course was developed. From these conversations, the district organized an annual Parent University with over 600 parents enrolled in workshops. Through these workshops conducted by teachers and school leaders, parents were introduced to key initiatives and goals of the district, and parents were then encouraged to participate in helping their children be successful learners for the twenty-first century. Additionally, focus groups with students were conducted, resulting in the development of a student version of the district's twenty-first century framework.

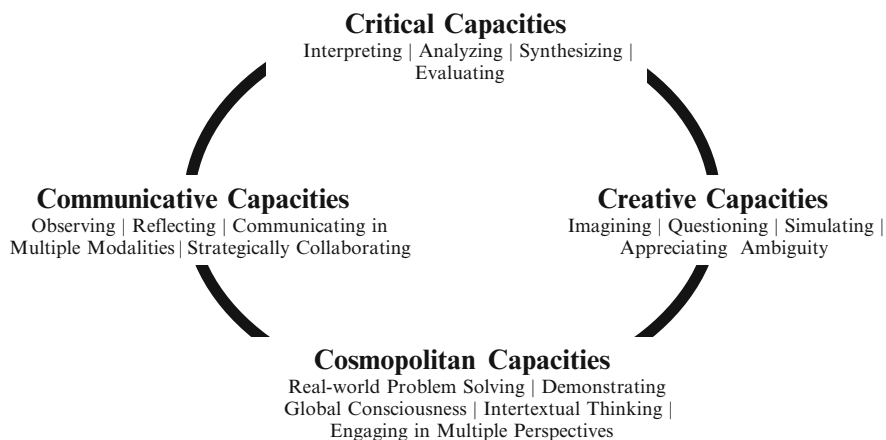


Fig. 10.2 Global Capacities Framework (Choo, Sawch, & Villanueva, 2012a)

Development of a Common Language Through a Twenty-First Century Framework

District leadership, including the superintendent, curriculum chairs and head of the district’s initiative, felt that the use of a framework that articulates and defines the capacities of what they called the “Twenty-first century global student” could be a single, organizing Lens through which teachers and administrators could examine student work and develop and refine curriculum and instruction. They believed, and research suggests (Kegan & Lahey, 2001; Pfeffer & Sutton, 2000, both as cited in DuFour & Marzano, 2011), that this would be essential toward gaining alignment and developing a common language and vocabulary around twenty-first century teaching and learning.

A task force was formed with volunteer teachers. Together they commenced working with scholars from Teachers College, Columbia University to adapt an existing Global Capacities Framework (Choo, Sawch, & Villanueva, 2012a). See Fig. 10.2 and Table 10.1.

One of the main effects of the framework has been the transformation of school culture through the cultivation and infusion of a common language around twenty-first century competencies. The involvement of different actors in the school in developing the language of the Lens has led to greater buy-in and enthusiasm for its use. Key leaders observe that a common language is emerging in curriculum plans, and teachers have begun incorporating keywords related to each competency in unit and lesson plans as well as class materials. Teachers described how the Lens was a “regular part of practice and something we talk about in department meetings and when planning with each other.” For many teachers, using the Lens made planning more intentional and less “routine,”— less about “tweaking what I’ve already done” and more about “really rethinking, ‘How should I teach and assess this unit if I want

Table 10.1 Summary of capacities in Westland district's Lens

Thinking domains			
Critical thinking	Creative thinking	Communications	Global thinking
Interpreting	Questioning and curiosity	Reflecting and meta-analysis	Engaging in real-world problem solving
Analyzing	Observing and imagining possibilities	Considering purpose and varied media to express Ideas	Engaging in global issues
Synthesizing and making applications	Risk-taking and tolerating ambiguity	Influencing and negotiating to reach goals	Engaging in multiple perspectives
Evaluating	Agility and adaptability	Collaborating strategically	Working across disciplines

Adapted from Choo, Sawch and Villanueva (2012a)

my students to understand the power of persuasive writing more globally, more creatively, etc?'" Teachers were able to use the framework not only on their own, but also with their content-specific colleagues and across disciplines and grade levels, both when planning units and when delivering instruction. The Lens served as a district-wide enabler of conversation around what matters for the twenty-first century as evidenced by statements borrowed directly from the Lens. Statements such as "I want my students to work collaboratively in a way that taps into the individual strengths of group members" or I want students to "synthesize key information, ideas, and concepts in order to make new applications" were part of casual dialogue, not formal speech, and embedded consciously into unit plans, instructional strategies, and assessments.

In his views of language as social action, Moffett (1968, as cited in Pare, 2010) notes that in schools, "there should be a total program in discourse running laterally across subject fields as well as longitudinally over the years" (p. 242). While this may sound like a disconnect from what happens in most schools today, it speaks to the power of a common discourse running up, down, and across the district among the participants involved in conceptualizing the Lens as they engaged in planning and implementation across grade levels and disciplines around what it means to teach and learn in the twenty-first century (Sawch, 2013). While education studies show that any meaningful change or reform initiative in schools first requires a shared understanding of language and common vocabulary about teacher practice and student outcomes (Kegan & Lahey, 2001; Pfeffer & Sutton, 2000, both as cited in DuFour & Marzano, 2011), it is most important that this language not serve as some kind of gratuitous jargon, void of meaningful application, rather it must embody key terms people throughout the organization must understand and embrace in order to move forward (DuFour & Marzano, 2011, p. 36). In Westland's case, the common language began with the organic framework of the Lens and its associated definitions and levels of critical thinking, creative thinking, communications, and global thinking, as well as what an end goal for the "Global Student" should look like.

When the superintendent had his leadership team create a “rollout kit” for teachers in the district to represent the key features and desired practices associated with the district’s 2025 initiative, he wanted to ensure that all teachers had common tools and vocabulary with which to share their experiences and protocols with fellow teachers. The kit included a video with a narrated PowerPoint presentation of each capacity and its associated dimensions on the Lens, sample teaching units and instructional videos with tutorials on how to use the Lens to plan units and deliver instruction. While, according to the Assistant Superintendent of Curriculum, the original goal was to “get our teachers to understand and cultivate the skills and capacities students need for full participation in the 21st century,” the implicit goal was to “lensify” teaching and learning so that everyone was “aligned to a common goal and using the same language.”

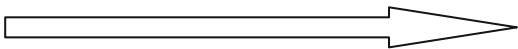
For the teachers in this study, the Lens also served as a common resource through which teachers could examine and refine curriculum, instruction, assessments, and student work collaboratively; it provided an envisioned future for what the district expected toward the cultivation of the “global student.” The Lens became the essential ingredient that enabled what Fullan (2001) calls “coherence making” (p. 6), the process of tolerating ambiguity so that innovation can occur and mutual understanding can be realized. The Lens as coherence-maker helped enable and shape the unifying twenty-first century discourse around teaching and learning that teachers could share and embody in their practice across grade levels and disciplines. In essence, the language of the Lens became a kind of institutionalized code for twenty-first century teaching and learning in the district. Throughout interviews, classroom observations, and in curricular documents and student work, Lens-based language presented itself naturally and in alignment with the language of the Lens itself. For example:

- “My students need to infer and engage more deeply with texts so that they can arrive at new meanings.” (Grade 8 Humanities teacher)
- I figured if I “flip the unit,” [have students study concepts at home before applying them in class the next day], it will give me a chance to see if my students can tolerate ambiguity and learn for themselves. (Grade 11 Math teacher)
- “In this unit, strategic collaboration worked for my students, and it worked for me.” (Grade 1 Humanities teacher after electing to work with the ICT specialist to create a persuasive writing unit she had always done on her own.)
- “Our group needed to collaborate and problem-solve better; we didn’t respect each other’s feelings, and we didn’t work as well as we could have to define our freedom and come up with a solution.” (Grade 8 student reflection).

Utilizing the Framework to Encourage Deeper Levels of Rigor

Westland district’s framework describes specific competencies with each competency elaborated across a spectrum leading to the competencies expected of a “global student.” For example, Table 10.2 describes the “questioning and curiosity” competency under creative thinking:

Table 10.2 Example of competency spectrum – questioning and Curiosity

Questioning and Curiosity				<i>Global students...</i>
Ask fact-based questions that show a desire to understand basic content	Ask fact-based questions that show a desire to understand the ideas and concepts in deeper ways	Ask analytical questions that make connections and lead to deeper explorations	Ask new and original questions that lead to deeper explorations	

Through these specific descriptors, teachers had greater clarity of the capacities expected of a global student. They became more aware of higher-order type competencies and the language of the framework facilitated modifications of expectations in lessons. Teachers involved in this study felt that participating in the initiative and using the Lens with colleagues helped them add rigor and innovation to their unit plans, instructional approaches and assessments. For example:

- First graders moved from writing letters home to persuade a parent to get them something they wanted, to engaging in online research and strategic collaboration to craft and publicize persuasive letters and speeches on social and environmental issues;
- Eighth-graders who once read *To Kill a Mockingbird* in their English classes while they studied slavery and the civil war in their social studies classes, worked in cross-disciplinary teams to read the novel and examine issues of power and leadership more globally. They engaged in deep levels of inquiry and critical reading to research and propose global solutions tied to youth and freedom;
- Ninth-graders explored issues of imperialism through real-world problem solving across disciplines in a new course focusing on Global Themes that was developed as a result of the district's 2025 initiative and that replaced an existing, required Western Civilization course;
- Tenth graders engaged as collaborative teams in a social activist-focused unit using the *Tale of Two Cities* as a pivot point for understanding issues of the voiceless;
- Eleventh grade math students moved from learning about regression models through practice problem sets, to working in collaborative teams to identify and solve real world problems using sophisticated concepts of statistics and primary research, and then presenting their findings in multi-media contexts.

Another effect of the framework has been greater awareness about the need for holistic education. For example, teachers have become more cognizant that they tend to emphasize critical thinking over creative and other forms of thinking. Consequently, the Lens pushed them to think of ways to encourage creative and other forms of thinking. A grade 10 Language Arts teacher noted:

I think the Lens really challenged me to think what creativity means in education. So asking students not just 'Here's your 3 choices of a creative project', but imagining the possibilities, looking at a situation, that area or that indicator is still something I am still figuring out how to make that come to life in a classroom. So I've spent a lot of time there. And in the communications capacity, I feel that I always try to have collaboration going on in my classroom. I am testing the waters with what that looks like and broadening my horizons beyond just group discussions.

Here, the Lens worked to expand her thinking about how to connect her lessons beyond just the critical thinking domain, for example, by giving more opportunities and curriculum time for creative and inquiry based projects.

Encouraging Adoption of the Framework Through Focus on Student Learning Rather than Teacher Improvement

Unlike traditional models of school change that often focus on teacher improvement as opposed to enhanced student outcomes (Darling-Hammond & Richardson, 2009; Vescio, Ross, & Adams, 2008), the approach Westland took to engage its faculty was to center the work around the cultivation of the "2025 global student" and to define and describe the key capacities he or she should embody for full participation in the twenty-first century. The district's pervasive focus on student learning, not teacher evaluation, helped redirect dialogue around curriculum, instruction, and student development (Newmann et al., 1996) and away from accusatory or evaluative emphasis on teacher practice. It also fostered ongoing conversations in both formal and informal settings that centered on how to use the Lens to inform practice and deepen both student engagement and understandings, as well as on the ways students demonstrated deeper understandings of concepts and more active engagement in their own learning.

Perceptions of Enhanced Student Performance and Engagement

In interviews with teachers, dialogue about practice transcended topic, text, or activity and instead focused on how to cultivate skills, capacities, and dispositions contextualized more globally – e.g. moving from teaching students to write persuasive letters to challenging them to "use their writing to make the world a better place"; working collaboratively with Interactive Communications and Technology (ICT) specialists to leverage technology more strategically in teaching and learning; deepening student learning about regression analysis by having them select a global issue and study it through the lens of statistics in order to interrogate issues and uncover the "so what" and the real world applications of statistics, or; reading the

novel *To Kill a Mockingbird* in order to help students learn how to interpret the idea of freedom through both the eyes of a fictional character and a historical point in time more globally. Thus, the Lens helped universalize the discourse from teacher to teacher and from teacher to student. Teachers used its language to create assessment rubrics and to introduce protocols, including those for reading and reflection.

Teachers in this study also felt that using the Lens helped them push their students to engage in deeper levels of critical and creative thinking, beyond what they thought was possible. They expressed surprised delight at how 6- and 7-year-old students could engage in sophisticated research and that their collaborative writing efforts would yield such bountiful speeches and letters about social and environmental issues, or how critical reading levels improved at the middle school based on a pre-/post-test unit on freedom. One teacher described how she saw greater levels of student agency and control of their own learning as students used statistics to engage in real-world projects centered around global issues, such as hunger, poverty, and global warming.

Shared Knowledge Around a Common Purpose Contributes to Teacher Agency

When teachers perceive that the entire organization is aligned around a vision and that it believes in the importance of that vision to effect change, then both individual teacher agency and a sense of organizational collective efficacy emerge (Goddard, Hoy, & Woolfolk Hoy, 2004). In fact, in their research on the relationship between self- and collective agency and student achievement, Goddard et al found that “teachers’ beliefs about the collective capability of their faculty ... are strongly linked to student outcomes” (p. 7), more so than students’ prior achievement, socio-economic status or race/ethnicity (p. 7). In Westland’s case, teacher confidence in themselves and in the collective efforts of the district to advance the initiative led to their feelings of enhanced student learning, i.e., deeper understandings of concepts and a perception that students were demonstrating deeper critical and creative thinking skills, such as interpretation and collaboration as well as higher levels of global awareness. Further, teachers pointed to collaborations with universities and involvement in the university Think Tank as a legitimizer of their work and an opportunity to have external, intellectual thought-partners throughout the process.

Higher Sense of Self and Collective Efficacy Provides Permission to Take Pedagogical Risks

Teachers throughout the district spoke of how their participation in the initiative and their use of the Lens heightened their pedagogical capabilities and empowered them to try new approaches in curriculum and instruction. Their feelings of self- and

collective efficacy fostered a form of professional risk-taking – ironically a capacity that was expected in their students but never overtly expected in them. Teachers reported that the Lens helped them think beyond what they were already doing and enabled them to tolerate the ambiguity of, say, “flipping” units or playing with math units in real-world contexts. Their own risk-taking helped them encourage risk-taking in their students.

Goddard et al. (2004) also suggest a correlation between teacher feelings of self-efficacy and their willingness to persist when challenged, which, in turn, “tends to foster innovative teaching and student learning” (p. 4). In the case of two humanities teachers, their work to develop students’ critical reading strategies came out of their belief that they could indeed change how their students read for deeper meaning. They collaborated using the Lens to develop a protocol for guided, critical reading. Another teacher reported that the Lens named capacities that she had underestimated in her students; thus, she pushed her first graders to do sophisticated research and collaborative co-authorship of persuasive texts.

Challenges of a “Whole-School” Approach to Global Education

Despite the transformative effects of articulating a twenty-first century vision and concretizing this in the form of a global Lens that is integrated systemically in the curriculum across schools, several challenges were apparent as well. In this section, we highlight three.

The Framework’s Emphasis on Competencies

Whole school reform efforts often tend to support visible competencies as observed in the Westland’s Lens (see Table 10.1). Competencies such as critical thinking are associated with such skills as interpreting, analyzing, synthesizing and making applications, and evaluating. Here, critical thinking is conceived in decontextualized and apolitical ways. Similarly, creative thinking is connected to questioning, observing, risk-taking, adaptability among others. They are less connected with aesthetic engagement, performative expression of ideas and ethical concerns but with entrepreneurial skills required in a creative economy. Essentially, the framework’s focus on competencies perpetuates the goal of education as equipping students with future workplace skills marginalizing other curricula emphasis such as education for social justice and for participatory citizenship (Spring, 2015). Such frameworks implicitly perceive individuals as human capital and tend to prioritize competencies for future workplace acculturation. Thus, there is a need for competencies such as critical thinking to be reoriented so that they are not end goals of education but are

positioned as means to strengthening an individual's capability to reason about rights and social priorities and to reflect on what he or she values in life (Sen, 2005).

Additionally, when a framework emphasizes only competencies, less attention is then paid to the kinds of dispositions and values that support human well-being and flourishing. For example, when teachers are encouraged, during observations to infuse the teaching of competencies specified in the framework, less attention may be given to the kinds of structures and pedagogies that provide students with opportunities, choice and agency to pursue what they value.

The Perceived Ease of Transference of Certain Capacities Versus Others

For teachers in this study, critical thinking skills such as interpreting and analyzing seem, to them, easier to articulate and measure and are more directly tied to content mastery. This means that these capacities are more familiar and measurable by traditional methods. "Soft skills" such as collaboration, risk-taking, and metacognition, while essential for full participation in the world (Jenkins, 2006), are much more difficult to measure, according to these teachers. Rubrics exist for evaluation and analysis, but they do not exist, for example, for "strategically collaborating," or "engaging in multiple perspectives." The teachers in this study all agreed that they wanted to focus on these capacities but that they were not sure how to grade them. Indeed, international tests such as PISA, national tests such as the Scholastic Achievement Test, or state standardized tests such as the Massachusetts Comprehensive Assessment System (MCAS) test currently do not flesh-out measures of certain creative skills, such as collaboration or curiosity, so there are few standardized models that concretize these skills in a measurable way. According to the district, this will be a key focus for the immediate future and will hopefully be informed by global strategic partnerships that the district is forming with other schools around the world.

In contrast, another theme that emerged was the notion of "time" as a major barrier to both collaboration and to using the Lens as a regular part of practice. A significant body of research on the effectiveness of professional learning communities (PLCs) suggests that time for collaboration, classroom observations, and common planning opportunities is essential (DuFour & Eaker, 1998; DuFour & Marzano, 2011; McLaughlin & Talbert, 2007), so it is not surprising that teachers spoke more often of how little time they had to plan with others or to build on one another's experiences using the Lens than they did the transformative experiences of being part of a PLC. That said, DuFour and Marzano (2011) address the co-culpability of schools and teachers who use time as a scapegoat for paralysis. They suggest that school leaders must provide the structures of support necessary to enable collaboration and knowledge building and sharing. They must also make cultural shifts in perception, both from one where if a teacher is not teaching in her classroom, she is not working, or that there is simply "no money" to fund workshops and time for

teachers to plan, to the notion that teachers who engage in meaningful collaboration are adding value to their own and each others' practice (p. 74). But these researchers also cite teachers as "not blameless in the struggle to ensure they are provided with collaborative time" (p. 74)

A Change Initiative Reduced to a Product, Not a Process

Teacher descriptions of the district's 2025 initiative centered around the Lens and not on other efforts to effect change tied to twenty-first century teaching and learning. Despite the fact that, as a result of the initiative, the district had adopted both a new literacy and new math curriculum for the elementary schools; begun to introduce problem-based units and culminating assessments in the middle school; introduced a new Global Themes course in the 9th grade; integrated the Lens into the district-wide online curriculum planning software; and announced a partnership with a high-performing school in Singapore to benchmark twenty-first century assessments, the teachers could neither identify these changes nor point to radical changes in the curriculum, the schedule, or in assessment approaches that they considered "twenty-first century." This may suggest that the district fell short on how it communicated initiative milestones to faculty and put unhealthy dependence on the Lens as the symbol and sole enabler for change. DuFour and Marzano (2011) point to the necessity of ongoing, two-way communication throughout any change initiative in schools and the need for constant informal and formal dialogue between and among key stakeholders. While school leaders administered feedback surveys to members involved in conceptualizing the Lens, they may have also needed to engage in more organic and "live" conversation to continually course-correct as the district moved forward, because "communications pathways are the veins and arteries of new ideas" (Kouzes & Posner, 1987, as cited in DuFour & Marzano, 2011, p. 43).

Again, the teachers in this study were early adopters in the initiative and eager to tap into socially-based networks, such as PLC's, to envision new ways of working both together and within their own practices. But they openly recognized that they were working *within* an existing system that had not significantly changed to accommodate either new practices or dramatically different possibilities for envisioning education for the twenty-first century, and they wondered how teachers less inclined to participate in the initiative might respond in the long term. If anything, these teachers demonstrated a true desire to leverage the power of groups to effect change. They cautioned that district leadership might squander this enthusiasm without demonstrable evidence that innovation can be productive *and* disruptive at the same time and in good ways.

Conclusion

This study builds, in part, on previous studies (Choo, Sawch, & Villanueva, 2014; Sawch, 2013; Voogt & Roblin, 2012) which argue that there is a gap in the literature between intention and practice in relation to the use of frameworks to facilitate twenty-first century approaches to teaching and learning. It concurs with these prior studies that highlight the importance that building a common language around what it means to teach and learn in the twenty-first century enhances pedagogy and provides opportunities for teachers to integrate aspects of global capacities into curriculum without compromising academic rigor.

This study uncovers some commonalities of an emerging twenty-first century global education discourse among school leaders and teachers and undergirds the significance of professional collaboration, teacher agency, and united efforts around developing global citizenship sensibilities and capacities. At the same time, there is a need for these sensibilities and capacities to expand beyond a technocratic, human capital approach to education by taking into account the economic, political, cultural, and ethical complexities that now characterize the twenty-first century.

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Chapter 11

For Whom Is K-12 Education: A Critical Look into Twenty-First Century Educational Policy and Curriculum in the Philippines

Genejane Adarlo and Liz Jackson

Abstract To respond to the demands and challenges of the twenty-first century, the Philippines has recently undertaken educational reforms that transition and shift its 10-year basic education into a K-12 curriculum. Such initiatives, as stated in the Enhanced Basic Education Act of 2013, aim to expand students' program of learning, improve access to quality education, form individuals, who can contribute to the wider community, and boost the global competitiveness of the Filipino workforce. Interrelated curricular changes, which emphasize a student-centered, culturally responsive, inclusive, and integrative approach, came from the growing need to address issues impacted by globalization, namely poverty alleviation, sustainable development, and peaceful co-existence. Although the impact of these educational reforms on the cohort of students undergoing the full K-12 system has yet to be seen, the curriculum guides released by the Department of Education reflect how the younger Filipinos are envisioned to confront the twenty-first century. This chapter examines these curriculum guides as well as related policy documents regarding what sort of citizens recent educational reforms intend to develop. Our analysis investigates whether and how the K-12 education of the Philippines caters to a "globalization from below" rather than "globalization from above," given a national context where facilitating dialogue and social justice is essential to ameliorate social inequalities.

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Introduction

Education has often been considered salient to social mobility around the world. As seen in many instances, it is not only a tool but also an indicator of human development, since having education can bring opportunities to improve one's socio-economic status and can thus break the intergenerational transmission of poverty (Manasan, Cuenca, & Villanueva-Ruiz, 2008). Thus, we see the United Nations Educational, Scientific and Cultural Organization (UNESCO) continuing to sponsor and systematically shape global implementation of the Education for All (EFA) movement since the turn of the twenty-first century, associating education at a more abstract level with progress in human rights and freedom, social equity, poverty alleviation, and enhancement of well-being across the globe.

Social mobility through education, however, is not without challenges. Among these include various societal factors that may continue to reproduce prevailing inequitable structures of knowledge production and transmission, legitimize social inequalities, and reinforce the social and political-economic status quo. At present, aspects of globalization, despite its benefits, complicate further the challenges confronting the EFA agenda. The power relations between dominant and non-dominant groups, along with the rising predominance of a capitalist orientation and neoliberal practices, have in some ways been instigating unequal educational and social outcomes among and within nation-states (Mundy & Manion, 2015). In Asia (as elsewhere), an uneven flow of capital and a top-down approach to market transactions have resulted in "privileging some places over others as sites of [wealth] accumulation" as well as "aggravating inequities that divide urban from rural areas, industry and services from agriculture, and rich from poor, and casting minorities into deepening marginality" (Ludden, 2012, p. 581–583). As a result, the poorer 80% of the world population is all the more "socially and fiscally at risk" due to inequitable distribution of resources for basic human needs (Appadurai, 2000, p. 3).

Educating individuals for the twenty-first century should therefore not only involve preparing students as economically productive citizens but also equipping them to resist harmful impacts of "globalization-from-above," which can be understood as globalization that happens for the benefit and in the interest of the global elite, often at the expense of the global poor (Falk, 1997; Hytten, 2008). Instead, education systems across the world should cultivate among the younger generation the necessary knowledge, skills, and dispositions for a "globalization-from-below" that enhances global well-being equitably and aims to ameliorate rather than exacerbate the deleterious effects of transnational market forces on human and environmental sustainability (Falk, 1997). Such globalization-from-below, according to Appadurai, includes grassroots actions that can counter "problems manifesting themselves in intensely local forms but have contexts that are anything but local" (2000, p. 6). It requires questioning and contesting the exploitative and oppressive features of globalization-from-above wherein neoliberal policies of trade and investment liberalization, privatization, and decreased public spending on social services disregard local needs in exchange for profits (Kimura-Walsh & Allen, 2008).

Thus, globalization-from-below requires making use of institutions and mechanisms of globalization to foster democracy and social justice (Kellner, 2002). As the collective actions required for globalization-from-below should be founded in solidarity (Chin & Mittelman, 1997), dispositions of interdependence, communal sharing, empathy, and engagement should be cultivated as twenty-first century learning competencies (Hancock, 2011).

Accordingly, the curriculum should not only aim to prepare students for a globally competitive labor force but, more importantly, transform students into citizens who can critically intervene on the root causes of unevenly distributed benefits of globalization (Hyttén, 2008). This entails taking on the challenge to educate for social justice, whereby human dignity and the common good are the bases to make decisions and solve problems pervading the society (Falk, 1997; Hyttén, 2008). Rather than putting sole emphasis on foundational knowledge and skills, such twenty-first curricular for social justice should focus on equipping students to transform oppressive structures in their society and in the world by teaching a kind of critical social literacy (Jackson, 2014). The specific learning outcomes of this curriculum, as Andreotti notes, are for individuals to be able (2006, p. 50):

to reflect on their context and their own and others' epistemological and ontological assumptions: how we came to think/be/feel/act the way we do and the implications of our systems of belief in local/global terms in relation to power, social relationships and the distribution of [labor] and resources.

In other words, education systems truly oriented toward education for all must promote a learning environment where individuals are respected; and students, teachers, school leaders, and the general public engage in a dialogue instead of having a set of values imposed on them (Freire, 1970/2000).

In the Philippines, a developing country demonstrating relatively slow progress towards universal education (EFA Global Monitoring Report Team, 2014), policy and curricular reforms are underway to respond to the various demands and challenges of the twenty-first century. In particular, its basic education recently transitioned from a ten-year curriculum into a K-12 program, by virtue of Republic Act (RA) No. 10533, also known as the Enhanced Basic Education Act of 2013, in order to meet global demands for a highly skilled workforce and address twenty-first century challenges of poverty alleviation, sustainable development, and peaceful co-existence. As one of last three countries in the world implementing a ten-year pre-university education prior to the latest reforms (Senate Economic Planning Office, 2011), the Philippines aspires to enhance access to high-quality basic education while also making its education system more “relevant to the needs of the people, the country, and society-at-large” (RA No. 10533, 2013, p. 1). In terms of curriculum, a focus on twenty-first century skills and dispositions has recently been introduced, emphasizing such globally common ends in its curricular framework as lifelong learning, critical thinking and problem solving, and civic responsibility for “a progressive, just, and humane society” (SEAMEO INNOTECH, 2012, p. 12).

Although the impact of recent reforms on the current cohort of K-12 students has yet to be seen, this chapter seeks to provide preliminary answers to the following

questions: For whom is this new K-12 education in the Philippines? Will recent reforms to K-12 educational policy and curriculum lead to greater equity, or might it continue to mostly benefit the privileged as education has done in the Philippines in the past, further reinforcing social inequalities? Analyzing policy documents, curriculum guides, and related materials, this chapter aims to examine more specifically whether and how the K-12 education of the Philippines manifests a globalization-from-below rather than globalization-from-above, as the country aims to improve its education for societal progress in the twenty-first century. First, we describe the contemporary basic education system in the Philippines, discussing its historical development towards universal education. We then look into recent curricular reforms in the Philippines, exploring how citizens are aspirationally conceived in the new K-12 program. Specifically, we evaluate the K-12 curriculum in terms of its response to globalization, identifying the capacities it requires of Filipinos to meet global challenges of the twenty-first century. This chapter concludes by developing a preliminary answer to the question of for whom the new K-12 education in the Philippines caters to today.

Context of Philippines Basic Education

Because education was informal and unstructured for much of its early history, the Philippine education system (and society) remains reminiscent of its colonial history, first under Spain and then under the United States of America. During most of the Spanish regime (1521–1898), propagation of Christianity and hispanization of an elite class were the primary goals of education. However, the Educational Decree of 1863 extended formal education to the masses by stipulating primary school as compulsory for children aged seven to twelve. It also subsidized school fees and materials, sanctioned the use of Spanish as the universal formal language of instruction, and established primary schools for boys and girls in each town. The curriculum covered Christian doctrine and morality, Spanish language, geography, history, culture, arithmetic, agriculture, and needlework (Hardacker, 2012). Preparing the masses for self-government and citizenship were the aims of education during the American occupation (1898–1946). The Education Act of 1901 brought in a more extensive public school system that was free, compulsory, secularized, and more centralized. With the basic education system and curriculum patterned after the American model, English became the medium of instruction, and democratic ideals were introduced into the curriculum for the first time (Act No. 74, 1901; Ballestamon, Narvasa, Cabasal, Gonda, & Prado, 2000; Orata, 1956). Brought about by the growing number of school-aged children in public schools, the Education Act of 1940 authorized shortening the elementary curriculum from 7 to 6 years, moving the school entrance age to nine, and arranging classes into double shifts of half-day sessions (Ballestamon et al., 2000; Commonwealth Act No. 586, 1940).

After gaining its sovereignty in 1946, the Philippines, by virtue of the Elementary Education Act of 1953, revised its basic education system into 4 years of primary

school and 3 years of intermediate school, and mandated compulsory enrolment at the age of seven, compulsory completion of elementary education, and implementation of full-day sessions (RA No. 896, 1953). But the basic education curriculum, particularly in public schools, remained at 6 years in elementary school and 4 years in secondary school due to a lack of political will (Orata, 1956). Double shifts of half-day sessions were still found in many public schools as a result of inadequate resources, constraining the quality of education that most students received because of shorter teacher-student interaction time (UNESCO, 1971). The use of indigenous Filipino, the proclaimed national language after independence, was adopted as medium of instruction in the first grade, while English was used by second grade.

In addition to foundational subject areas, the curriculum covered “development of moral character, personal discipline, civic and vocational efficiency, and citizenship training” as part of building the nation (Ballestamon et al., 2000, p. 165). In contrast to elementary education, secondary schooling was not compulsory or free. Public secondary schools were supposed to have 2 years of common studies, followed by 2 years of academic studies or vocational studies, for hiring as skilled workers. However, due to lack of instructors and equipment as well as the unpopularity of vocational studies, public schools operated more or less as a 4-year academic track (UNESCO, 1971). It was only through the Free Public Secondary Education Act of 1988 that students could start availing of free public secondary schooling, provided that they did not fail their academic subjects in two consecutive years (RA No. 6655, 1988).

Clearly, opportunities for basic education were afforded to more Filipinos during the course of the twentieth century. However, there were still high numbers of out-of-school youth in the country despite provisions to increase school enrollment and attendance (EFA Global Monitoring Report Team, 2003). Primary among efforts to address this problem were the Governance of Basic Education Act of 2001 and Basic Education Sector Reform Agenda 2006–2010, which reiterated the Philippine government’s commitment to free basic education in public schools, alternative learning systems to out-of-school youth, and transparency and accountability in executing its functions (Department of Education [DepEd], 2005; RA No. 9155, 2001). But, years into the twenty-first century, the Philippines is still confronted with similar trends in educational outcomes that it faced at the end of the last century.

Among these include income and gender disparities in access to basic education. According to the EFA Global Monitoring Report (2003, 2014), there is declining participation in basic education among the poor, as more school leavers come from poor families than better-off families. Children from conflict-ridden areas, particularly in Mindanao where armed struggles have occurred, and those in remote and disaster-prone areas also have lower participation in basic education (Mesa, 2007; Symaco, 2013). In such circumstances, the “pressures of family survival or of improving a family’s socio-economic status, combined with the parents’ [adverse] attitudes toward education”, as Ballestamon and colleagues observe, may “determine whether or not a child will be able to stay in school” (2000, p. 168). In terms of gender, males display dwindling participation in basic education, representing

more than half of out-of-school children. They likewise showed deficient academic outcomes, with more boys than girls repeating a grade and with boys spending more time than girls to complete their basic education (EFA Global Monitoring Report Team, 2003, 2014). This is because the curriculum, as noted by Okabe, was deemed “not flexible and varied enough to meet the [financial] needs and [personal] interests of these students” (2013, p. 25).

Due to socio-economic barriers, the poor have thereby remained disadvantaged in basic education in the Philippines. Although a number of policies and curricular reforms have been put into place to address these matters, the poor continue to be marginalized as the educational system still reflects vestiges of elitism from its colonial years.

The country, however, is not only confronted with disparities in education. The quality of basic education also has appeared to be problematic. In the 1999 and 2003 Trends in International Mathematics and Science Study, the country demonstrated poor performance, scoring significantly below the international average (Martin et al., 2000; Martin, Mullis, Gonzalez, & Chrostowski, 2004; Mullis et al., 2000; Mullis, Martin, Gonzalez, & Chrostowski, 2004). Additionally, Filipino students, as a whole, have not fared satisfactorily in national assessment tests (Azfar & Gurgur, 2001; DepEd, 2013a). For such dismal results, longstanding under-investment in public education (i.e. shortages of teachers, classrooms, and textbooks) and lack of effective governance have been cited as important factors (Azfar & Gurgur, 2001; Ballestamon et al., 2000). Because of insufficient time to learn a range of competencies in the Philippine educational system, the 10-year basic education curriculum has also been implicated as a cause of the poor performance of Filipino students in standardized tests (Okabe, 2013; Senate Economic Planning Office, 2011). The use of Filipino as a medium of instruction, particularly among first graders whose mother tongue is a vernacular, has likewise been viewed as contributory, as many argue for the importance of first language use in early childhood education (Gonzalez, 1998; Young, 2002).

These issues have a negative impact on Filipinos particularly at this time, wherein increasing interconnectedness and cross-border movements brought about by globalization have transformed the workplace and altered labor requirements (Senate Economic Planning Office, 2011). Given that the Philippine economy has shifted from agriculture to service (Albert, 2013), calls for quality education in the Philippines have become more palpable as graduates of its education system are often considered underqualified for available jobs. There has been a mismatch between the competencies acquired and the demands for work (Okabe, 2013). Such a mismatch does not only affect the economic productivity of Filipinos and their chances for a better life but also the global competitiveness of the Philippines.

K-12 Education as a Twenty-First Century Response

More than a decade into the twenty-first century, the Philippines still faces the challenge of ensuring equitable access to quality education for Filipinos as well as creating effective opportunities for them to succeed in life. As a response, the Kindergarten Education Act of 2012 was passed by the Philippine government “to provide equal opportunities for all children to avail of accessible mandatory and compulsory kindergarten education” so as “to sufficiently prepare them for formal elementary schooling” (RA No. 10157, 2012, p. 1). The Enhanced Basic Education Act of 2013 was also ratified to “give every student an opportunity to receive quality education that is globally competitive ... [and] at par with international standards” (RA No. 10533, 2013, p. 2). The basic education program in the Philippines now includes 1 year of kindergarten, 6 years of elementary education (1st to 6th grades), 4 years of junior high school (7th to 10th grades), and 2 years of senior high school (11th and 12th grades), in line with international norms, so as to “provide sufficient time for mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, middle-level skills development, employment, and entrepreneurship” (Republic of the Philippines [PH], n.d., para. 1).

These recent basic education reforms are anchored by the 1987 Philippine Constitution to make quality education accessible (Muñoz & Gonzales-Muñoz, 2002) and the vision of the Department of Education to educate “Filipinos who passionately love their country and whose values and competencies enable them to realize their full potential and contribute meaningfully to building the nation” (n.d., para. 1). They are also based on UNESCO’s four pillars of education and global trends in educational thinking, such as student-centered learning and constructivist approach to teaching, so that each Filipino shall be (RA No. 10533, 2013, p. 2):

an empowered individual who has learned, through a program that is rooted on sound educational principles and geared towards excellence, the foundations for learning throughout life, the competence to engage in work and be productive, the ability to co-exist in fruitful harmony with local and global communities, the capability to engage in autonomous, creative, and critical thinking, and the capacity and willingness to transform others and one’s self.

The new K-12 program intends to facilitate equitable access to quality education in the country to level the chances of individuals for a better life. Through these educational reforms, the government hopes to empower Filipinos by promoting their holistic development and equipping them with knowledge, skills, and dispositions to achieve self-actualization, meet human capital needs, and transform the society.

To provide an opportunity to access early childhood education, kindergarten is now compulsory under the law, with funds appropriated for its operation in public schools (RA No. 10157, 2012). Mother tongue or first language (including sign language) has also been mandated as the medium of instruction during the early school years, before Filipino and English are introduced in grades 4–6 (RA No. 10533, 2013), so that 5 or 6-year olds are more likely to enter and stay in schools (Espada, 2012). These policies thus reflect the Philippine government’s goal to

improve quality and outcomes in basic education, recognizing the role of first language use in building proficiency, and “[making] education learner-oriented and responsive to the needs, cognitive and cultural capacity, the circumstances and diversity of learners, schools and communities” (RA No. 10533, 2013, p. 2).

There are, however, several concerns that may undermine these efforts towards universal access to quality education in the Philippines. Public school teachers commonly encounter difficulties related to translating instructional materials to students’ first languages and teaching in the mother tongue or in a multilingual setting. In several areas, capacity building in mother tongue-based multilingual education has become necessary, as effective use of first languages in early childhood education is associated with provisions of teaching materials, qualifications of teachers, and diversity of students (Lartec et al., 2014; Wa-Mbaleka, 2014). Thus, providing educational resources in the mother tongue and related teacher training and forging strategic partnerships with communities, local government units, and the private sector are essential for enhancing the success of these policies (Lartec et al., 2014; “Education for All 2015 National Review Report: Philippines,” 2015). As only 70 % of eligible children are enrolled in kindergarten, it is also vital “to find the school-age children, reach out to them, and keep them in school” (“Education for All 2015 National Review Report: Philippines,” 2015, p. 83). To address socio-economic barriers to universal pre-primary education, expanding education grants for children from targeted poor households should also be explored (Chaudhury, Friedman, & Onishi, 2013). Other modes of learning may also be designed for pre-primary children in conflict, remote, and disaster-stricken areas since current alternative learning systems begin at grade 1.

Aside from mandating kindergarten, adding 2 years in the basic education system is another key feature of the K-12 program of the Philippines. Such a policy is intended to provide students more opportunities to succeed in school, work, and life, giving them “ample time to learn concepts, understand their abilities, and recognize proper actions and conduct” (PH, 2012, para. 19). Also, it “[broadens] the goals of high school education... in a rapidly changing and increasingly globalized environment” as the 2 years will be spent in senior high school to equip learners for university study or economic productivity in vocational career, creative arts, sports, or entrepreneurship (RA No. 10533, 2013, p. 2). This would not only lead to higher monthly wages but can also make K-12 graduates competitive in higher paying sectors (de Vera & Tan, 2010).

However, adding 2 years into basic education is still seen by many families as an economic burden (Caoli-Rodriguez, 2008; de Vera & Tan, 2010). Considering that nearly 20 % of school-aged children work to support their families and schooling (DepEd, 2013b; National Statistics Office, 2011), the proportion of school drop-outs may increase in the K-12 system. To reduce such financial constraints, programs for social protection and welfare should be strengthened. Among these include extending the coverage and benefits of education grants because these are only applicable to students below 15 years of age, and financial assistance to indigent households, amounting to US\$1.25 per day, is hardly enough for transportation,

meals, school projects, and other costs of education (Chaudhury et al., 2013; Fernandez & Olfindo, 2011).

Moreover, in a society, such as in the Philippines, wherein university degrees are highly regarded compared to vocational studies, the prospects of upward mobility may not necessarily apply to all graduates of the K-12 program (Okabe, 2013). Those with credentials from higher education institutions are, in fact, preferred in high-paying job placements, giving one in every ten high school graduates a competitive advantage (Commission on Higher Education, 2013; Okabe, 2013; UNESCO, 2015). To improve the chances of other high school graduates, the overall quality of the K-12 program has to be assured in order to yield a substantial impact that can change society's perceptions on education.

Readiness of the basic education sector for K-12 implementation is also central to ensure quality education in the Philippines. So far, 71 private schools have approved transition plans to K-12 programs, while 107 public and 98 private schools are offering senior high school curriculum ahead of planned implementation. An additional 5795 public and 3884 private schools should be operational in 2016, but there are approximately 1800 public and 1100 private schools that are not ready to offer senior high school programs (DepEd, 2015a, 2015b). Although the Department of Education recognizes the importance of "building partnerships with the private sector, non-government organizations, and other government agencies that will aid the full implementation of the K to 12 Program" (2015c, para. 2), the government should invest more in education since its spending has remained below 3% of gross domestic product (GDP). To achieve universal access to quality basic education, public spending on education has been recommended as 6% of GDP, similar to that of Vietnam, Malaysia, and Thailand (EFA Global Monitoring Report Team, 2014). Otherwise, the poor, who rely mostly on social services from the government, will not fully gain from the K-12 program.

Thus, incorporating kindergarten and senior high school to enhance the Philippine basic education system requires additional public investment. As the poor finds it difficult to access and complete education in the 10-year format, this may remain the case under the K-12 program as social services are unable to meet students' basic needs and are not responsive to their socio-economic circumstances. K-12 education may therefore fall short of its EFA goals when the government continues to adhere to its neoliberal practice of under-investment in education, compromising the capacity of public schools to provide quality education to the poor. In effect, the privileged, who do not only have the resources but also the cultural capital to begin with, may yet again reap the benefits of K-12 education as they can afford to pay for quality schooling. The poor, on the other hand, may (further) become disillusioned regarding the purpose of the K-12 system of education, which should empower them "to seek and attain progress not only for [themselves] and for [their] family, but for the entire country" (PH, 2012, para. 24).

K-12 Curriculum View of Twenty-First Century Challenges

While the policy for a K-12 education is meant to ensure universal access to quality education in the country, its curriculum aims to educate Filipinos not only to acquire basic competencies necessary for self-actualization and gainful employment but to also become involved in a just and humane society, care for the environment, and develop a sense of cultural rootedness (RA No. 10533, 2013). It seeks to provide meaningful learning so that citizens of the Philippines can develop the capacities to meet global demands and challenges of the twenty-first century, including social progress, environmental protection, and harmonious living. In a sense, K-12 curriculum becomes a tool towards greater equity by educating individuals about their social responsibilities more generally in this new era.

Similar to curricula of other countries, there is a new focus in recent guidelines on students' acquisition of twenty-first century knowledge, skills and dispositions that are necessary to identify root causes of problems besetting the (wider) society and to arrive at global solutions contextualized to grassroots concerns. These include higher-order reasoning, complex communication, collaborative work, leadership, and autonomy "to allow students to collaborate, work on authentic problems, and engage with the community" (Rotherham & Willingham, 2009, p. 19). For instance, the teaching-learning process in English pays attention to effective communication of meanings and feelings, appropriate construction of meanings, and representation of information within or among texts (DepEd, 2015d), while Mathematics is premised on the development of critical thinking and problem solving skills that are relatable to everyday experiences and real-world situations (DepEd, 2013c). Disaster preparedness, risk reduction, and sustainable development in the twenty-first century are incorporated into Science, emphasizing collective understanding and actions on environmental and social issues impacting Philippines and the rest of the world (DepEd, 2013d).

Relatedly, K-12 curriculum is intended to teach Filipino learners early on, through values formation, civic education, and so forth, to take on challenges of a rapidly changing world, including local issues of global relevance as well as global concerns of local impact. Children during kindergarten, for example, are not only provided readiness to the content-based curriculum of grades 1–12 but they are also given foundations on (DepEd, 2015e):

- Having positive self-concept as well as respect and concern for others;
- Relating well with others and appreciation of cultural diversity;
- Understanding one's social identity and civic responsibility;
- Caring for the environment.

Thereafter, these children learn about the importance of personal development and the common good, appreciation and affirmation of cultural diversity, promotion of environment sustainability, and participation in civic action, as they attend various academic subjects and proceed from one grade to another. By the time these children graduate from basic education, they should have gained a broad and deep

understanding of their local communities as well as various groups and communities in Philippines, Asia, and other parts of the world so that they can consider multiple perspectives when responding to social justice issues impacting the various local and global communities (DepEd, 2013e, 2013f, 2013g).

In turn, Filipinos are to be (trans)formed into socially responsible citizens under curriculum guidelines, in solidarity with local and global communities (RA No. 10533, 2013). They are to be equipped not only to examine their role in relation to the harmful impacts of globalization-from-above but to also engage, as Hancock describes, in “societal transformation at the personal, intergroup, and policy level” (2011, p. 182). As exemplified in the curriculum guide for English, multi-literacy is necessary in relation to the following (DepEd, 2015a, p. 6):

to help learners understand that English language is a dynamic social process which responds to and reflects changing social conditions, and that English is inextricably involved with values, beliefs and ways of thinking about ourselves and the world we dwell in... [understanding] that the meaning of any form of communication depends on context, purpose and audience.

Other aspects of critical social literacy are likewise integrated in the K-12 curriculum, taking into consideration “the overall implication of media and information to an individual (personal, professional, educational, and others) and the society as a whole” (DepEd, 2013h, p. 5) and the potential of information technology “as a tool, medium, and force [to bring] about action and mobilize [social] change” (DepEd, 2013i, p. 6).

Though these curricular recommendations cohere well with the aims for a globalization-from-below, such learning opportunities to counteract globalization-from-above may not be carried out well in K-12 classrooms given the pedagogical concerns that continue to plague the education system. Studies by de Mesa and de Guzman (2006) and Villena and de Mesa (2015) demonstrate that most classroom activities remain teacher-directed rather than student-led, since many teachers were conditioned to a traditional method of teaching when they were students. Often such teachers, according to principals, have the tendency to run through the syllabus content within allotted class hours (Brooks & Sutherlands, 2014), without giving probing questions for reflection, exploration, or in-depth thinking (Bago, 2001). Furthermore, as discussed by Agarao-Fernandez and de Guzman, “the curriculum of pre-service teacher education has few mechanisms for prospective teachers to prepare themselves for acquiring core competence required in the changing school setting and to reflect on their professional role” (2005, p. 133). As observed by Bernardo, Clemefia and Prudente (2000), the working environment, which includes availability of teaching resources and rewarding compensations, has not been conducive for in-service teachers to modify their pedagogical approaches. This has often resulted in resistance to curricular changes because Filipino teachers “equate change with more work” (Bago, 2001, p. 160). Additionally, some teachers become authoritarian in the classroom “due to perceived pressure on curricular compliance, when higher authorities impose restrictions on teachers’ responsibility for the students’ performing up to standards” (de Mesa & de Guzman, 2006, p. 245). They

(and their principals) are more concerned with productivity, overlooking the importance of student-centered learning.

However, preparing more than 400,000 K-12 teachers “to use pedagogical approaches that are constructivist, inquiry-based, reflective, collaborative and integrative” (RA No. 10533, 2013, p. 4) is challenging. It requires deliberate effort from the Philippine government, in partnership with the private sector, to provide an enabling environment for school leaders and teachers to feel at ease with the curricular reforms. Such an enabling environment would again require revisiting the government’s fiscal policy, so that public spending on education is sufficient to unburden principals and teachers as they carry out the reformed K-12 program. By increasing provisions, the Philippine government can better uphold its commitment to its constitutional mandate to “promote social justice in all phases of national development” (Muñoz & Gonzales-Muñoz, 2002, p. 34). Despite the shortcomings of principals and teachers in the past, their further capacity building is essential for the K-12 education to achieve its purposes. They must become familiar and stay abreast of effective teaching strategies to facilitate student capacities to face twenty-first century dilemmas. To date, workshops have been given to re-train teachers, and efforts have been made to review teacher education. However, there should also be opportunities for principals and teachers to equip themselves for critical literacy and social justice education so that they can comfortably incorporate these in their practices and not “run the risk of (indirectly and unintentionally) reproducing the systems of beliefs and practices that harm those [they] want to support” (Andreotti, 2006, p. 51).

Given that curriculum guides simply outline content to be learned and standards to be met, it is imperative for K-12 leaders and teachers to also be given opportunities to learn how to live out critical consciousness and dialogue in their practices, specifically if the Filipinos are to be enabled in the twenty-first century as empowered individuals who can transform oppressive structures in society. Without principals and teachers on board to incorporate critical understanding of prevailing tensions, limitations, and opportunities in society, students cannot learn to make conscious, informed choices to intervene in the increasing commodification that accompanies globalization-from-above (Chin & Mittelman, 1997). When a teacher, for instance, becomes authoritarian in class discussion, students are precluded from engaging in dialogue wherein, as Hytten describes, they “ask critical questions of our current system and... imagine possibilities for humane social arrangements that do not involve the increasing accumulation of wealth in the hands of fewer and fewer people, while others suffer needlessly” (2008, p. 340). Without empowerment of students through such dialogical encounters, curricular reforms for a globalization-from-below are ineffectual since the prevailing social structure and order will remain unchallenged. Such an education may fail to promote greater equity in society, as students may not be able to apply aspects of globalization-from-below in the classroom. Such curricular reforms, without further provisions for teacher and school leader capacity building, may once again only cater to those in privileged positions, since the dominant-subordinate relations characterizing the Philippine

and larger societies can be perpetuated and reinforced through traditionalist education.

Conclusion

From the period of colonization until this era of globalization, the Philippines has come a long way in its efforts to make quality education accessible to more and more Filipinos. The purpose of recent policies and curricular reforms in the Philippines has been twofold. Transitioning and shifting the 10-year program of basic education into the K-12 format is the government's response to prepare Filipinos, particularly the poor, for labor market integration and economic productivity, which can provide them opportunities to improve the quality of their lives. It is also a response to resist globalization-from-above through a globalization-from-below, giving emphasis to personal and social transformation of oppressive structures and practices, so that greater equity in society can be realized.

The aims of these recent policies and curricular reforms to educate Filipinos as productive and socially responsible citizens, who can respond to the demands and challenges of the twenty-first century, are promising. However, it remains as a fundamental question whether the Philippine basic education can truly cater to the marginalized and can indeed equip students to ameliorate inequalities in society, particularly when low levels of public spending in education have implications for the country's capacity-building for K-12 education and for a globalization-from-below. To match these aims towards universal access to quality education in the Philippines, further commitment is therefore required from the government, basic education sector, and other sectors to address not only concerns related to inadequate resources and traditional pedagogy, but to also provide better social protection and welfare to the Filipino people. Specifically, there should be committed effort to resist globalization-from-above by challenging longstanding under-investment in education and social services. By doing so, educational outcomes may finally begin to favor the poor, motivating them to believe in social mobility through education.

Without an enabling environment and teachers willing to engage in social justice issues in class as well as facilitate dialogue with students, the recent educational reforms in the Philippines will remain short of bringing about greater equity. The privileged will still be at an advantage and, in effect, will benefit the most from K-12 education, if students are not taught to question and contest the prevailing social structure and order. Provided that the K-12 education of the Philippines can effectively carry out its curriculum for a globalization-from-below and be supported by efforts similar to a globalization-from-below, such as increased public spending on education and social services, possibilities of social justice can finally emerge in the Philippines in the twenty-first century.

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Chapter 12

Preparing Students for the Twenty-First Century: A Snapshot of Singapore's Approach

Chew Leng Poon, Karen WL Lam, Melvin Chan, Melvin Chng, Dennis Kwek, and Sean Tan

Abstract The teaching and learning of twenty-first century competencies in Singapore schools began with a vision in 1997. The Thinking Schools, Learning Nation (TSLN) vision initiated a series of educational reforms to strengthen thinking and inquiry among students, preparing them for learning and working in the twenty-first century. The momentum generated from the TSLN vision led to the development of the *Framework for 21st Century Competencies and Student Outcomes* which articulates the twenty-first century competencies that will be nurtured in schools – civic literacy, global awareness and cross-cultural skills, critical and inventive thinking, and communication, collaboration and information skills. This chapter narrates the policies and approaches that were central to TSLN, specifically on the structural and curricular changes, the re-perception of teaching and learning and a redefinition of the role of teachers. TSLN, which captures the central ideas of preparing students for the twenty-first century, was never conceived as a programmatic change in that it did not contain an explicit set of intervention strategies and targets. TSLN was an entire systemic effort encompassing the policy, cultural, curricular, assessment and professional learning arenas. TSLN recognised that Singapore can no longer depend on large structural fixes to transform the education system. Instead, any refinement has to be at the nexus of teaching and learning, be reflexive and responsive to students' needs and interests, and create new opportunities

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and learning experiences dynamically in and out of the classroom. Bringing about transformational change in teaching and learning requires honest recognition of issues of implementation in the classroom. Significant reductions of the national curricular content took place to make time and space for student inquiry approaches. The role of teachers was examined and rebalanced – while recognising the importance of the teachers' role to tell, instruct and demonstrate, there was also an imperative for teachers to teach less, so that students learn more. Teacher-preparation and in-service professional learning programmes were re-designed to build teachers' capacity to develop students' twenty-first century competencies and give a greater emphasis to teacher-initiated learning.

To understand the philosophy and approach Singapore took in the teaching and learning of twenty-first century skills, it would be pertinent to appreciate the country's geopolitical context. Singapore is a small country of just over 700 km², with no hinterland and no natural resources. There are only 365 schools in Singapore, with just under half a million students and 34,000 teachers (MOE, 2014a). Small, but strategically located at the tip of the South-east Asia archipelago, it sits at the geographical and cultural crossroads of the East and West. From the early days as a British Colony, to its independence in 1965 and until today, Singapore has almost always been a global hub, welcoming people of diverse ethnicities to take root here and building a thriving economy by being open to international trade and services. It also means, however, that Singaporeans are directly exposed to constant waves of intense competition and economic fluctuations, rapid advances in technologies and business models that impact how one makes a living, and shifting values that challenge the social norms.

Given that people are its only resource, education has always been a strategic plank of the Singapore government to meet new challenges ahead. It is not surprising then that as early as the 1990s, Singapore began thinking about preparing its students for the twenty-first century and starting a series of educational reforms that seek to equip its students with the dispositions, skills and competencies to seize opportunities and thrive in a much transformed world. These reforms involved structural and curricular changes, a redefinition of the role of teachers and schools, and a re-perception of teaching and learning.

This chapter provides a brief account of the policies and approaches that we felt were central to the educational reforms to equip students with twenty-first century competencies (21CC) in Singapore schools. We must qualify that we are narrating this account from the 'insider' lens. We were all participants of these educational changes from within the system, whether as teacher educators and researchers, curriculum developers in the Singapore Ministry of Education (MOE) or as teachers and school leaders contributing to the conception of the policies and approaches and implementing the changes. Our account therefore might lack some of the perspectives that would have been more obvious to an observer from outside the system. We hope that our narrative would, nevertheless, provide some insights to the journey that Singapore took in the teaching and learning of twenty-first century skills and we welcome other authors to provide their perspectives and critical review.

Beginning with the Thinking Schools, Learning Nation Vision

The teaching and learning of 21CC in Singapore schools began with a vision. The 1990s saw the world transit into a knowledge-based economy driven by innovation and proliferation of knowledge, and fuelled by advances in technology and communications platforms. As described in the preceding section, Singapore is particularly vulnerable and thus needs to be responsive to global changes. There was then a collective sense that a paradigmatic change in the education system was necessary to meet these challenges. An extensive review involving a wide spread of stakeholders was carried out by MOE in 1997 to garner views on the educational reforms that would be needed to better equip students with competencies to flourish in the twenty-first century (MOE, 1998). A major outcome of the review was the articulation of the *Thinking Schools, Learning Nation* (TSLN) vision to “provide the young with the capacity, core knowledge and skills, and the habits of learning that will enable them to learn continuously throughout their lives ... in a future we cannot really predict” (Goh, 1997, para 7). TSLN envisions schools and the classrooms as “crucibles” where teaching and learning reflect a thinking culture, where inquiry is nurtured and where students develop a lifelong desire and capacity for learning. TSLN recognises that learning cannot be completed in schools, but that it is the responsibility of all schools to nurture and develop the capacity, dispositions and skills for thinking and continuous learning in all students.

The simplicity of the vision statement, Thinking Schools, Learning Nation, facilitated the communication of the vision of twenty-first century education among teachers and other stakeholders. The TSLN aspirations were shared with parents and other Singaporeans when the then Prime Minister of Singapore launched the TSLN vision in June 1997. All schools in Singapore dialogued the ways in which they could realise the educational aspirations embodied in TSLN. Starting with a shared vision became an important step forward in co-creating and implementing concrete strategies and approaches across schools. In the following sections, we describe some of these concrete strategies and approaches and their impact on teaching and learning.

Systems Approach to *Thinking Schools, Learning Nation*

TSLN, which captures the central ideas of preparing students for the twenty-first century, was never conceived as a programmatic change in that it did not contain an explicit set of intervention strategies and targets pertaining to a programme or project to be attained within a specific time frame. And it was much more than just a clarion call to raise the quality of teaching and learning. TSLN was an entire systemic effort encompassing the policy, cultural, curricular, assessment and professional learning arenas.

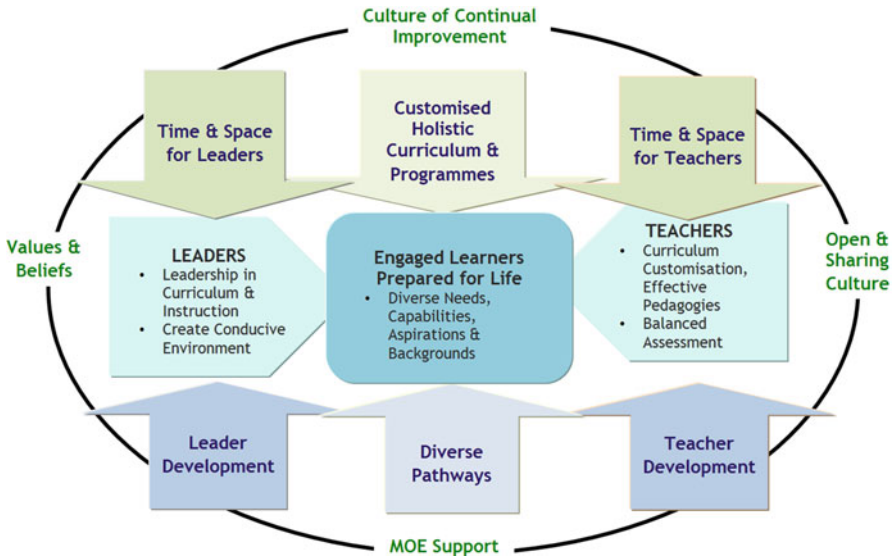


Fig. 12.1 A systems approach to realising thinking schools, learning nation

Working towards the realisation of the TSLN vision involved multiple stakeholders, and multi-pronged efforts and work-streams, which is captured in the framework shown in Fig. 12.1. At the heart of this framework is the students – TSLN seeks to help them be engaged learners, prepared for life, regardless of their different needs, capabilities, aspirations and backgrounds. TSLN took a systems approach, which recognises that an entire eco-system of shared values and beliefs, a culture of continual improvement, and an open and collaborative school environment would be essential to drive and change practices in schools to effect the spirit of TSLN. Policies and MOE provisions, such as freeing up curriculum space for more inquiry-based activities, and structuring time for teachers to collaborate on planning lessons and activities that better align with TSLN, facilitated the development of such an ecosystem in schools. But more critical than policies and top-down support from the MOE was the bottom-up initiatives that would have to be driven by school leaders and teachers. Hence, the systems approach also made provisions for school leaders and teachers to be prepared for these roles through professional learning and growth.

Building a Culture of Continual Improvement

Since 1997, cultural, curricular and structural shifts were introduced into the education landscape. As a vision, TSLN is, first and foremost, contingent on a cultural shift in the mindsets of the different stakeholders – learners, teachers, and leaders.

TSLN recognises that Singapore can no longer depend on large structural fixes to transform the education system. Instead, any refinement has to be at the nexus of teaching and learning, reflexive and responsive to students' needs and interests, and creating new opportunities and learning experiences dynamically in and out of the classroom. Rather than top-down change which is much too slow and inflexible, in TSLN, there was to be "ideas bubbling up through the system" (Shanmugaratnam, 2005, para 5). In that spirit, the details of many changes resulting from TSLN were conceived through widespread consultation of teachers, school leaders and policy makers.

Examples of structural shifts were in the way schools were managed and where educational innovation took place. Moving away from a highly centralised system of management, schools were instead grouped into clusters, with cluster superintendents (who were former senior principals) mentoring principals and promoting innovation within each cluster and within each school. Schools were the centres of TSLN, with MOE providing top-down support for ground-up school-based curriculum innovations. This enabled schools to act autonomously to fine-tune their teaching and learning approaches in response to their school context, with resource and expertise support (e.g., funding, personnel support and teachers' skills enhancements) provided by MOE whenever necessary.

Aligned with the cultural shifts in education under TSLN, teachers were given time to reflect, professionally develop and stay relevant and updated. Changes in culture and practices, however, were not widespread across classrooms in the early years of TSLN. This is to be expected as cultural shifts take time (Hargreaves & Fullan, 2012; Lortie, 1975). Under TSLN, the seeds of continual improvement and innovation have been sown, as seen by the pockets of innovation in teaching and learning in schools. Sustained effort and continuous review of the effectiveness of the TSLN strategies would be needed to ensure a wider and deeper entrenchment of the spirit of TSLN.

Reforms in Curriculum, Pedagogy, and Assessment

TSLN sets the stage for Singapore to think about a total learning environment that will help prepare students for the future. The momentum generated from this vision enabled the ministry to develop the *Framework for 21st Century Competencies and Student Outcomes* (henceforth referred to as the "21CC framework") in 2010 (Fig. 12.2). This framework articulates the competencies and values that are critical to enable the young to thrive in the twenty-first century. Compared to the initial TSLN period which focused solely on thinking skills, the competencies in the framework are multi-faceted – encompassing values, social and emotional competencies and emerging 21CC.

Sitting at the core of the framework are the values of *Responsibility, Respect, Resilience, Integrity, Care* and *Harmony*. Stakeholders believe strongly that to be able to function effectively in a turbulent and fast-paced twenty-first century, stu-

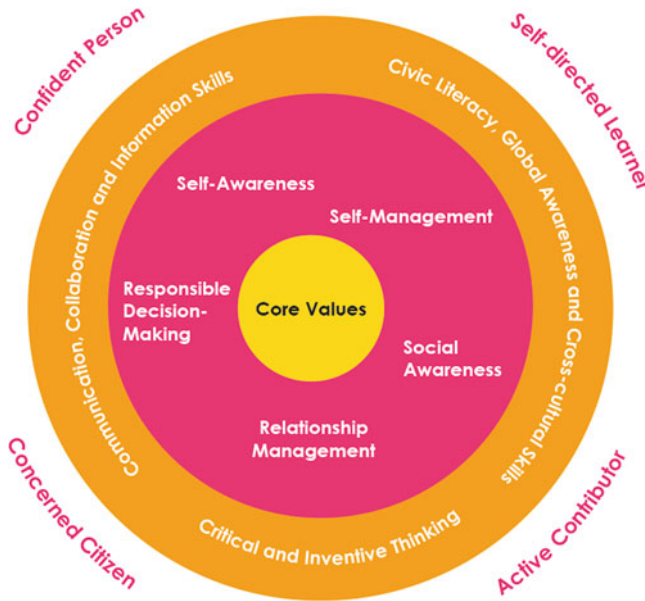


Fig. 12.2 Framework for 21st Century Competencies and Student Outcomes © Ministry of Education, Singapore (Reproduced with permission from the Singapore Ministry of Education; MOE, 2014b)

dents need to be anchored on values that will help them develop social and emotional competencies. The middle ring articulates the social and emotional skills that are necessary for students to recognise and manage their emotions, develop care and concern for others, make responsible decisions, establish positive relationships, as well as handle challenging situations effectively. The outer ring of the framework articulates the emerging 21CC: *Civic Literacy, Global Awareness and Cross-Cultural Skills*; *Critical and Inventive Thinking*; and *Communication, Collaboration and Information Skills*. Together, these values and competencies nurture the twenty-first century citizen as a *confident person, self-directed learner, concerned citizen* and *active contributor*.

Since its introduction, the 21CC framework has been used to guide curriculum planners in developing and revising the national curriculum to ensure that the development of these competencies is effectively integrated into subject syllabuses, as well as the instructional materials. The framework also guides schools as they adapt and modify the national curriculum to meet the needs and aspirations of students.

Bringing about transformational change in teaching and learning requires honest recognition of issues of implementation in the classroom. For student-centric inquiry-based approaches to even start taking root, teachers needed curricular time to carry out higher-order thinking activities. Something would need to be taken out of the curriculum to create space and time for students to learn the new skills. Therefore, as part of the TSLN efforts in 1997, a fundamental review of the entire

national curriculum was conducted, resulting in significant reductions of curricular content across all subject syllabuses to make time and space for student inquiry. Other systems that have embarked on curriculum reduction would appreciate that it involved a lot of debate, persuasion (almost every piece of content seems too fundamentally important to be removed!) and careful deliberations. The challenge was to achieve a judicious reduction of curricular content, without eroding the strong foundation in literacy and numeracy skills that will enable students to access further knowledge and skills throughout their lives.

To strengthen the teaching and learning of higher-order thinking skills, a deliberate decision was made to build the learning of these skills into all the subject syllabuses as previous efforts to do so via a standalone thinking programme were deemed as less successful both in Singapore and elsewhere (Bransford, Brown, & Cocking, 2000; Chang, 2001). Cognisant that the development of dispositions and competencies reflected in the 21CC framework required a different approach to teaching, pedagogical approaches that better supported the development of these competencies were also introduced into the various disciplines such as science and the humanities. For example, in Social Studies, which is a compulsory subject for all primary and secondary school students, inquiry approaches are used to help students construct new knowledge actively as they engage in the processes of critical questioning, evidence-based reasoning and metacognition. Through these processes, students acquire higher-order thinking skills such as drawing inferences, evaluation and synthesis. To complement efforts to develop such skills in each subject, Project Work was also introduced into the curriculum in 2000 to expand opportunities for students to synthesise knowledge from various areas of learning, and to critically and creatively apply their knowledge and skills to a longer and more authentic learning experience.

Citizenship and Character Education (CCE) was also strengthened to develop a stronger sense of national identity and rootedness to the country. This was and still remains an important emphasis given the need to ensure a strong core of citizens to contribute to nation-building—important attributes to enable the young to stay local while developing a global mindset. Alongside curricular changes, a national Information and Communications Technology (ICT) masterplan was also drawn up to equip schools with the technology to harness ICT for teaching and learning.

Understanding that teachers and parents regard national examinations as an important influence on how students learn, changes were made to the format and modes of the national examinations at Grades 6, 10 and 12 for greater alignment with the objectives of TSLN (Tan, Chow, & Goh, 2008). Given the emphasis on developing higher-order thinking skills, assessment modes and item formats that were more aligned to the learning outcomes of the different subject disciplines were introduced. In the humanities subjects such as Geography and History, for instance, source-based questions required students to draw inferences, analyse and evaluate evidence, draw conclusions based on reasoned consideration of evidence and arguments, and recognise values and biases. In Science, students have to identify the problem, design and plan investigations, evaluate methods and techniques, and support their arguments and claims using experimental evidence. Such changes meant

that the national examinations moved away from the ubiquitous multiple-choice and short response questions to more open-ended items requiring students to produce more thoughtful and considered responses.

Under TSLN, equipping students with 21CC went beyond the academic curriculum. A distinctive feature of Singapore's education system is the emphasis placed on Co-Curricular Activities (CCAs) and CCE. These areas of learning provide unique opportunities for students to develop important values and competencies. For example, through CCAs and CCE, students plan projects that address problems in their schools or communities. Through these experiences, students not only pick up important life values; they also have a platform to practise problem solving skills that have greater connection with the real world.

In summary, the TSLN effort was focused on the nerve centre of students' school experiences – curriculum, pedagogy, assessment and co-curricular activities.

Teaching Practices and Professional Learning Under TSLN

TSLN recognises that teachers are important agents of instructional change (Cohen, 1990) and education policies only become a reality if they are implemented well in schools and classrooms (Fullan, 2007; Fullan & Pomfret, 1977). Teachers play an instrumental role in realising the TSLN vision of creating a vibrant learning environment to develop 21CC. This required a re-conceptualisation of not only *what* teachers taught, but also a re-thinking of *how* they taught. The TSLN vision called for a rebalancing of the role of teachers, one in which teachers will not only tell and instruct, but also guide and facilitate independent thinking as well as collaborative learning. To this end, the policies related to teacher-preparation and in-service professional learning programmes were re-designed.

A unique feature of teacher development policy in Singapore is that each teacher is entitled to 100 h of sponsored training annually and has access to a range of professional development opportunities offered by MOE, the National Institute of Education (NIE) and other sources to ensure that they receive the types of training they need to hone their craft. Aligned to the TSLN movement, teacher professional development is underpinned by five principles, namely, (i) the shift from deficit to growth model, (ii) greater teacher autonomy and ownership, (iii) application of learning to close the theory-practice gap, (iv) mentoring and teacher collaboration, and (v) global understanding grounded in local perspectives and contexts (Heng, 2012b).

Professional development under TSLN emphasised teacher ownership of the teaching and learning process through teacher-initiated learning and the formation of learning communities (Heng, 2012a; Teo, 1998). To engender greater teacher ownership of professional development, the Teachers' Network was set up in 1998 for teachers to come together as members of a larger professional fraternity to reflect on issues of classroom practice (Teo, 1998), a major thrust to help teachers form learning communities. By 2010, the Teachers' Network evolved into the Academy of Singapore Teachers to facilitate a greater push toward a teacher-led culture of

professional excellence (Ng, 2010). The Academy, together with other discipline-based academies and subject chapters, spawned networks of teacher learning communities.

In line with the TSLN spirit, schools also initiated professional learning communities (PLCs) which became the drivers of practitioner-oriented professional growth that engendered a culture of collaborative professionalism at the school level. These communities provided the platforms for teachers to gather in interest groups to dialogue, share, embark and reflect on teaching and learning initiatives to address student learning issues (Heng, 2012b). Time (one hour of 'timetabled' time weekly)¹ and space was built into teachers' weekly timetable to give them time to reflect and share with and learn from one other. Teachers were using a variety of methods such as Lesson Study and Action Research to capture data so that they can use it to improve their classroom pedagogy (Rajah, 2012).

The deepening of teacher's professional growth in more fundamental pedagogical skills gained momentum in the *Teach Less, Learn More* (TLLM) movement introduced in 2005 (Shanmugaratnam, 2005). TLLM encouraged and supported teachers to use engaging pedagogies that would promote inquiry, develop deep understanding, and create authentic learning experiences in order to develop students' critical thinking skills and dispositions – to enable them to apply their learning to new contexts. Further, a Research Activist scheme was set up in 2006 to equip teachers with the skills to conduct and use research to improve teaching and learning practices (Shanmugaratnam, 2006).

Nearly two decades since the implementation of TSLN, we turned to two sources – the results of the 2013 Teaching and Learning International Survey (TALIS) conducted by the Organisation for Economic Cooperation and Development (OECD) and insights gleaned from a large scale study conducted in Singapore on teachers' classroom practices by NIE – to examine the extent to which teachers have understood and assimilated their redefined teaching roles in their classroom practices.

The 2013 TALIS survey administered by OECD indicated that the majority of Singapore teachers held constructivist beliefs about teaching – that teaching should be done in a way that enables students to learn actively through 'doing'. In particular, TALIS 2013 data showed that 95 % of the ISCED 2 (lower secondary) teachers and 96 % of ISCED 3 (upper secondary) teachers in Singapore surveyed believed that their role as a teacher was to facilitate students' own inquiry (OECD, 2014a). About 95 % of the teachers (compared to the TALIS average of 84 %) believed that thinking and reasoning processes were more important than specific curriculum content. While we do not have the benefit of comparable data on teacher beliefs prior to TSLN, these findings on teachers' wide subscription to constructivist beliefs are aligned to the desired shifts in the role of the teacher envisioned by TSLN.

¹ This one hour for professional planning and collaboration is worked within each teachers' total timetabled time so as not to add to their existing teaching load. Providing more time and space for teachers to engage in professional development was supported by an 8-year recruitment effort to increase the size of the teaching force (Straits Times, 2015).

Underlying these teachers' constructivist beliefs, however, is a more complex conception of how their beliefs are translated in the reality of the classroom. In this respect, about a third of the ISCED 2 Singapore teachers in the same TALIS 2013 survey reported that they employed what OECD termed as "active" teaching practices (including getting students to work in small groups to come up with a joint solution to a problem or task, students using ICT for projects or class work, and students working on projects that require at least 1 week to complete) frequently or in nearly all lessons. While this was encouraging, we wondered what this implied of the other two-thirds of the fraternity – Do they seldom or not translate their constructivist beliefs into classroom practices? To make sense of this, we referenced a large scale, classroom observational study conducted in Singapore by NIE on the classroom practices of English Language and Mathematics teachers² (see Hogan et al., 2013, 2011 for details).

This study found that Singapore teachers used a blend of 'performative pedagogy'³ and 'knowledge-building pedagogy'⁴ that co-existed in a hybridic and pragmatic form that defies the traditional-constructivist pedagogical binary. Relying on survey results and classroom observational data, the study showed that teachers drew from, and combined, "ensembles of practices grouped by broad instructional categories" which included traditional instruction, direct instruction, teaching for understanding and co-regulated learning strategies (Hogan et al., 2013, p. 94). These ensembles cohered around two institutional purposes of Singapore schooling – to perform well in examinations (performative) and to co-construct disciplinary knowledge (knowledge-building).

In classrooms where knowledge-building pedagogy was dominant, lessons had clear and explicit learning objectives that focussed on conceptual understanding, deeper learning, metacognitive self-regulation, knowledge transfer, and the development of expertise. The use of the knowledge-building pedagogy was strongly framed by instructional tasks that encouraged and required students to participate in

²The Singapore Core 2 study is a large-scale study carried out by NIE from 2010 to 2014 that examined pedagogical and assessment practices in Singapore classrooms. Employing a mixed methods approach, the quantitative component of the study utilised a multi-stage sampling design that involved students and teachers in over 200 classes and across 62 primary and secondary schools (see Hogan et al. (2011, 2013) for details of the research design).

³Performative pedagogy pays attention to ensuring that curriculum content and concepts are taught in the classroom, and to ways that help students master both factual and procedural knowledge.

⁴'Knowledge-building pedagogy', a theory that is derived from research into the disciplinary nature of knowledge (e.g., Christie & Maton, 2011; Ford & Forman 2008), Visible Learning theory (Hattie, 2009, 2012), dialogic teaching (Alexander, 2008), exploratory talk (Barnes, 2008), academic work (Doyle, 1983; Stein, Grover, & Henningsen, 1996), authentic pedagogy (Newmann & Associates, 1996) and productive pedagogy (Hayes, Linguard, & Mills, 2002) is evident when students have access to powerful conceptual, epistemic, disciplinary and metacognitive knowledge.

knowledge-building practices including generating, representing, communicating, deliberating, validating, and justifying knowledge claims against given epistemic norms. Importantly, participation in such tasks provided students with opportunities for collaboration, ICT use, open-ended questioning, extended student responses and classroom talk that focused on meaning making, understanding and interactional exchanges that were dialogic in nature – supportive, collective, cumulative, reciprocal, and purposeful (Alexander, 2008; Lefstein & Snell, 2014). See Box 12.1 for an illustration of a lesson using knowledge building pedagogy in a Singapore Secondary English classroom.

Box 12.1: Knowledge-Building Pedagogy in a Secondary English Classroom

In a unit on Secondary English, the teacher focused on narrative writing and structured well-designed instructional activities in a cumulative fashion to systematically enhance students' repertoire of skills for writing narratives. Across the unit, activities show a steady progression in cognitive demands – from those that entail recall, practice, application and interpretation to those requiring students to extensively draw on language resources to express meaning. The teacher uses learning materials that focuses on the disciplinary nature of English (Christie & Maton, 2011), as well as uses a range of representations for meaning making. Lessons commence with a story or song for tuning-in students to engage in activities that equip them with a range of understandings such as the use of narrative structure, essay introduction techniques and characterisation in stories. Furthermore, students have opportunities to apply and practice their understandings through group activities. The teacher weaves between factual and procedural knowledge which provides the foundation students need, and conceptual and hermeneutical knowledge which involves the deconstruction of texts. Exploratory talk is present and teacher and students engage in interactions that are reflexive in nature, explanatory and serve to make teaching and learning more visible. Students have ample space to express their opinions, debate, deliberate, present and justify alternative perspectives in a favourable learning environment even while the teacher maintained her epistemic authority in the classroom. In the post-unit interview, the teacher expressed clear understandings of the need for coherent development of conceptual understanding throughout the lessons and explicit explication of learning objectives to the students so that they understand why they are learning the unit and what comes next so that learning becomes purposeful (Hattie, 2012).

Source: Hogan et al. (2013, 2011)

The blended pedagogy observed in the Singapore study supports the assertion that the constant provision of ‘rich classroom discussions’ alone is insufficient in bringing about richer student thought and expression. Teachers need to design rich learning opportunities in order for students to attain higher-order skills (Gallimore, Hiebert, & Ermeling, 2014), a call made by TSLN. This can be illustrated by observations of Mathematics teaching in the Singapore study, where even though students typically worked on numerous problems, they are, in fact, able to discern different and important aspects of mathematical concepts, problem solving heuristics and disciplinary understanding. This is because teachers skilfully selected and deployed problems for their students by weaving between repetitions and simple chains, then moving the problems to procedurally and conceptually complex ones (see Box 12.2 on Insights into a Singapore Secondary Mathematics Classroom).

Box 12.2: Insights into a Singapore Secondary Mathematics Classroom

In secondary Mathematics classrooms in Singapore, teachers use problems to help students understand mathematical concepts and practise on problem solving skills. Students typically encounter an average of 30–40 problems in a topical unit of work. On surface, this might suggest a form of traditional, rote-learning pedagogical model. However, on examining the relationships between problems in a typical unit, a significantly different understanding emerged. The mathematical problem relationships can be classified into four types – (i) repetition (a problem is a repetition of a previous problem and are similar in nature), (ii) simple chain (a problem is related to another when it tests different aspects of the same concept), (iii) procedurally complex chain (a problem is related to another when it requires a more complex procedure to solve it), and (iv) conceptually complex chain (a problem is conceptually more complex to another). The Mathematics teachers skilfully selected and deployed problems for their students by weaving between repetitions and simple chains, then moving the problems to procedurally and conceptually complex ones, and finally, cycling through repetitions and simple chains of such complex problems, before cycling in more procedurally and conceptually complex problems again. Through this constant weaving (Kwek, 2012) between problems and their relationships, teachers were engaged in both performative and knowledge-building pedagogies (Hogan et al., 2013). It is through this rapid variation of problems and making numerous connections between them that students were able to discern different important aspects of mathematical concepts, problem solving heuristics and disciplinary understanding. Importantly, Marton and Tsui (2004) pointed out that through variation, students come to be able to discern and solve problems simultaneously, as if on reflex, as well as be cognitively aware of, and focus on, how problems can be solved efficiently and effectively.

Source: Hogan et al. (2013, 2011); Rahim, Hogan & Chan (2012)

Conclusion

The endeavour to equip Singapore students with twenty-first century competencies and dispositions has been a sustained and coordinated systematic effort since 1997. Working to realise TSLN involved coherent and comprehensive structural, cultural and curricular changes. Structurally, schools were given more autonomy. Culturally, a new approach to teaching and learning was being adopted; and professionally, teachers were encouraged to learn continuously and to take ownership of their learning so that they can transit into new pedagogies that are more engaging and supportive of the development of 21CC. Curricular reviews were made to provide more time for the use of inquiry-based and constructivist approaches to develop critical and creative thinking.

But reaching the goals of TSLN is far from complete. Uneven implementation of pedagogical approaches that engender thinking and inquiry across classrooms is a threat (see for example, Poon & Lim, 2014). Lee (2014), who spent time in a school to observe a school-based innovation under the umbrella of the TSLN movement, observed that students' efforts in investigative projects and the teachers' emphasis on the learning of process skills did not generate adequate "rich experiences in developing epistemic agency, which are the higher-order and critical reasoning skills" (p. 185). Lee attributed this to the lack of curriculum space for students to exercise a more sustained and deeper sense of inquiry. Teachers have also pointed to an examination culture that made it harder for them to effect changes in teaching and learning (Ratnam-Lim & Tan, 2015). Gopinathan (2015) also pointed out that as the TSLN movement matures, the realisation of the TSLN vision would be closer with fewer directives from the top and greater school and teacher ownership of the changes that are required.

There are some indications, however, that students are benefiting from the TSLN efforts. The Trends in International Mathematics and Science Study (TIMSS) reports three dimensions of student ability in mathematics and science: *Knowing*, *Applying* and *Reasoning*, with "reasoning" regarded as a higher-order thinking dimension. Between TIMSS 2007 and TIMSS 2011, there was a significant increase in the reasoning scores for Singapore's Grade 8 Mathematics and Science and Grade 4 Science (see, Martin, Mullis, Foy, & Stanco, 2012; Mullis, Martin, Foy, & Arora, 2012). In Grade 4 Science, for instance, it was observed that the "knowing" score decreased in TIMSS 2011 (from 599 in TIMSS 2007 to 570 in TIMSS 2011), arguably as a result of the syllabus reduction to free up time to support engaging pedagogies and development of thinking skills in TSLN. However, this was compensated by a significant gain in score in the "reasoning" domain (from 576 to 597), possibly reflecting the shift towards a more inquiry-based curriculum and pedagogy. In April 2014, when OECD published the results of the PISA 2012 study on Creative Problem Solving, Singapore students performed well. The OECD report (OECD, 2014b) described Singapore's 15-year-olds as having displayed good problem-solving skills – able to think flexibly and creatively to solve complex and unfamiliar problems, able to handle uncertainty, and daring to experiment with alternative

solutions. These are indeed some of the 21CC that Singapore schools have been working towards, and the results provided some encouragement and assurance to educators here that while they have yet to fully achieve the TSLN vision, they have made a small headway towards their goals. Singapore will continue building on its efforts under TSLN to prepare its students to live and thrive in the twenty-first century.

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Chapter 13

Towards Twenty-First Century Education: Success Factors, Challenges, and the Renewal of Finnish Education

Jari Lavonen and Tiina Korhonen

Abstract This chapter seeks to analyze the success factors, challenges, and renewal of Finnish education in the context of learning twenty-first century competency. We analyze the good performance and low variation in performance of Finnish students and suggest Finnish teachers and teacher education as well as the Finnish approaches to curriculum, assessment and quality assurance as possible factors for the excellent results. In addition, we analyze possible reasons for the recent decline in assessment results. Challenges for Finnish education in the classroom, school, municipality, and national level as well as challenges in teacher education are considered. Finally, we introduce the new Finnish national curriculum and how it aims to develop the twenty-first century competencies of students as a solution to overcoming the challenges. The creation of teacher collaboration networks is suggested as a way to support teachers' continuous professional development, particularly with respect to their teaching of twenty-first century competency. We show how such networks could facilitate the creation and sharing of educational innovations related to teaching and learning through teachers' collaboration, inquiry, and problem-solving activities as well as through a close connection to classroom practice.

Finnish Education Context

Finland is situated in northern Europe, and its population, of which 90% are Finnish-speaking Finns, is around 5.5 million, the majority being concentrated in its southern regions. The Finnish education system consists of daycare programs, a 1-year "preschool" (for children aged 6), a 9-year compulsory basic comprehensive school (starting at age 7 and ending at age 15), post-compulsory secondary general academic and vocational education, higher education at universities and applied universities, and adult (lifelong, continuing) education. Finland has consistently

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ranked high in the Program for International Student Assessment (PISA) studies that compare national educational systems internationally (OECD, 2007, 2010), achieving not only high scores but also little variation in performance, an important outcome of national education policy. Several researchers and policymakers argue that this success is a consequence of Finland's education policy, structure, and practices (Burris, 2012; Sahlberg, 2011). The masters level teacher education programs have been named as particularly important in contributing to the success (Laukkanen, 2008; Simola, 2005). However, when the PISA 2012 results were released, Finnish policymakers, researchers, and teachers encountered a new situation (Kupari et al., 2013) due to a decline in PISA results (OECD, 2012). The percentage of weak performers in Finland had risen from 7 to 12 %, and the percentage of high performers in mathematics dropped from 23 to 15 % compared to the previous PISA 2009 results. To find reasons for this decline, as well as new approaches to stop the decline, Minister of Education Krista Kiuru launched a project in spring 2014 to plan "Future primary and secondary education." As an outcome of this project, some speculative reasons for the decline, including reduced resourcing and non-engaging pedagogy, were suggested. In addition, recommendations for the development of primary, secondary, and teacher education were outlined (Ouakrim-Soivio, Rinkinen, & Karjalainen, T. (toim.), 2015).

Knowledge-Based Society

The most important feature of Finnish education policy has been the commitment to a vision of a knowledge-based society. This vision can be found in national documents published as early as the 1970s, when the idea of introducing a common comprehensive school and university level teacher education was first presented (Jaku-Sihvonen & Niemi, 2006; Simola, 2005). A central aspect of the Finnish vision has been broad literacy and educational equality. As a part of this, the Finnish school curriculum emphasizes the learning of twenty-first century competencies, such as critical and creative thinking and learning to learn (ways of thinking); the competence for inquiry, problem solving, communication, and collaboration (ways of working); the competence for using tools, including broad literacy and the use of technological tools; and the competence for acting in the world in different contexts (global and local) (Vahtivuori-Hänninen et al., 2014). The Finnish school curriculum also values all school subjects equally, with a dynamic balance between the arts, the humanities, and the sciences (Finnish National Board of Education (FNBE), 2004, 2013).

Educational Equity

Key decisions on Finnish education policy were made in the 1970s, when, along with other Nordic countries, a change to a comprehensive obligatory school system was prescribed. According to the basic policy set at that time, all students should

attend common comprehensive schools and learn together for as long as possible. Comprehensive school education is provided free of charge and includes school-books, meals, transport, and health care. Although the policymakers' vision is that Finnish students should complete exactly the same 9-year comprehensive school education, some streaming of students according to ability does take place, for example, in mathematics and foreign languages at the school level. The equality policy encompasses special education practices, which aim to prevent students from dropping out and to support the learning of all students. Teachers do not consider their students as one entity; instead, teaching is adjusted to meet the personal needs of each student (personalized learning) (Jahnukainen, 2011). Altogether, 52 % of the schools participating in PISA 2012 in Finland reported that students were not grouped into different classes by ability in any subject. The corresponding percentages were 49 % in Shanghai, 35 % in Canada, 32 % in the United States, 32 % in Singapore, and 21 % in Australia (OECD, 2013).

Culture of Trust

An important general characteristic of Finnish education policy is the culture of trust: education policymakers and education authorities trust teachers, together with principals and parents, to decide on how to provide the best possible education for children and students at any given level (Simola, Rinne, Varjo, Pitkänen, & Kauko, 2009). There has never been district or national level testing in the Finnish comprehensive school, nor have there been national or local school inspectors since the late 1980s. The teaching profession has always enjoyed great public respect and appreciation in Finland (Simola, 2005). Parents also trust the school, its teachers, and the quality of the work it undertakes. According to the PISA 2012 School Questionnaire data (OECD, 2012), only 4 % of Finnish schools reported being subject to constant pressure from parents. The corresponding percentages were 60 % in Singapore, 36 % in Australia, 35 % in the United States, 32 % in Canada, and 20 % in Shanghai (OECD, 2013).

Reasons Behind the Success of Finnish Education

In general, Finnish students perform well. They have achieved high scores among OECD countries in assessments on reading, mathematics, and scientific literacy. Moreover, the low variation of performance in the results indicates that overall, the performance of all teachers and schools is very similar. The aim of this section is to analyze the reasons for the good performance and low variation in performance. In practice, Finnish teachers and teacher education as well as the Finnish approaches to curriculum, assessment and quality assurance are analyzed.

Finnish Teachers Are Professional Teachers

A professional teacher, internationally, is supposed to have a profound and versatile knowledge base. This professionalism is based especially on the level and depth of the teacher's subject matter knowledge, as well as on his or her knowledge of pedagogy (Carlsen, 1999; Gess-Newsome, 1999). Professional teachers collaborate with other teachers in planning, implementing, and assessing their own teaching and their students' learning and, moreover, constantly work to improve their teaching based on these assessments. They formatively monitor the progress of their students, particularly those with special needs, and try to support all students' learning (DuFour, 2006). These characteristics of a professional teacher are the core aims in Finnish Master's level teacher education programs (Kansanen et al., 2000; Lavonen et al., 2007; Niemi, Toom, & Kallioniemi, 2012).

Altogether, 60 % of Finnish teachers and principals like their job and feel that their work in education is valued highly in Finnish society (Taajamo, Puhakka, & Välijärvi, 2014). In our neighboring country, Sweden, only 5 % of teachers believe that their work is appreciated. Finnish teachers are pleased with what they do in school (95 %) and enjoy their work (91 %). They would recommend their school as a good place to work (88 %), and if they had to choose again, they would still choose the teaching profession (85 %) (OECD, 2013).

Teacher Education in Finland

Professionalism is not only a characteristic of the Finnish teacher but also of the whole Finnish education context (Krzywacki, Lavonen, & Juuti, 2015). This aim is pursued by providing 5-year master's-level programs at universities for primary and secondary school teachers, with a core objective to train professional teachers (Jakku-Sihvonen & Niemi, 2006; Kansanen et al., 2000; Lavonen et al., 2007; Niemi et al., 2012; Sahlberg, 2011). The decision to do so was made more than 40 years ago, in 1974, when separate teacher education colleges and teacher training schools were merged to form departments within universities. From the very beginning, the objective of teacher education has been to make sure teachers not only have a high level of teaching expertise but are also capable of professional and autonomous planning, including the planning of a local-level curriculum, as well as implementing and assessing their own work.

The aim of teacher education is to educate "teacher leaders" (Krzywacki et al., 2015) in the context of "teacher leadership" thinking (Katzenmeyer & Moller, 2001, p. 17). Based on the national teacher education documents, Lavonen et al. (2007) have outlined three areas of aims for teacher education that are closely aligned to teacher leadership thinking:

1. High-quality knowledge base, including high-level subjects, pedagogical content knowledge, contextual knowledge, an ethical code, and social skills, such as for communication and ICT use.
2. Competence to operate in networks and partnerships, including knowledge about school as an institute and its connections to the society, and collaboration skills with teachers, parents, and stakeholders around the school.
3. Competence for life-long learning, including the skills needed in developing one's own teaching, in the teaching profession, and in the local curriculum, as well as academic skills in terms of being able to conduct high-quality research.

National and Local Curriculum

The curriculum cycle in Finland is approximately 10 years. The latest revision of the National Core Curriculum for Basic Education (NCCBE), replacing the previous one from 2004, was published in 2014, with its introduction to service scheduled for 2016. According to Vitikka, Krokfors and Hurmerinta (2012), the current national curriculum system in Finland has three key driving factors: (1) a description of broad goals following national core values, such as human rights, equality, democracy, and natural diversity, and a discussion of twenty-first century competencies; (2) the autonomy of municipal authorities in providing and organizing education, so that the local curriculum is the guiding document at the local level; and (3) different approaches to schoolwork (Vitikka et al., 2012; Finnish National Board of Education [FNBE], 2013). Consequently, the Finnish approach to curriculum differs from the outcome-based approach that encompasses a detailed description of intended learning outcomes (Spady, 2003).

Education in Finland is arranged by local authorities (municipalities), and schools operate under their jurisdiction. The core curricula are prescriptive to the providers of education, who are obliged to draw up the local curricula based on them (Halinen, Holappa, & Jääskeläinen, 2014). However, local education providers have extensive autonomy in Finland; the municipal curriculum is decided upon by municipal education authorities. They are responsible for planning the local curriculum, organizing assessments, and using the data obtained to evaluate how well the curricular goals have been achieved. Moreover, the municipalities have a great deal of autonomy in preparing the school budget, in setting group sizes, and in other operations at the school level.

The local-level curriculum is a dynamic and flexible document, designed at the grassroots level as a joint effort between principals, teachers, and parents, as well as local community organizations, such as athletic and cultural groups. The local curriculum is seen more as a process than as a product, and it has a central role in school improvement (Lavonen, 2007).

Consequently, a productive, flexible interaction exists between partners at the national, municipal, and school levels. This long-term process has a central role in school improvement and development. According to the PISA 2012 School

Questionnaire (OECD, 2012), altogether 62 % of the participating schools in Finland reported that a principal and the teachers were responsible for curriculum policy. The corresponding percentages were 68 % in Australia, 48 % in Singapore, 47 % in Canada, 44 % in the United States, and 28 % in Shanghai. Preparing the local curriculum has a central role in school improvement and development.

Quality Assurance and Assessment

The Finnish approach to quality assurance (QA) is not based on school inspections, systematic national testing, or pre-evaluation of learning materials. Neither teachers nor the quality of their teaching are assessed on the basis of their students' learning outcomes or other indicators. According to the PISA 2012 School Questionnaire data, only about 10 % of Finnish teachers feel that the quality of their work is evaluated by the principal more than once in a term. The corresponding percentages were 61 % in the United States, 42 % in Canada, 33 % in Australia, 30 % in Shanghai, and 16 % in Singapore. However, small-scale, sample-based monitoring designed by the National Board of Education is carried out infrequently with a representative sample of teachers (Kärnä & Rautopuro, 2013). The information gathered from these is mainly used for curriculum development and as a basis for educational policy.

In addition to this type of national monitoring, QA is organized through self-assessment at the school and municipality levels. For example, the principals organize professional development discussions with teachers to support their self-assessment. Schools collect feedback from students and parents and analyze this feedback in teacher meetings to improve teaching and school operations. Moreover, self-assessments are discussed at municipality level, which means that there is interaction between the levels (Simola et al., 2009). QA is seen as contributing to educational policy enhancement and as a tool for improvement, not as a reason to impose sanctions or penalties (Niemi & Lavonen, 2012).

Internationally, the roles of teachers in assessment and assessment policy may be in conflict. Teachers aim to organize their classroom practice in such a way as to fulfill the requirements of the curriculum. They may find that top-down educational policy and bureaucratic measures threaten their feeling of expertise and confidence as teachers (Inbar-Lourie & Donitsa-Schmidt, 2009; Black & Wiliam, 2003). Moreover, teachers may not feel that feedback from an external assessment is pedagogically relevant to improving their methods and activities but instead experience it as external control and consequently as a threat to their professionalism (Maier, 2009).

Assessment in Finland is internal, emphasizing teacher-conducted procedures, such as formative forms of assessment and self-assessment (Black & Wiliam, 2003; Inbar-Lourie & Donitsa-Schmidt, 2009). There is no national or district-level testing. A non-competitive and non-judgmental atmosphere in assessment makes the professional life of Finnish teachers enjoyable. Because of this non-competitive atmosphere, teachers are eager to collaborate. The focus on internal assessment is

also seen in the PISA 2012 School Questionnaire (OECD, 2013): 70% of Finnish teachers feel that student assessment is their responsibility. The corresponding percentages were 70% in Australia, 58% in Canada, 49% in Singapore; 40% in the United States, and 33% in Shanghai. This internal assessment and Finnish teachers' autonomous role in assessment are supported by Finnish education policy and context. Assessment in Finland serves various functions, including the improvement of classroom practice and student learning processes, as well as the monitoring of the quality of teaching (Krzywacki, Koistinen, & Lavonen, 2012). However, as in other countries, the variety of uses, users, and methods makes assessment complex in Finland.

Challenges of Finnish Education

Although the Finnish PISA results are high, they are declining. Therefore, the second aim of the chapter is to analyze the challenges for Finnish education and possible reasons for the declining PISA results. Despite the success of Finnish students and the whole education context, several challenges arising from the twenty-first century including megatrends of globalization, digitalization, and mobile learning have been identified. Next, the effects of these challenges are analyzed at the classroom, school, municipality, and national levels.

Twenty-First Century Competencies

The "Twenty-first Century Skills" movement refers to the redefinition of educational goals and to ways of organizing learning to meet the demands of the twenty-first century (Binkley et al., 2012; Trilling & Fadel, 2009). Several research studies, for example OECD, PISA (OECD, 2006) and DeSeCo (OECD, 2005), have tried to specifically describe what kinds of competencies people should have to achieve personal, social, and economic success.

In the DeSeCo project, OECD (2005) analyzes twenty-first century competencies in the context of the future of work life. They emphasize the need for an ability to meet complex demands by drawing on and mobilizing psychosocial resources (including knowledge, skills, and attitudes) in a particular context. In the DeSeCo project, OECD collaborated with scholars and experts to identify a small set of key competencies, rooted in a theoretical understanding of how such competencies are defined. According to the DeSeCo project, each key competency must contribute to valued outcomes for societies and individuals, help individuals meet important demands in a wide variety of contexts, and be important not just for specialists but for all individuals. Individuals need to be able to use a wide range of tools, including socio-cultural (language) and technological (ICT) tools, to interact effectively with the environment, to engage and interact in a heterogeneous group, to take responsi-

bility for managing their own lives, and to act autonomously. Although DeSeCo focuses on the needs of working life, the ideas could be interpreted in the context of school. In this interpretation, it is important to remember that the students are novices, still learning these competencies.

The PISA Science Framework (OECD, 2006) defines three science competencies, which describe the use of science subject knowledge and knowledge about science generally, as well as the willingness to use this knowledge (attitude) in three situations: in identifying scientific issues, in explaining scientific phenomena, and in drawing evidence-based conclusions. Therefore, the PISA framework emphasizes a scientific, or critical, way of thinking, giving value to the use of evidence in argumentation or research-based knowledge in explaining. In a similar way, PISA Reading Literacy refers to the capacity to understand, use, and reflect on written texts to achieve one's goals, develop one's knowledge and potential, and participate in society. PISA Mathematical Literacy refers to the capacity to identify and understand the role that mathematics plays in the world, make well-founded judgments, and use and engage with mathematics in ways that meet the needs of one's life as a constructive, concerned, and reflective citizen. Consequently, PISA focuses on critical thinking, the use of evidence in thinking, and the use of knowledge in thinking.

An important challenge for all individuals is to learn creative thinking and to acquire the capability to innovate (Rotherham & Willingham, 2009). Piirto (2011) provides a careful analysis on how to embed creativity into the classroom and suggests three main views:

1. Think creatively: use a wide range of idea creation techniques (such as brainstorming); create new and worthwhile ideas (both incremental and radical concepts); elaborate, refine, analyze, and evaluate ideas to improve and maximize creative efforts.
2. Work creatively with others: develop, implement and communicate new ideas to others effectively; be open and responsive to new and diverse perspectives; incorporate group input and feedback into the work; demonstrate originality and inventiveness in work, and understand the real-world limits of adopting new ideas; view failure as an opportunity to learn; understand that creativity and innovation are a long-term, cyclical process of small successes and frequent mistakes.
3. Implement innovations: act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur.

Table 13.1 summarizes the competencies that individuals need to lead a successful and responsible life and that society needs to face present and future challenges. However, choosing teaching methods that support students in learning these competencies is not straightforward because students come with diverse backgrounds and achievement levels that impact their ability to learn. Therefore, it is important to utilize a variety of teaching methods that help learners build their own understanding through real-world applications and interactions, in small groups, with their peers. To be productive contributors to society in our twenty-first century, students need to be able to quickly learn the core content of a field of knowledge while also

Table 13.1 Twenty-first century competencies as ways of thinking and working

Competencies needed in the twenty-first century	Examples of competencies
Ways of thinking	Creative and critical thinking
	Use of knowledge and information interactively
	Learning to learn, use of metacognition
Ways of working	Communication, collaboration, and networking (teamwork in a heterogeneous group)
	Competence to act autonomously
	Identifying issues (questioning), arriving at conclusions based on information, explaining phenomena, and organizing information
	Competence to use both creative and critical thinking in problem-solving and decision making
	Use of ICT tools interactively
	Managing and resolving conflicts
Tools for working	Literacy: knowledge (network of concepts), nature of knowledge, and attitude (willingness to engage)
	ICT literacy
	Skills needed in inquiry and problem solving
	Moral and ethical code
Context for working	Personal, citizenship
	Social, local
	Working life, career
	Global
Attitude needed for working	Willingness to use knowledge (motivation)
	Self-efficacy

mastering a broad portfolio of essentials in learning, innovation, technology, and careers skills needed for work and life (Trilling & Fadel, 2009, p. 16; see also, Binkley et al., 2012). Students should be educated for jobs that have not yet been created, for new products that have not yet been invented, and for new skills that build towards creativity and innovation.

Challenges in the Classroom

The key challenge at the classroom level is to find ways to guide students to learn twenty-first century competencies. Teachers and school leadership must consider the impact of teaching twenty-first century competencies to the practical operational arrangements in the classroom and in the school. This may prove challenging because current teacher-led learning methods do not support the learning of twenty-first century competencies. In addition, the school may need to invest in the redesign

of its physical learning spaces and assign parts of its already scarce resources to the purchase of new learning resources.

At the classroom level, the successful implementation of the teaching of twenty-first century competencies calls for (1) the recognition of students' individual backgrounds and ways of learning, (2) the introduction of new versatile and engaging teaching methods, (3) the versatile utilization of different learning environments, and (4) the empowerment of students to influence their learning, the ways of teaching and learning, and the learning environments and operational practices in the classroom and in the school.

By recognizing the preferred learning style and rhythm, as well as the personal interests and hobbies of each student, the teacher can design personalized learning that finds the right balance between individual and group creative thinking and makes clever use of the students' own interests to get them engaged in creating and implementing innovations.

New, versatile learning and teaching methods include authentic learning – project-based learning that is grounded in real-life challenges. These methods include widely scoped project work that encourages students to make use of the knowledge and skills they have acquired in various school subjects while they are exposed to various teaching practices that encourage them to try new things and to nurture and develop their ideas (Lavonen, Korhonen, Kukkonen, & Sormunen, 2014).

The learning environments in a school comprise both physical and virtual environments. To enable the learning of creativity and innovation, the school should allow and encourage learning wherever it takes place naturally: in a classroom, in the hallways, outdoors, or in other locations, such as in a community library. The key challenge for the school is to cross the boundaries of the traditional classroom and start using out-of-classroom spaces for teaching and learning. Moreover, digital environments such as Google Drive expand the spaces that students engage with in their learning. These new spaces create learning environments supportive for the learning of twenty-first century competencies. However, the environments in and of themselves do not create twenty-first century learning – novel pedagogical innovations are needed. Lavonen et al. (2014) describe several pedagogical innovations designed for new environments and supportive for learning of twenty-first century competencies. Among these innovations is the versatile use of smartphones in science learning to personalize students' learning. Another example is School-Community Collaboration (SCC) with the local library, kindergarten, and senior home. In this pedagogical approach, students engage in SCC that has been designed collaboratively between teachers, students, and out-of-school collaborators. The SCC supports students in planning their own learning and project tasks collaboratively, lets them choose their preferred ICT tools, allows them to interact with each other in small groups where they can share responsibilities, and lets them self-evaluate their project work, learning progress, and accomplishments.

Challenges in the School

In schools and school districts, operational practices and leadership structures need to be reengineered to support the learning of twenty-first century competencies. Teachers may feel that their individual competency is insufficient to address the new teaching challenges in their classroom. They would need additional competency to support students in learning critical and creative thinking skills as well as to guide students' collaborative inquiry and problem-solving activities. In the Finnish primary school context, it may be especially difficult for a professional teacher to recognize that in working alone, he or she cannot understand and teach all the aspects related to the teaching and learning of twenty-first century competencies. Schools should recognize this and steer away from the traditional Finnish concept of the "lone wolf" teacher towards the teacher as learning facilitator who works flexibly with the school's teaching and non-teaching staff to complement his or her own knowledge and skills in the context of the teacher leadership movement (Lieberman, 1992; Harris, 2003; Katzenmeyer & Moller, 2001, p. 17).

To enable the versatile ways of learning called for in the classroom, the school needs to take steps to establish the school as a safe, supportive environment within both its physical and virtual extents. The school must safeguard students' physical and mental health. This includes insisting on an immediate response to bullying, while encouraging as much flexibility in learning and student interaction as possible. The school needs to organize interdisciplinary work that integrates the various professionals in the school: teachers, teaching assistants, school managers, school nurses, counselors and psychologists; into a team that works together with parents to address any issues and that empowers students to have their say in any proposed action.

The learning of twenty-first century competencies calls for versatile physical and virtual learning environments that extend beyond the school's perimeter. Students learn everywhere and should be supported wherever they learn. This requires the school to establish and maintain effective local collaboration networks, not only with other community institutions such as kindergartens and libraries but also with parents and other members of the local community. This needs leadership and readiness from teachers for this type of networking. In addition, to learn about and share best practice in the learning of twenty-first century competencies, the school needs to establish and maintain professional networks with other schools and with national and global initiatives that allow the exchange of experiences and ideas.

When using the Internet, students are exposed to a global virtual learning environment. To make this environment safe and understandable for them, it is important that the school establishes network contacts that allow them to engage readily with students from other parts of the world. This in turn enables them to understand themselves as a part of global humanity, to take their first steps along the way to becoming "world citizens," and to appreciate different cultures, traditions, and ways of working.

The challenges posed by the learning of twenty-first century competencies are not static and thus cannot be solved once and for all. Instead, the school needs to become a learning organization, flexibly evolving its operational practices to align with evolving challenges. For this to happen, continuous quality assurance monitoring of school operations should be established to support the further, collaborative development of the school and its networks.

Challenges at the Municipality Level

The previous analysis of the challenges at the school level could be summarized as follows: to support students in learning twenty-first century competencies, the school should emphasize versatile leadership, teachers' professionalism, meaningful learning in versatile physical and virtual learning environments, and, moreover, the versatile use of networks and partnerships of the school. These four characteristics activate teachers, students, school principals, parents, and other collaborators from the nearby community to continuously develop the school operations to support the acquisition of twenty-first century competencies. (Korhonen, Lavonen, Kukkonen, Sormunen, & Juuti, 2014).

Consequently, at the Finnish municipality level, a key challenge is helping schools develop the four key characteristics that support the teaching and learning of twenty-first century competencies. Local education policymakers face the challenge of establishing a strategy-based school network that supports schools in collaboratively developing the four areas. As Finnish municipalities face severe challenges in their long-term financing, calling for increased productivity in public services, the community needs to simultaneously find efficiencies in the design of the school network.

Although the Finnish tradition discourages emphasis on school assessment and rankings, an approach being considered is to collect and use school-level assessment data to feed into decision-making on the allocation of resources. Accurate assessment data would allow decision-makers to balance different equity areas and to determine the optimal learning conditions, notably class sizes, for each area.

National-Level Challenges

At the national level, the learning and teaching of twenty-first century competencies challenge education policymakers to develop appropriate nationwide guidance for the challenges mentioned above. In addition, national-level policymakers need to review the current teacher education curriculum and professional development programs offered to in-service teachers and school management to align them with the teaching of twenty-first century skills. In addition, current national policies related to QA and

assessment, the long-term funding and productivity of education as a public service, and its equal availability to all inhabitants need to be reviewed in the light of the new challenges.

Challenges for Teacher Education

A recent international teaching and learning study, TALIS 2013 (Teaching and Learning International Survey) (OECD, 2014), demonstrated several weaknesses in school operations (Taaajamo et al., 2014). According to the TALIS study, most Finnish teachers find that they are able to influence factors that promote learning. However, according to TALIS, teachers' participation in continuous professional development seems to be declining. In particular, the demand for continuing education that meets long-term challenges and develops professional competence is decreasing. Moreover, TALIS emphasizes that induction and orientation for new teachers has a low take-up in Finland. Teachers feel that initial teacher education does not prepare them sufficiently for twenty-first century challenges, such as collaboration between home and school, multi-professional co-operation, controlling disruptive behavior in the classroom, or catering to the needs of challenging students.

To develop the additional knowledge and skills teachers need for teaching twenty-first century competencies, teachers should be encouraged to organize and participate in professional development programs and other in-service training as a natural part of their career development. Faced with new challenges in their classroom, teachers can no longer expect to be able to run their classroom in a "lone wolf" fashion with no significant retraining over the course of their entire professional career. As this is a significant change to the self-image of a professional teacher, national policy and local providers of education (municipalities) should consider measures that support teachers, especially those who have advanced far into their career, in adopting the new image as a coach or facilitator to other teachers. Moreover, university teachers delivering teacher education and professional development programs for in-service teachers confront similar challenges as classroom teachers: the university teacher does not have personal experience in teaching twenty-first century competencies, yet is expected to guide student teachers and in-service teachers in doing the same.

However, it is difficult to organize an effective professional development program or an in-service program in practice. Borg (2011) argues that in-service training is too often conducted according to the "transmission model," in which the aims of the training do not necessarily meet the needs of the teachers; it consists of short lectures, with the aim to transmit new knowledge (input-based), and the training is disconnected from practice. Borg (2011) argues that in-service training should follow a more "constructivist model"; it should be teacher-led, continuous, situated in or connected to the classroom context, collaborative, and inquiry oriented, including reflective practice (Lavonen, Juuti, Aksela, & Meisalo, 2006; Juuti, Lavonen, Aksela, & Meisalo, 2009). Constructive models for in-service training would appear

ideal for enabling teachers to teach and students to learn twenty-first century competencies, with which they align well. Such models could help teachers to internalize the meaning of these competencies. During their preservice training, student teachers should develop a readiness to participate in constructivist in-service training and ultimately, in lifelong learning. They should, for example, be introduced to the role of leadership and goal orientation and to the importance of interaction. Moreover, student teachers should understand the role of assessment in education: targets (student, teacher, and school operations), self-assessment (formative and summative) and assessment methods, and the use of assessment data for various purposes (support for learning, additional support, or differentiation for individual students).

In-service training or professional development should enable teachers to support their students' engagement in learning and enhance their existing skill sets with new, versatile pedagogy that supports the learning of twenty-first century competencies and personalized learning. Teachers should also develop skills in new topics, such as global citizenship, democracy, and equality education, and in the use of new tools, notably educational technology. The challenges posed by the teaching of twenty-first century competencies also call for an expanded role for teachers outside the classroom. To prepare for this, teachers should develop an understanding of the role of networks and partnerships at the school and municipality levels as well as an understanding of the continuous and collaborative improvement of school operations. As a part of a school's quality assurance procedures, the principal and teachers should continuously monitor how the curriculum, teaching, and learning methods at the school engage students to learn twenty-first century competencies. Moreover, new methods and tools for assessing the learning outcomes related to twenty-first century competencies are needed. Traditional "testing" might not be the best choice for assessing twenty-first century competencies.

Quality Assurance Challenges

Although the Finnish approach to QA does not place great weight on testing and assessment, changes to educational policy intended to support the teaching of twenty-first century competencies should include new ways to assure the quality of policy implementation. Twenty-first century competencies include competencies such as local and global collaboration skills, which cannot be measured using current forms of assessment. As new forms of measurement for such competencies are needed all over the world, their development would benefit from global research collaboration.

To enable the implementation of changes that meet the challenges, national policy should allocate resources to strategic areas, financing research and development as well as lifelong professional development projects. With limited resources allocated to education in the national budget, the productivity of public services is an important consideration in any new policy development. Traditionally, new national-

level education development initiatives start their work from scratch and end up reinventing tools and redeveloping competencies that would already be available for reuse from previous programs. New initiatives should therefore seek to use existing assets and competencies. In addition, resourcing should focus on reinforcing success by funding long-term development that continuously creates new results built on earlier results, and should include provisions for the nationwide dissemination of best practices. For example, initiatives to develop national-level learning environments, including cloud services and virtual learning centers for teachers and students, should make use of existing competency models available from previous initiatives. Furthermore, for educational equity, it is important to make sure that the cost of teaching twenty-first century competencies does not prohibit it from becoming available to all students, thus setting a limit for the cost of any solutions prescribed by national policy.

Renewal of Finnish Education

The New National-Level Curriculum

To address the challenges analyzed above and to help students learn twenty-first century competencies, a new national-level curriculum has been developed. During the 5-year design process of the curriculum, the need for twenty-first century competencies or skills has influenced the design of the curriculum in Finland and in many other countries (Finnish National Board of Education (FNBE), 2013; Vahtivuori-Hänninen et al., 2014). The new Finnish curriculum, NCCBE (Finnish National Board of Education (FNBE), 2013), was accepted in December 2014 and will guide all schools towards preparing a local curriculum that will be implemented from the beginning of 2016.

The new NCCBE outlines the need for broadly scoped competency that aligns with twenty-first century competencies, including the competencies described in Table 13.1, such as critical and creative thinking, and an ability to use a wide range of tools, such as socio-cultural (language) and technological (ICT) tools. Table 13.2 compares the interpretation of the twenty-first century competencies in the new Finnish curriculum and the interpretation of the twenty-first century competencies outlined earlier (Table 13.1). The new curriculum emphasizes that students' well-being, defined as the balanced development of personality and the ability to manage daily life, is also an important goal of learning. According to the curriculum, students' physical and emotional well-being should be supported through school and classroom operations. At the school site, there should be different actions and support available, such as an anti-bullying program, a school nursery, a social worker, and psychology services. The use of ICT may provide many tools for active and meaningful learning.

Table 13.2 Comparison of twenty-first century competencies (Table 13.1) and Finnish border-crossing wide-ranging areas of competencies

Twenty-first century competencies (Table 13.1)	Finnish border-crossing wide-ranging areas of competencies
Ways of thinking	
Critical and creative thinking	Thinking and learning to learn
Learning to learn	
Ways of working	
Inquiring and problem solving	Inquiry orientation
Communication and collaboration	Interaction and communication
Tools for working	
Broad literacy	Multi-literacy
Technological skills	ICT competence
Acting in the world/context	
Global and local citizenship	Taking care of your-self, everyday life skills, safety
Cultural awareness and social responsibility	Working life skills and entrepreneurship
	Participation and influence, responsibility for sustainable future

Success in infusing twenty-first century competencies through the new NCCBE, as articulated in the local curriculum, depends on teachers' competencies and on the support available for them. Teachers may not yet possess the knowledge and skills that would enable them to successfully teach twenty-first century competencies. In addition, teachers may feel insecure with or even fear the teaching of twenty-first century competencies, as it involves project-based and inquiry-oriented learning methods and, moreover, integration of technology, which are not part of their existing competencies. This gap between the needed and current teaching practices have been reported in national PISA reports (Kupari et al., 2013) and in national monitoring reports (Kärnä & Rautopuro, 2013).

The previous NCCBE (Finnish National Board of Education (FNBE), 2004) already incorporated competencies related to twenty-first century skills, such as the use of technology and the understanding of technology as part of society. When the previous NCCBE came into effect, incorporating these parts into the local curriculum proved challenging for teachers and headmasters, and they sought additional guidance on both the peer level and from national authorities. The main reason for these challenges was the need to combine the aims related to twenty-first century competencies with subject-specific aims. The new curriculum encourages an even deeper combining of these two groups of aims. Thus, we can expect that the new NCCBE, with its more direct call for the incorporation of twenty-first century competencies into the curriculum as part of broad-based competency, is likely to raise the same and additional challenges. The core challenge is the need for teachers and headmasters to start the task of teaching twenty-first century competencies to students while simultaneously trying themselves to learn the twenty-first century competencies that enable them to do so.

New Forms of Professional Development

The image and forms of professional development programs for in-service teachers should be reshaped to meet the new challenges. A professional development program does not necessarily need to consist of a single high-profile seminar, but can instead take flexible forms that initiate and enhance collaboration among both teachers and learners. Professional development should be a lifelong activity, supported by a personal development plan for teachers and school principals.

To realize new types of professional development practices, preservice and in-service teacher education should prepare teachers for collaboration and continuous team-based professional development. Lieberman (1992) and Harris (2003) have outlined the knowledge base of this type of teacher leader. Such teachers are goal oriented and have a clear vision of school development and are able to work collaboratively and in interaction with other teachers towards their goals. They are capable of absorbing and assimilating research-based knowledge and have a deep understanding of teaching and learning, which allows them to act as curriculum specialists. A teacher leader is a facilitator and a coach for other teachers.

Several changes at the national level are needed to bring more teacher leaders to schools. Although several national and municipality level meetings and other in-service training will be available, addressing this core challenge requires the recognition of a number of operational challenges on the classroom, school, community, and national levels. A national project for harmonizing teacher education programs in various universities and for balancing academic and professional aims is needed. In practice, strategy-based planning of teacher education and continuous QA (use of working life feedback, students' evaluations, and the outcomes of research) are needed, as well as research projects that can lead to productive teacher education and offer appropriate content to teacher education programs.

In Chap. 24, Korhonen and Lavonen describe the Innokas Network (Korhonen & Lavonen, 2016), which has been established in Finland for the nationwide sharing of best practices related to the learning of twenty-first century competencies. Continuous design and adoption of educational innovations in collaborative teacher teams inside a school and in teams of teachers coming from different schools is suggested as an alternative form for teachers' professional development. The key guiding idea is that teachers and students themselves are innovators (Korhonen & Lavonen, 2016). In general, such networks support teachers' professional development because they encourage the generation, sharing, and adoption of novel educational ideas among network participants (Rogers, 2003). Further, such networks create environments or cultures for learning, in which participants learn and use new knowledge and skills in different contexts (Epstein, 2009).

Discussion

Professional teachers are at the center of addressing the challenges arising from new national initiatives, including those associated with the introduction of twenty-first century competencies into the Finnish national curriculum. This raises the question of what changes should accordingly be made to both in-service and in initial teacher education. Teacher education should consider the current baseline knowledge on twenty-first century skills, the currently available best practices of teaching them, and proficiency in continuous improvement methods that allow teachers to both contribute to the national pool of knowledge and implement national education policy initiatives in their school. Preservice teacher education should especially develop readiness for collaboration and networking and for continuous lifelong learning as outlined above and in Chap. 24. Although, Finnish preservice teacher education does emphasize teacher leadership, teachers should receive in-service support or training on leadership so that they can act individually and as part of a team in the continuous design and implementation of educational innovation. These measures may provide a partial solution to the challenges identified at the school, municipality, and national level.

The nationwide sharing of best practices requires the establishment and maintenance of teacher and school collaboration networks, such as the Innokas Network (Korhonen & Lavonen, 2016) that is introduced in Chap. 24. Such networks could work by facilitating face-to-face meetings and the use of new social networking tools. Teachers' collaboration in the networks starts from the needs of the teachers and includes both the creation of educational innovations and their application in the classroom. Therefore, the networks serve the learning and development needs of the students in the classrooms. Further, such networking supports integrating inquiries, problem solving, and reflective practice as a part of professional development. There is a close connection to classroom practice (Borg, 2015), which is regarded as central for teachers' professional and ongoing development (Lavonen et al., 2006; Juuti et al., 2009). As far as possible, such collaboration networks should be aligned with existing structures at the school, municipality, and national levels, without sacrificing the peer-to-peer nature of the teachers' interaction model.

Teachers tend to teach as they are educated (Borg, 2015). Teachers' in-service training that aims to support the learning of twenty-first century competencies should engage teachers in professional development practices that are themselves based on twenty-first century competencies. Teachers should proactively set aims for activities and generate, implement, and test (evaluate) educational innovations, and they should engage in decision making. Networking as such is one of the twenty-first century competencies; in addition, it facilitates communication and collaboration (Rogers, 2003). Large amounts of information are mediated through ICT tools in networks, and consequently, networks facilitate learning about the use of ICT tools. Problem solving and collaboration in the context of networking emphasize both creative and critical thinking and the interactive use of knowledge and information. Finally, working in networks includes various working contexts: personal,

social, and even global. The teachers active in the Innokas Network (Korhonen & Lavonen, 2016) have already created several pedagogical innovations, such as School-Community Collaboration (SCC) with the library, kindergarten, and senior home, as well as the personalization of learning through the use of smart phones as described above (Lavonen et al., 2014). These innovations have already been deployed through the Innokas Network and will be distributed wider in the future.

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Chapter 14

Imagining the Cosmopolitan Global Citizen? Parents' Choice of International Schools in Kuwait

Carol Reid and Mohammed Kamel Ibrahim

Abstract This chapter examines the links between parents, school curriculum and teaching practices in international schools in Kuwait to understand how they are responding to globalisation and educating students for twenty-first century capacities. With increasing marketization of schooling globally, parental choice rests upon decisions about the kind of education that will best prepare their children for the future. In the Middle East, there is considerable change occurring, although Kuwait has a longer history of US international schools and British schools than many other Arabic speaking countries in the region. Nevertheless there has been a rapid increase in international schools and many local providers are emerging. This chapter uses cosmopolitan theory to analyse interviews with parents in three accredited international bilingual schools in Kuwait. These schools teach both Arabic and international English curricula. Each school represents a certain category; the first school has a reputation for having 'high quality' education; the second school favours a more conservative Islamic environment, and the third school offers special needs and inclusive education in addition to main stream classes. Parents were asked about their reasons for choosing an international school and their responses were considered in relation to globalisation – of the English language, Western curriculum (or international education) – and the effect of these schools and their education on the students' identity and culture. The parents' responses include views about the curriculum and teachers' capacities. The benefits of international schools, from the parents' perspectives, on preparing their children for a future in the twenty-first century will be discussed in relation to Weenink's (Sociology 42(6): 1089–1106, 2008) concept of cosmopolitan capital. The findings suggest that the parents are

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primarily ‘pragmatic’ cosmopolitans rather than dedicated cosmopolitans. This leads to an insight into the kinds of capacities parents believe are required and therefore their evaluation of the education in these schools.

The exponential growth of international schools is a global phenomenon. As public education systems have become subject to neoliberal regimes that treat education as a market, increasing numbers of private providers have emerged (Ball, 2012). In the competition for students, they mark out their space by offering curricula and governance arrangements that harness particular constructions of learning and cultural values. These are constructed in terms of a view of the future, which is being reconfigured by contemporary globalization (Amin, 2002). Lingard and Sellar (2013) argue that there is an emergence of heterarchies, whereby education policy, practiced and transformed spatially, is no longer underscored by the logic of fixed boundaries in policy implementation.

In this chapter, the interest is on how such heterarchies are related to cosmopolitan dispositions or at least the desire by parents for the development of cosmopolitan dispositions in their children. Cosmopolitan dispositions according to Delanty (2006) entail world openness and self-transformation while Holton (2009) suggests a cosmopolitan disposition is not limited to the concerns of the immediate locality but recognises global belonging, involvement, and responsibility. However, this simple ideal leads to key questions about cultural complexity. In this chapter, we reveal some of these complexities and suggest, following Appiah (2007), that people can be partial cosmopolitans (p. xvii) because some values are universal while others must be from a local perspective (xxi). In a similar vein, Woodward, Skrbis and Bean (2008) argue that this means cosmopolitan dispositions are not consistent across all fields and that there are multiple cosmopolitanisms.

The chapter first provides a brief background to the context of international education in Kuwait followed by an overview of the research methodology including sites, participants and analytical frames that are employed. The chapter then discusses two key themes related to parental choice of an international school, including issues related to identity and culture, and their thoughts on the curriculum and teaching in three international schools. The chapter concludes highlighting the kinds of capacities parents feel are necessary for living in the twenty-first century in a globalizing context and the need for teachers dispositions to be open.

Background

In the Gulf Cooperation Council countries (GCC), the majority of citizens have a high income in comparison with the rest of the world. Kuwait, as a member of GCC, is considered one of the richest countries in the world (Pasquali, 2015). In the last two decades a growing number of Kuwaiti citizens began to educate their children

in international schools, where English is the medium of instruction, as a way of investing in their children's future.

International schools are of interest as increasingly they are attracting more students from the local culture – rather than just expatriates working in the Kuwait labour force – whose parents are seeking a better future for their children in a local and/or global market. In addition, these schools have a “central role in the development of the knowledge economy” (Coulby & Zambeta, 2005, p. 1 cited in Hayden, 2011). An important aspect of this economy is competency in English.

With the development of electronic technology worldwide, the English language has become even more dominant and citizens of the world have increased their interaction globally using this medium. The English language “cuts across national boundaries more than any other language and is an icon of the contemporary age. It is undoubtedly the language of the cosmopolitan/global professional elites” (Hayden, 2011, p. 74). The importance of English is generally acknowledged as an aid to travel, career development, knowledge enhancement, and economic success: “It is the language of globalization – of international business, politics, and diplomacy” (Guilherme, 2007, p. 131).

As a global language, English has become a vehicle in globalization for building a responsible, cosmopolitan citizen. However English, like any other language, has its own identity and culture. That is, there are Englishes (Kachru, 1992) because ‘creating and interpreting meaning is done within a cultural framework’ (Scarino & Liddicoat, 2009, p. 18). Kachru developed a three circle analytical framework reflecting the historical spread of English to countries where it was adopted as the mother tongue (inner circle), to others where it served as a lingua franca (outer circle) and the more recent growth in international relations (expanding circle). So becoming proficient in it has become an issue of debate and research, especially in relation to culture and identity of national citizens. This is a real challenge for educators and educational policy makers as “it is important to consider how language as code and language as social practice are balanced in the curriculum” (Scarino & Liddicoat, 2009, p. 18).

In order to understand the relationship between globalisation and national education policies and practices it is necessary to “extend the methodological horizon of social analysis” (Johnson, 2009, p. 1). Where education is concerned a kind of *methodological nationalism* is often assumed when trying to understand social processes. Here the ‘container’ is the nation state where it becomes very difficult to explain change (Beck & Sznaider, 2010) without looking outside. To overcome this problem, cosmopolitan theory is used in analysing parental desires as it “offers a promising way to link the analysis of globalization to developments in social and political theory” (Guilherme, 2007, p. 2). There are many approaches and notions of cosmopolitanism. The focus of analysis will be on two related ideas; “the idea of an awareness of global connectedness and ...the idea of an orientation of open-mindedness towards the Other” (Moran, 2010, p. 1089). Weenink (2008) suggests the former results in pragmatic cosmopolitans while the latter are more likely to be dedicated cosmopolitans. In his research investigating the parents of students in international schools in the Netherlands, he distinguished between the two forms of

cosmopolitans by stating that dedicated cosmopolitan parents “taught their children to explore the world and to take a global perspective in their course of life, while ... pragmatic cosmopolitans thought that globalizing processes required cosmopolitan competencies” (Weenink, 2008, p. 1089). Here, in this study, in spite of the similarity of both studies in researching the attitudes of parents whose children attend a form of international education, the social group is significantly different and thus as Weenink (2008) has argued this determines “the rules of the appropriate forms of cosmopolitan behaviour” (p. 1104). In the analysis of the data from the parents in Kuwait, the results and conclusion do not lead to the same form of pragmatic cosmopolitan established in Weenink’s (2008) study and differs because of the different “social arena in which it is activated” (Weenink, 2008, p. 1103). Therefore, in analysing the parents’ responses, there was “an eye for both the new cleavages and social ties that the cosmopolitan condition will bring us” (Weenink, 2008, p. 1104).

Weenink’s framework is similar but different to the notion of “strategic cosmopolitanism”. Mitchell (2003) notes a shift in the way in which international education has been understood from one focussed on getting along with others who are different to “cosmopolitan learning in service of the national interest” (p. 709). Clearly in Kuwait, where the sector is less organised as discussed below, there is nothing strategic at the institutional level to equal that of the USA. However, the neoliberal imperative driving international education in response to globalization creates ambivalence in the minds of the parents in this study.

Beside the benefits of education and language, the students in international schools develop dispositions that include “adaptability, cross-cultural skills, social skills, and observational skills” (Lallo & Resnik, 2008, p. 171 cited in Hayden, 2011, p. 15). In applying cosmopolitan theory in this chapter, it is possible to gain an understanding of how a cosmopolitan disposition is a source of power and a form of social and cultural capital (Weenink, 2008, p. 1092) that parents may be seeking when choosing an international school for their children. For example, lives are not only shaped by economic capital but “by ‘dispositions of the mind and body’ and ‘cultural goods’ institutionalized in the form of educational qualifications (cultural capital). Exchange of capital is in turn structured by social obligations, networks, and connections, which are often institutionalized in the form of titles and credentials (social capital)” (Noordegraaf & Schinkel, 2011, p. 104).

The attraction to international schools by local parents is therefore not only motivated by the desire to access a prestigious commodity but also in the hope of attending prestigious Western universities as they believe in the “symbolic capital embodied in international qualifications” (Lowe, 2000 cited in Hayden, 2011, p. 218). This pragmatic cosmopolitanism demonstrates that parents consider this kind of education a capital that will help preserve their social status and secure the future for their children. Here an interesting paradox emerges: cosmopolitan orientations on the parents’ side but a Western focus in schools. Because of this desire and the increasing marketization of education, a rapid growth in the number of these schools is noticed globally and locally. Due to the increase in the market and competition for students, bilingual education is gaining momentum in Kuwait as the

population is eager to invest in their children by providing them with international education that is adapted as much as possible to suit their identity and culture.

According to The International School Consultancy (ISC), the number of international schools is growing at 8 % annually around the world (Bunnell, 2008). A similar trend is also noticed in Kuwait as the number of international schools (American, British, bilingual, International Baccalaureate, etc.) is rapidly increasing (Ministry of Education annual schools list). In the last two decades more than 85 % of the international schools in Kuwait have been established, and continue to emerge every year. They are often established by private companies or individuals as businesses with minimal supervision or involvement of qualified educators. Policy makers have designed qualification criteria for teachers who work in international schools, as well as general policies or procedures relating to all educational organizations, but there is no thorough government monitoring of the curriculum or the quality of education in these schools (Kuwait Pocket Guide.com, 2015). This situation raises many questions and requires closer examination of important issues related to the impact of Western education policies on identity, culture and quality, and the effectiveness of teaching and learning in these schools.

In spite of their rapid growth, and the social and economic importance of this sector locally and globally, there has been a lack of interest – from individual researchers, international education organisations, or local educational policy makers like the Ministry Of Education – in conducting any sort of research that would serve as a reference for educational policy makers and the local government to take critical decisions regarding this vital sector. This education sector is not only important because of its economic effect, but more significantly its social effect on the identity and culture of local citizens and the Kuwaiti society as a whole.

According to Hendriks, Doolaard, & Bosker (2002 cited in Vanhoof & Van Petegem, 2007): “Quality of education is something on which the government, the school board, school management, teaching staff, pupils, parents, the business world and higher education must agree by means of dialogue” (p. 262). However, quite often in the Gulf these glamorous new Western institutes are financed by one or two owners and therefore lack the necessary collaborative and long term planning to cultivate quality education.

Education reforms, especially in the international schools sector, are minimal or non-existent in Kuwait and most Gulf countries. For example, in Kuwait, the only role played by the government in monitoring international schools is in approving staff qualifications, standardizing school facilities, and monitoring the censorship of educational texts (Kuwait Pocket Guide.com, 2015). Responsibility for assessing the effectiveness of overall school performance is given to the school itself and/or international accrediting agencies. This means that a borrowed Western curriculum is dominant and change is slow. Without a national authority organising and supervising the sector, both quality and innovation, as well as appropriate local input, is uneven. This has the impact of potentially failing to deliver the very capital that parents are seeking for their children as well as colonizing local culture.

Methodology

The data discussed in this chapter was collected in 2014. It involved interviewing parents of students studying in three bilingual international schools in Kuwait. The purpose in choosing these three bilingual international schools was twofold. First, bilingual international schools were chosen instead of any other kind of international school (e.g. American, British, and Canadian) because the rapid increase in this kind of school is very noticeable. According to the Ministry of Education International schools list (2014), there was only one bilingual school before 1990, and eight Western International schools, but now there are 34 bilingual international schools in comparison to 28 Western (American & British) International schools. They are becoming more popular in Kuwait because they teach both Arabic and international English curricula. Second, the issue of representativeness was also taken into consideration. Each school represents a certain category; the first school, Community Bilingual School (CBS) has a reputation for being progressive and more liberal since it is non-segregated and both genders are taught in the same class; and is renowned for good quality education. The second school Cultural Identity Bilingual School (CIBS) provides a more conservative Islamic environment where it is totally segregated as boys and girls are in separate buildings as well as more time being given to additional Islamic subjects. There are many bilingual schools following the same trend. The third school, Inclusion Bilingual School (IBS), offers special needs schooling and inclusive education in addition to mainstream schooling. It is only segregated in classes but they are in the same building, and there are many bilingual inclusive education schools following this path. Of interest in relation to language development toward globalization is that most international schools, including the bilingual schools in Kuwait, offer French as a third language, which are mostly French basic communication skills classes in middle and high schools.

Semi-structured interviews were carried out with ten parents from the three schools. They were chosen using a criterion sampling strategy where “the individuals studied represent people who have experienced the phenomenon” (Creswell, 2007, p. 28). They came from a range of backgrounds including professional and trades, and they send their children to different areas in Kuwait. Kuwait is a very small country and its population is also small; according to The Public Authority for Civil Information (PACI) (2015), there are 1.3 million Kuwaiti citizens and 2.9 million other nationalities living in Kuwait. The majority of the students in international schools, including the bilingual schools, are Kuwaitis. Therefore, most parents that were interviewed are Kuwaitis but a non-Kuwaiti parent was interviewed from each school because “from a social justice perspective it is critical that interpretive accounts take into account cultural complexity” (Charmaz, 2005, pp. 527–528). This small sample does not seek to be representative of a wider population but rather to explore cosmopolitan theory applied to a context undergoing rapid change.

Parents were interviewed at places of their choosing; some chose to meet at their homes (3), some chose to meet inside or outside their schools (3), two were inter-

viewed in public places and one parent was interviewed at his place of work. One of the parents, a mother working as a medical doctor, due to cultural reasons – embarrassed being seen talking to a man – was interviewed via phone while she was sitting in her car outside the school waiting for her daughter. The majority (above 95 %) of students in these schools are Kuwaitis. Interviews ranged from 15 to 60 min. All parents were males except two; one from the IBS, and the other one from CIBS. All necessary steps, like conducting the interview with an assistant female researcher, were taken to meet with more female parents but negative responses were received due perhaps to cultural reasons. Further research into mother's perspectives would be interesting. The focus of the questions was on their high school children. The parents were given the option to conduct the interview in English or Arabic, as the researcher is fluent in both languages; most of them chose to speak in Arabic but sometimes included short English sentences.

The interviews covered: the reasons for choosing an international school for their children; their children's experience in these schools and the effect of these schools on their identity; their perspectives about the curricula, teachers, principals and administration; the effect of international education on their children's future; their general satisfaction and evaluation of these schools.

Discussion

The desire for twenty-first century capabilities has led to greater scrutiny of schooling across the world. Because of the changed context in government schools in Kuwait after the war and the influence of neoliberalism, which is the main driver of globalization (Ritzer, 2008), there has been a growth in private schools. This is in line with neoliberalism globally where “a number of pro-capitalist positions: that the state privatize ownership of the means of production, including private sector involvement in welfare, social, educational and other state services” (McLaren, 2003 as cited in Hill & Cole, 2001, p. 70) has strengthened. We discuss the experiences of this shift through the lens of choice of school and views on the curriculum and teachers.

Choosing an International School

Three key reasons for choosing a private international school emerged. Apart from the desire for an education that would provide access to the global labour market there was a desire for bilingual education and the maintenance of identity. Mazen, a doctor at Kuwait University, and a parent and board member at CBS commented:

I chose private education because I believe it is distinguished from the government education system ... it is a sort of investment in my children ... the issue that attracted me to this school is the bilingual education.

As Weenink (2008) noted the “social process of cosmopolitanization may result in the globalizing of minds: the awareness – whether one likes it, fears it or hates it – of being part of the world and at the same time being part of a particular, locally and historically grounded place or situation” (p. 1091). Mazen wanted better options but did not want to sacrifice Arabic so a bilingual school was attractive. The tension for most of the parents in this study is that the desire for twenty-first century global capacities might come at the cost of local knowledge and language. The desire for positional advantage [for their children] in the form of international qualifications and associated skills sets (Waterson, 2015) is balanced by the maintenance of Arabic in bilingual schools. A demand for language continuity and skills and knowledge expanded by Western curricula has consequences for international schools if they are to survive in the market. This leads to understanding the other side of the language equation and the second reason that parents from all schools focussed strongly on: the desire for English language acquisition for their children. A desire for bilingual education was paramount according to Maram, a parent and head of the registration department at CBS:

The main issue that attracts parents to put their children here is the bilingual education. It is not only an American or British school, but it is a bilingual school and it is the best school in Kuwait. It was the first bilingual school in Kuwait, so this is what makes us unique and special.

As discussed, Weenink (2008) argues that there are dedicated and pragmatic cosmopolitans. The former considers that openness is necessary and indeed desired, while pragmatic cosmopolitans see it as a necessity in a globalizing world. He (2008) states that a “typical characteristic of pragmatic cosmopolitans is that they restrict cosmopolitanism to learning English and speak of appropriating this asset as a competitive advantage” (p. 1097).

For some parents the choice of bilingual education was not in isolation from other factors. For example, Islamic values and Arabic identity were just as important and were not to be subsumed just for the sake of English. As Appiah (2007) has argued, people can be partial cosmopolitans where some values are universal and others local and particular. For example Mohsen, a parent at CIBS said:

I preferred for my sons to be committed to Islamic values. So since the curriculum of this school is designed to include and respect the Islamic values and it is also scientific and because of the English language, I thought at the time it is the best option and choice, so Islamic, scientific curriculum, and the English language for a better future.

In preparing children for twenty-first century living by contributing to the development of cosmopolitan dispositions, schools and teachers need “to understand that they are sites of cultural production and social reproduction” (Sobe, 2012, p. 267) and that despite the impact of globalization on communications and flows of ideas, finance and technologies “societies continue to display the deep-rooted imprint of cultural differences which have persisted from centuries earlier” (Pippa & Ronald, 2012, p. 167). “Partial cosmopolitans” (Appiah, 2007) is a useful concept because openness is not consistent across all fields and there are multiple cosmopolitanisms (Woodward et al., 2008). This leads to a consideration of the impact of choosing a

bilingual international school on identity and culture. No doubt that change is happening in life styles and the wider culture as a result of dealing with a stronger connection to the 'outside' world, especially the Western world. The protection and maintenance of identity and culture is a consequence of friends' and colleagues experiences regarding the impact on their children. Hence, they are trying to strike a balance in securing a better future, and reducing what they see as the negative impact on their identity. For example, mixing of genders between parents and teachers or among school staff was not popular or preferable but now, especially in the environment of international schools, it is increasingly common. As part of this shift, the non-segregation of boys and girls in international schools occurs and this is at times unacceptable to the local culture.

Beyond gender segregation there are tensions related to opening up to international ideas and practices, including pedagogies that are more progressive. Abdelraheem, a parent at IBS commented on how the international school environment affects his son's attitude and character:

So I am against some habits they gain through being at this school like the so called 'freedom' and considering himself in the right and everybody else in the wrong. Even if he realized he is in the wrong, he is still insisting to stay on that stance! This is how this school builds the student's character.

For Abu-Sakeb, who is a parent from CIBS, the negative effects of these schools were much stronger:

Private international schools cons beat their pros; mixing (no segregation between boys and girls), relationships (between boys and girls), the religion and Islamic values come without meaning and substance (in these schools).

So there are contradictions that result from parents' decisions to choose international schools. All of the parents were pragmatic cosmopolitans rather than dedicated cosmopolitans. As a consequence, while they may have made their decision based on expectations about school culture and school marketing the effects were not predictable. The desire for cosmopolitan capital therefore takes many forms, as it is "an expression of agency, which is acted out when people are forced to cope with the cosmopolitan condition when it enters their personal lives" (Weenink, 2008, p. 1103).

A final comment from a mother at CBS illustrates this when her daughter asks to study outside Kuwait. Here, is a big shift in beliefs and values. The mother said:

I wish she stayed here...because you know it is hard as a girl... for us you know. We consider these things but she wants to go, she wants to feel that she is more independent.

Views on Curriculum and Teachers' Capacities

What is different among the parents is their perception of the ways in which the schools are providing an education that will prepare their children for twenty-first century living in terms of the curriculum and the teachers' capacities.

Curriculum

At CIBS, values were more important than the curriculum content in the assessment of capacity building. For all three parents interviewed, the school was lacking in certain areas but despite the shortcomings, they felt they had made the right choice in choosing this school. The reason was that it is more conservative than government (public) and private Arabic schools. For example, Muhanned, a parent and the head of Islamic studies at the same school, admitted that oral and aural English language skills are not as good as other schools:

Maybe there is a lack in the speaking and listening skills but writing, reading, and understanding the language – there is no big difference between this school and other international Western schools.

Meanwhile Mohsen, a parent at CIBS who is a surgeon, was very critical in pinpointing a major issue about the curriculum structure in the high school where the students do not have the chance to choose certain science subjects, required by most universities for certain degrees:

For their academic achievements, I think there are limitations. Not planning to change the scientific subjects studied in the high school to enable students to apply and get acceptance in certain fields and degrees at universities is another issue in the school where students face many difficulties if they want to apply to universities outside Kuwait. This is what happened with my son because he didn't study the science subjects like chemistry, physics, and biology in the last year of high school.

At CBS on the other hand, the issue was about preparing the students for university education and building a confident personality with many skills. For example, Jasem commented on his daughter's experience:

So when I asked my daughter, who is now studying in her second year at the university in the states about how she is coping with her study at the university, she told me that there is no big difference between the level of education and study of this school and what she is studying now at her university. She said that she was well prepared and ready to enter the university when she graduated from this school.

The correspondence of content in the curriculum to that of the West is important to being able to compete and succeed in Western universities. Mazen expressed a similar view:

I saw the effects on my daughter in a direct way; in the quality of learning she's getting and her ability to deal with many situations like ability with speech skills, the communication skills, the emergence of her (distinguished) personality and I think she developed her personality as a result of the education she got at school. The education level my daughter is getting is considered of high standard.

The third parent Maram explained how CBS provided skills preparing them for work and life:

Education wise, of course here comparing kids between CBS and other Arabic schools, here they give them more freedom, they give them encouragement to do... like presentations... they have these skills where in other schools they are not free to stand and speak and

present. So they have this opportunity here, it's more American style, they do lots of research, it's more independent, they are all ready for work and a feel for life.

This was a common theme in the interviews with CBS parents and relates to cosmopolitan capital that "comprises bodily and mental predispositions and competencies (savoir faire) which help to engage confidently in such arenas. Moreover, it provides a competitive edge, a head start vis-à-vis competitors" (Weenink, 2008, p. 1092).

However, teachers' capacities are central to any curriculum implementation so the view of this small group of parents' is revealing about what is happening in the school and how they feel it is aligned with the success or otherwise of their children.

Teachers' Capacities

Teachers preparing students to live in the globalised world of the twenty-first century require considerable expertise. Schools in Kuwait have a mix of teachers from overseas and locally and qualifications are uneven. This leads to competition for good teachers to work in international schools where the promise is the acquisition of cosmopolitan capital. Parents' views about teachers' capacities reflect these concerns. Yaser, a mechanical Engineer and parent at IBS, explained:

The teachers have an important role; there are some good teachers and some are not. They keep moving; if a good teacher finds a better opportunity he will go to another place.

Indeed, staffing schools with qualified teachers and keeping them is an increasingly critical problem for the administration of international schools and globally the mobility of teachers is increasing (Reid, Collins, & Singh, 2014).

At CIBS, Mohsen reveals the tension created by the desire for cultural continuity. On the one hand, he likes the school for his youngest daughter because:

My ambition is not only to provide good quality education to my children but also to give him an Islamic Arabic character so he belongs to our society. I found that in this school my children feel the balance between the home and the school environment. This affects the way of thinking and culture so the student does not feel any kind of conflict between the example of the teacher and the examples of the father and the mother, so there would be a kind of stability in culture, environment, and habits.

Yet later in the interview, he discusses how this is at the expense of progressive pedagogies:

...they do not have the culture of making the students depend on themselves by reading through these textbooks and this is the worst thing, the students depend on the summary provided by the teachers.

Another parent, Abu-Sakeb, suggested that Arabic principals at CIBS were an advantage because:

The Arabic principal deals with the students in a friendly less formal relationship, and always keeps the students happy even in certain cases where the students were doing or asking something that may sound against the rules of the school. However, a non-Arabic

principal would deal with the students in a formal way following the rules without being lenient in special cases.

The tensions here of competing intentions plays out in this kind of pastoral care, which was discussed more commonly in the interviews with parents at CIBS. At CBS, the focus was directly on teaching capacities that provided the kind of cosmopolitan capital viewed as critical to living in a dynamic globalizing world.

Jasem felt that the focus on critical thinking at CBS allowed children to ‘think out-of-the-box’. He explained:

It is an environment where teachers encourage them to ask questions... especially now in the Google era... This generation is more open-minded because at school they prepare them to question anything they feel [they need] to ask about so they get to be confident.

The attraction and retention of qualified Western native English speaking teachers is a major element in the education quality and reputation of any international school and attracting parents to register their children. Mazen, a parent from CBS points out:

The most important thing that this school is distinguished with is the type of teachers they have especially the local Arabic teachers but also the international teachers. There is a big investment in teachers... the quality of teachers is the most important factor in any education system, and I think this is one of the main factors of success of this school.

In these small excerpts, it is possible to make visible what constitutes professional capital. English language and progressive pedagogies appear to be central but so are “dispositions of the mind and body” and “cultural goods” (Noordegraaf & Schinkel, 2011, p. 104) in the form of cultural capital.

Conclusion

Teaching and learning in the twenty-first century is shaped by mobilities of people, ideas, technology and media leading to an “everyday experience of cosmopolitan interdependence” (Beck & Sznaider, 2006, p. 11 cited in Weenink, 2008, p. 1099). However, as outlined in the introduction, this is not an even process and is different depending on the field. The parents imagining of the twenty-first century global citizen has commonalities with pragmatic cosmopolitanism. This means the capacities parents feel are necessary include a disposition that is confident, independent and self-directed yet balanced with cultural and linguistic continuity. We see this in the desire for intellectual expression and innovation to set their children free to “know the world” without being consumed by Western values. This is an example of policy practiced and transformed spatially (Lingard & Sellar, 2013).

The evaluation of teachers in addressing the parents’ expectations is mixed. In keeping an eye on the “cleavages and social ties that the cosmopolitan condition bring us” (Weenink, 2008, p. 1104), teachers require considerable professional capital flexibly attuned to not only the capital they bring but also the capital in the local.

While the dispositions and the cultural goods such as qualifications are desired locally, there is a need for teachers to also be open to the local contexts. As Sobe (2012) argues, “teachers need to understand that they are sites of cultural production and social reproduction” (2012, p. 267). If this is not done, cosmopolitan learning is merely a one-way colonial street and the promise of cosmopolitan ideals and practices – to think anew about social and cultural transformation – will be lost.

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Chapter 15

Towards Being a “Good Cuban”: Socialist Citizenship Education in a Globalized Context

Denise Blum, Rosemary Smith, and J. Ruth Dawley-Carr

Abstract Considering the renewed diplomatic relations with the United States and to a globalized world, the Cuban State is forming global citizens while trying to retain socialist values in the face of increased market liberalization. Since the revolutionary period (1960s), Cuban education has stressed the intersecting values of fervent, resistant patriotism, hard work and active, solidary internationalism, as integral parts of the New Socialist Man/Woman or the “*buen revolucionario*” (good revolutionary). In this new economic, political and social context the Cuban government, its school system, and parents are challenged with preserving socialism and its accompanying values while preparing its young people for work and life in an evolving society and globalized world. Drawing on school textbooks and a wide range of interviews with young Cubans conducted by three education researchers, between 2011 and 2014, this chapter examines Cuban young people’s struggle to reconcile the contradictions and tensions between these ideals and the pragmatic reality of life, implying the need for new forms of national, international, global citizenship. Cuban youth are demanding a larger role in shaping their society if the government wants to keep them on the island. Consequently, the development of the *buen revolucionario* is taking on new meaning in the twenty-first century globalized world.

The construction and maintenance of Cuba’s socialist Revolution since 1959 has been predicated on a maximalist citizenship model of shared revolutionary values and high levels of social and political participation, through voluntary work,

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marches and active membership of Cuba's 'Mass Organizations'.¹ Whether pilloried as indoctrination (Bunk, 1994; Cruz-Taura, 2003) or venerated as a force for propagating moral and political consciousness (Macdonald, 2009; Wald, 1978), it is undeniable that a, possibly *the*, central function of Cuba's free, fully inclusive education system has been the creation of young Cubans willing and able to inhabit these challenging citizen roles.

This idealized citizen is referred to in Cuba as a "*buen revolucionario*" (good revolutionary) and the values (s)he is said to embody, as set out in school curricula, include hard work, anti-imperialism, solidarity, patriotism, honor, internationalism and honesty (MINED, sixth grade program of study). Such values are, moreover, presented as inextricably bound up with the rebel nation's intransigent resistance to "Yankee imperialism" (*Programa de Historia, Noveno Grado*, 2004, p. 54). A nation formed out of resistance to Spanish colonialism became increasingly defined by its resistance to US imperialism, so that 'the oft-repeated slogan of "*Cuba sí, yanqui no*" does not simply state that one is both Cuban and anti-American, but that one's Cubanness is to a great extent defined by one's anti-Americanness. Support for one entails resistance of the other' (Smith, 2011, p. 68). Such axioms of political and educational discourse may, however, be set to change.

On December 17, 2014, the first steps toward renewed diplomatic relations took place between the U.S. and Cuba: the first time since being broken off by the U.S. in 1961. In addition, Cuba was removed from the arbitrary U.S. list of countries sponsoring terrorism.

It is important to avoid overstating the significance of this recent semi-rapprochement. Although diplomatic ties have been restored between Cuba and the United States, imperialism has not softened on the part of the United States, especially towards socialist countries. The United States continues to pursue regime change in Cuba and, as long as Cuba develops as a socialist country with its own political system, the United States will not recognize Cuba's constitutional order or end the blockade. Statements from the Obama administration² indicate clearly that there is a change in *tactics*, as the old tactics, promoted by the Republicans and by the Democrats before him, *did not work*. For its part, Cuba has not conceded one iota its right to self-determination and sovereignty, as President Raúl Castro stated on December 17³ and reiterated on December 20,⁴ when he added that the main means of production would never be privatized. Thus, normalization of relations is relative.

These tentative steps towards normalization come at a time when Cuba is becoming increasingly exposed to globalization due to increased tourism, liberal market

¹ Organizations for women, children, students, workers, veterans, neighborhoods and workers that enjoy mass membership, influence policy and do much of the 'legwork' of running day-to-day services in Cuban society.

² See: https://www.washingtonpost.com/politics/obama-hails-historic-step-forward-in-us-cuban-relations/2015/07/01/d3834de6-1ffa-11e5-aeb9-a411a84c9d55_story.html

³ See: <http://www.pedagogiacuba.com/temas>

⁴ See: <http://www.cuba.cu/gobierno/rauldiscursos/2014/ing/r201214i.html>

reforms, expanded internet access, and relaxed restrictions on traveling and migration. Together, these raise questions about the continuation of traditional educational messages of patriotic revolutionary citizenship in a rebel nation: questions that represent an urgent challenge for policy makers, educators and, not least, young schooled Cubans becoming assimilated into adult citizenship roles.

Each of the researchers contributing to this paper has conducted significant primary research in Cuba in relation to education for citizenship. In each case, concerns around globalization, migration and internationalism emerged naturally from young Cubans’ accounts of their values, identities and relationships to the state and its revolutionary project.

Blum’s study focused on data collection in the fall of 2014 in Havana and the surrounding countryside, interviewing 60 young people, ages 16–30 years of age. Smith’s doctoral research, undertaken during three research visits between 2011 and 2013, involved semi-structured interviews with 60 young people from varied educational and socioeconomic backgrounds, aged 21–34 years, from Havana and Bayamo. Dawley-Carr’s doctoral research, conducted over 7 months between 2010 and 2012, included the collection of school materials and semi-structured interviews with 44 Havana residents, diverse in ethnicity, gender and sexual orientation, aged 16–60.⁵

This chapter sets out the content of existing citizenship education in relation to the complex interaction of patriotism, globalization and internationalism, gleaned from the current primary and secondary textbooks for civic education.⁶ Drawing on testimony from the studies mentioned above, it goes on to discuss the ways in which the uncompromising messages of this education are challenged by young Cubans’ lived reality and their attempts to develop new ways of being both *buenos revolucionarios* (good revolutionaries) and global citizens.

Value Formation

Cuba’s non-negotiable principles of national sovereignty, self-determination, and peace form the bedrock of socialist value formation in Cuban schools. Value formation remains one of the most critical and talked about topics in Cuban education (García Batista, 2013). Particular emphasis is placed on the dispositions of collectivism, engendered through in-school democratic structures, peer criticism and socialist emulation (whereby rewards and validation depend on the success of the whole class or group). Civic education inculcates in young people particular values such as honor, honesty, justice, patriotism and responsibility (MINED, 2007), along with their corresponding behaviors, which are deemed essential to Cuba’s ongoing

⁵Where interviews are cited directly they are followed by the age, gender and city of the interviewee and by the initials of the researcher whose data is being used.

⁶The primary textbook is used at 5th grade and the secondary at 7th, 8th and 9th grades. Civic education is not studied as a discrete subject at other grades.

socialist revolutionary project (Blum, 2011). Since the 1959 Triumph of the Revolution, young people's morals and active participation in society has been developed in multiple contexts: across the curriculum, in Marxist-Leninist work-study programs, and throughout society, in homes, neighborhoods and work places (Baxter, 2007; Fernández Rey, Fernández Pina, & Fernández Sera, 2010; Medin, 1990; Saez Palmero, 2001). Severe economic and social problems arising from the collapse of the Soviet Union sparked a need to revitalize citizenship formation. Between 1989 and 2002, civic education was, therefore, introduced as a discrete subject in the fifth and ninth grades (Blum, 2011; Fernández Rey et al., 2010). Cuban schools today use two civic education textbooks in fifth through eighth grades, with few revisions since their initial publication, despite the recognition that they are "not fitted to provide an answer to the dynamic changes that [were] coming about in the country" (Fernández Rey et al., 2010, p. 20).

School prepares children for Cuban society, actively guiding each to recognize and become a "*buen revolucionario*" (good revolutionary): ideologically, politically and socially assimilated, and with the proper knowledge and skills to fill labor needs. Values are communicated through images and accounts of heroes and martyrs, most notably José Martí, a nineteenth century literary figure, political theorist, anti-imperialist and philosopher, whose bust is present on every school campus. Although Martí never critiqued capitalism or advocated for communism, he condemned imperialism and supported nationalism and independence from Spain; his quotes are ubiquitous throughout Cuba – included in textbooks and even painted on school walls. Some are used to support the practice of physical labor, as a reminder of the revolutionary sweat of the early 1960s and 1970s (cutting cane, agricultural work, and other proletariat professions) as the educative task of the school; from his *Obras Completas* (1975): "To educate is to prepare for life" (p. 308); "Behind every school a field" (p. 287); and "In the morning the hoe, in the afternoon the pen" (p. 53), which accurately describes the school day of many secondary students throughout the revolutionary period. Blending Marxism-Leninism and Martiism allows the Cuban leadership to graft socialism onto Cuban nationalism (Blum, 2011), creating a coherent ideology described by Antoni Kapcia as *cubanía revolucionaria* (Kapcia, 2000). Hard physical labor, struggle, and schooling are expected to protect the nation from its imperialist foes.

The "New Man" and the "Ever Newer Man"

The Cuban leadership measures the success of the Revolution firstly by its progress in creating and sustaining a *conciencia* (consciousness), and secondly by economic productivity (Blum, 2013). The ideals of the Revolution and the "*buen revolucionario*" (good revolutionary) have been modeled and embodied in the prototype of the *Hombre Nuevo*, or New Man, and the image of Che Guevara. Ernesto "Che" Guevara, an Argentinian doctor, well-schooled in Martí, Marx, and Lenin, joined

Fidel Castro in the 1959 Rebel Army overthrow of the Batista dictatorship. Guevara thought that if Cuba tried to survive on its own, it would be defeated by the U.S. government and its allies (Harris, 2009) and therefore firmly believed that the only way to defend and save Cuba’s socialist revolution was to make sure that similar revolutions and regimes were established elsewhere. He thus became the apotheosis of internationalism and solidarity with other struggling nations – key components of Cuban global citizenship. During the 1960s and 1970s, Cuba provided support to revolutionary socialist causes, liberation movements and leftist governments across Latin America, Africa, the Middle East, and Asia. While Che Guevara is its quintessential proponent, participating as a foreigner in the Cuban Revolution, internationalism is represented as integral to the Revolution as a whole, with one textbook containing a “thank you” letter to Fidel Castro from parents in Ecuador for the medical attention that was provided for their child (Rafael Vázquez, González, Costales, Rivera, & Soler, 2008, pp. 51–52).

From the 1960s–2000s, the characteristic qualities of the *Hombre Nuevo* were embodied in workers’ humility and stamina in the countryside, coupled with urban savvy, progressive education and communist ideology. Still today, the mass student organization, the Pioneers, repeat the motto, “We will be like Che.” Pictured in the fifth grade civic education textbook, above the question “What does it mean to be like Che?” Guevara’s iconic image is surrounded by the attributes he is said to embody: “Modest, simple, honest, internationalist, humane, hardworking, demanding, responsible and a fighter” (Rafael Vázquez et al., 2008, p. 88), Che’s mythologized character is important less as a representation of his actual character than as the New Man who “tomorrow’s heroes” (as their history textbook dubs them) (Albelo Ginnart et al., 2013, p.9) must emulate. The extent to which the prescribed ideal of Cuban citizenship retains its relevance in a changing Cuban reality is, however, questionable.

Anthropologist Laurie Frederick (2012) suggests an evolved image of the New Man, the *Hombre Novísimo* or “Ever Newer Man,” of the twenty-first century. (S)he is conceived as an urban (wo)man “with *campesino/a* (farmer) morals and a *campesino/a* soul; still communist in her humility and loyalty to *la patria* (homeland), but less aligned with a political party and more cognizant of a general *martiano* (centered on José Martí) and nationalist philosophy of patriotism and united Latin American struggle against imperialist domination” (Frederick, 2012, p. 14). The “real” Cuba is the countryside, *campesinos* (farmers) argue; it is Cuba *de verdad* (true, real), the “pure” and noble face of Cuba, whose spirit has not been contaminated by the commercial market of the cities, international influences, dissidents and disaffected youth. Conversely, Havana, for *Habaneros* (those from the capital city of Havana), is the city is “where it’s at” and is the heart of true Cuban identity. Havana has the heaviest concentration of the Cuban population and many aspire to live there in the hope of better paying jobs and greater access to goods. Therefore, these two sources, the countryside and the city, are the manifestations of true Cuban identity that converge in the *Hombre Novísimo*, el “*buen revolucionario*,” the Cuban global citizen.

Internationalism

Identified as a value, action, and characteristic, internationalism indicates serving nations in need. It is distinguishable from “globalization” in that internationalism rests on Cubans’ solidary labor with other nations, serving them both at home and abroad. Serving denotes patriotism; loving Cuba requires defending Cuba and its ideals, not only within Cuba’s borders but also beyond them. It is thus not accidental that internationalism is described explicitly in the fifth grade textbook, in a chapter entitled “Love for the Nation: Its Defense.” Textbooks depict internationalism as an extension of Cuba’s national justice-seeking, requiring empathy and sacrifices of time and resources to aid in areas of natural disasters but also to support the global proletariat in their struggle against the vicissitudes of capitalism, such as poverty, poor health conditions and education.

Reiterating the solidary and internationalist aims of the Cuban government, the fifth grade textbook reports that “thousands of students from fellow nations have been professionally trained in Cuba to be technicians, engineers, doctors and teachers” and “thousands of [Cuban] teachers, doctors, nurses, builders and technicians” have been sent on missions to nations in need (Rafael Vázquez et al., 2008, p. 50). Further, “many Cubans voluntarily donate their blood to be sent to nations affected by earthquakes” and “Cuban construction workers have built and equipped hospitals and industries in other nations” (Rafael Vázquez et al., 2008, p. 50), all of which frame Cuban global citizenship as altruistic and solidary, lauding the role of Cuba as an international influence while allowing a discourse rejecting and vilifying external capitalist influences to continue.

The Cuban nation labors to stay afloat and yet continually invests in helping other nations as part of a moral responsibility by fostering parallel relationships that sometimes address receiving nations’ needs more than Cuban profits. The Cuban government has long used their doctors for “medical diplomacy” in developing nations and disaster zones. Cuban medical schools provide training, housing, and supplies free of charge to Cuban and low-income students from all over the world, including the U.S. The Cuban government earns over six billion dollars annually from its export of doctors alone. These proceeds far exceed those from any other Cuban enterprise, with tourism lagging well behind in second place. Sending doctors and medical missions to countries in need is a great source of financial gain, national pride, international service, and a model for moral responsibility, but the export of medical staff in many cases has had detrimental effects on Cuba’s own health care system, with Cubans sometimes finding it difficult to get the medical attention that they need (Avni, 2014).

Cuban Civic Education: Rights and Responsibilities

Civic education textbooks employ international standards to contend that the ideals of Cuba’s socialist system align with human rights, referencing the United Nations’ Universal Declaration of Human Rights (Paris, 1948) and the Rights of the Child (Geneva, 1924) (Silva Hernández et al., 2011, pp. 150–156). Human rights violations in Cuba are not mentioned in the textbooks; instead, textbooks construct and reiterate Cuba’s vision of rights (which stresses “second generation” rights to education, healthcare and housing above “first generation,” largely civic, rights) in an idyllic manner. In emotive passages such as, “in Cuba, respect for human rights is not expressed only in our laws, but through the day to day, beautiful reality of fostering life conditions in order that all citizens fully enjoy them, even before birth and into old age” (Rafael Vázquez et al., 2008, p. 115), an emphasis on Cuba’s principles of equality precludes discussion of the problematic actuality of economic poverty on the island.

Internationalism is considered just one of the duties that constitutes Cuban citizenship. Repeatedly throughout civic education textbooks, children are informed of their rights and duties as Cuban citizens. Cuba’s socialist system affords citizens human dignity by protecting human rights and commensurate responsibilities that actively and collectively sustain Cuba socially, economically and politically. In diagrams identifying rights and duties specific to Cuban children (Rafael Vázquez et al., 2008, pp. 53; 68) rights include a formal education, medical attention, sports and recreation, and labor such as in the sciences and construction. Duties also emphasize formal studies but demonstrate children’s vocational training for future economic participation in industry. Additional responsibilities involve being punctual, helping friends study, engaging in volunteer agricultural work, and defending the nation militarily.

Cuba’s just system as portrayed in the textbooks juxtaposes the lack of adequate schooling and medical attention in other countries, detailing the multiple global ills, such as violence, drug abuse and human trafficking, in order to inspire gratitude in Cuban youth. One chapter in the fifth grade textbook entitled, “Life in Socialist Cuba,” shows children in “an underdeveloped capitalist country” shining shoes instead of attending school, while in the ninth grade textbook, a young girl unable to write, read or do math gathers water and prepares food daily. The text states that she is fortunate to be alive, unlike three siblings who perished due to a lack of vaccinations, adding that she is unaware of the world outside of her local community and does not know that her human rights are being violated (Silva Hernández et al., 2011, pp. 114–115). This latter example is contrasted to rights guaranteed in Cuba, such as the right to a formal, public education and health care, and restrictions against child labor. Cubans are made to feel a sense of moral duty to combat global injustice, its resultant suffering and inhumane conditions. With the exception of a fleeting mention of past racism (Rafael Vázquez et al., 2008, p. 41), there is no recognition of social problems in Cuba.

Likewise, children in capitalist nations, developed and undeveloped, are portrayed as exposed to continual violence. The ninth grade textbook recounts the example of 14-year-old Colombian peace activist Juan Elías, denied justice by the failure to try the assassins of his respected dentist father (Silva Hernández et al., 2011, pp. 116–117). The textbook also mentions the violent context in the United States with an account of Dylan Klebold and Eric Harris’ murderous assault on students and teachers at Columbine High School, Littleton, Colorado, in 1999. Included are local and national responses, highlighting the ways the U.S. entertainment industry responded with a bombardment of images of violence, while school administrators installed metal detectors and hired security guards for greater safety. Nevertheless, the National Rifle Association proceeded to celebrate its yearly convention in Colorado. These scenarios not only highlight a lack of consciousness, justice, and protective policies in other countries, they serve to instill fear in Cuban children who might be lured by the material benefits in other countries to leave their relatively peaceful and safe island. The textbook underscores that a grave lack of respect for human life is rife outside of Cuba, and that it is a Cuban citizen’s civic duty to be informed of this injustice and stand against it: “allied in promoting a world plan, adolescents have infinite possibilities in respect to changing the course of human development” (Silva Hernández et al., 2011, p. 131).

Globalization and the Threat of “Anti-values”

The danger that lurks in increasing capitalist measures, technology, tourism and travel opportunities, is more exposure to what Cubans refer to as “anti-values:” the greed and selfishness that dehumanizes relations, causes violence, and stratifies society, leading to poverty and insecurity. Textbooks denounce overconsumption in industrialized nations, an action that runs contrary to *conciencia* (consciousness). The ninth grade textbook further urges readers to recognize that the interconnected, neoliberal world of today is led by a “hegemonic superpower” that aims to “govern the world by erasing the face and memories of communities/peoples” (Silva Hernández et al., 2011, p. 111). It warns against a “pseudoculture” of triviality – entertainment, sex, and gratuitous violence. Modifying a quote from Martí, it argues that such a packaged culture threatens a social mentality in which “the beauty of the vase is more important than the flower” (Silva Hernández et al., 2011, p. 111).

Countering these forces, textbooks put forth an image of Cubans’ worldwide moral responsibility in which citizens must participate in making the world a more just place. The fifth grade text closes with an image of children around the globe dancing together in peace and solidarity, encouraging Cuban children and young people to contribute toward making the world less dangerous. This is reinforced by direct exhortations, such as this passage from the ninth grade textbook, “[Youth,] you can play an important role in realizing the dream that humanity can be saved from poverty, curable diseases, prostitution, discrimination, violence and all other

ills that afflict it (Silva Hernández et al., 2011, p. 131). On a global level, then, Cuban youth must be moral models and agents of change.

The *Hombre Nuevo* (New Man) has been the prototype for this moral model, upholding a moral stance against capitalist greed and domination, fighting against those who challenge the Revolution and contaminate the *pura cepa* of Cuban identity with anti-values. However, unlike the *Hombre Nuevo*, the *Hombre Novísimo* (The Ever Newer Man) battles an enemy of ambivalent status in Cuban society – one that is condemned but also marketed by the state; one that is resented and simultaneously desired by the majority of Cubans; one that symbolically or psychologically conflicts with Cuba’s *pura cepa* (Frederick, 2012). This contemporary “anti-value” foe takes the form of “pseudo-culture” and “anti-culture,” becoming that which is motivated by money and individual gain, rather than reflecting the collective, solidary society.

Solving world problems of overconsumption, poverty and violence is not left solely to Cuban young people; culpability for problems in the “Third World” is placed firmly in the hands of former European colonialists. The textbooks assert, from Cuba’s position of moral authority, that nations that benefitted from exploitative colonial relationships hold an “historical responsibility” (Silva Hernández et al., 2011, p. 109) to assist underdeveloped nations in diversifying away from economies characterized by dependent monocultures.

The Global Citizen in Contemporary Cuba

School textbooks, then, construct a coherent, compelling image of Cuba’s place on the world stage. Identified with the Third World, but circumventing its most painful social realities by rejecting capitalism and prioritizing social justice; developing models of citizenship entail internal and international solidarity, while rejecting capitalism and neo-imperialism, particularly through resistance to the United States.

Young Cubans, however, do not receive these messages in a totalizing vacuum. Within the classroom, scarce resources and young teachers, whose accelerated training attests to the difficulties of retaining well-qualified professionals in state occupations (Smith, 2015, p. 198), raise questions about the interpretation of the Cuban revolutionary project as providing for the material needs of its people and serving as an exemplar for social justice. Beyond the classroom, Cuban reality is worlds away from that experienced in the late 1980s, when the Cuban civic education syllabus was designed, an era perceived by today’s youngsters as a “flourishing time” (27, Havana, RS). The difficult years of the 1990s and early 2000s, along with the increased marketization introduced to keep the country afloat, have led to a challenging and disorienting conjunction of circumstances for young Cubans educated in inflexible moral absolutes (Blum, 2011; Dawley-Carr, 2015; Smith, 2015): a state wage that, as recognized by Raul Castro, no longer meets basic needs; a double currency and liberal market initiatives that have caused the return of marked inequalities;

and increasing contact with the foreign (capitalist) world, as a result of the growth of tourism.

Young Cubans interviewed on values and civic behavior referred repeatedly to the difficulties they face reconciling their current reality, either personal or national, with an intransigent revolutionary past that textbooks and curricula hold up as a standard for the present. When Cubans talk about the past, they frequently mention “antes” (before). For Cubans born before the Revolution, “antes” is clearly before the Triumph of the Revolution in 1959; for younger Cubans it often refers to before the fall of socialism in Europe, and more recently, Cubans are now making a reference to “antes de 17D,” or before the 17th of December, 2014, the beginning of diplomatic relations with the United States. The timeline for a Cuban’s referent “antes” can be telling in one’s understanding of their relationship to the Revolution. Tasks in textbooks requiring students to speak to family members about conditions during their youth to elicit positive comparisons with current conditions have become anachronistic, as those whose parents’ young adulthoods were passed during the 1970s and 1980s will report higher standards of living, more opportunities and greater social equality.

The significance of these differing temporal perspectives is not lost on Cuban youth. As one young musician (20, Havana, RS) perspicaciously observed, hunger, repression and inequality experienced under the pre-revolutionary Batista dictatorship, and the subsequent provision of free universal healthcare and education, created such intense loyalty to the Revolution that some older Cubans see its failures “through rose-tinted glasses.” Another young man (27, Havana, RS) simply claimed that “if they had lived our reality they would have thought the same way” (an argument consistently employed in reverse by older Cubans criticizing youth), demonstrating how, for many, life experience has to some extent overwritten civic education’s clear moral messages.

This does not mean that young Cubans reject the values promoted in civic education; they featured significantly in interviewees’ descriptions of a good Cuban, even if those espousing revolutionary values frequently dissociated them from political assignation (Smith, 2015, p. 265). The value of internationalism, however, which is significant in the school texts, was conspicuously absent in depictions of a good person, due possibly to the way in which internationalism is tied in the textbooks to glorious historical figures and may be seen by some as not pertinent to contemporary Cuban reality. Asked to identify models of a good Cuban, one relatively politically orthodox interviewee (27, Havana, RS) stated, “one way is to talk about Che and Martí, but that’s just romanticism.”

The “antes” of the 1970s and 1980s was, in many ways, Cuba’s most internationalist period. Close economic and cultural ties with the Communist Bloc meant that many educated Cubans travelled abroad for work and study – to the envy of many younger Cubans. In terms of internationalism, these were the years of Cuba’s participation in the Angolan Civil War and consequent influence on geopolitical changes, such as the ending of apartheid in South Africa. Interviewees harked back to this period as a time when one could make a meaningful contribution to the revolutionary project nationally and internationally; motivations were both philanthropic

and pragmatic, the altruistic and personal benefits of the period were often equated. One (28, Havana, RS) justified her decision to sign up in 2000 for the program of intensive training for young teachers as a “substitute for going to Angola.” Another interviewee (27, Havana, RS) discussed differences in generational outlook in relation to subsidies that allowed “a standard of living equal to any developed country” and the chance to “go to Tropicana,” alongside opportunities for travel and “the chance to construct, to participate in many things: mobilizations.” Despite the growth of globalization, young people’s formative experiences have occurred in a Cuba increasingly dissociated from a global outlook.

Internationalism of the 1990s and 2000s

The early 1990s in particular saw a marked fall not only in standards of living but also in engagement with the rest of the world. Cuba’s socialist allies were on a path of “transition” and assimilation into the “logic” of capitalism, leaving Cuba economically isolated and swimming against an apparently unstoppable ideological tide. The U.S. tightened its embargo, and Cubans began to turn inwards, both as a nation and in terms of internal social cohesion, as economic inequality grew and attention turned to basic survival. This was seen by many as the root cause of the perceived moral deterioration of Cuban youth: “If the state can’t guarantee everything, the first responsibility has to be to your family – to guarantee your family what they need and also guarantee yourself what you need” (27, Havana, RS).

In this new era of pragmatism, young Cubans recognize that their education – its high academic standards and emphasis on cultural, political and personal identity – renders them an invaluable national asset. One young journalist stated that Cuba’s greatest advantage, lacking significant material resources, is its human resources, and argued on that basis for opening up internal Cuban structures to greater personal initiative and control (27, Havana, RS). The “resource” of well-educated, culturally and politically conscious young Cubans, however, is replacing the decimated sugar industry as Cuba’s greatest export.

While this export partially takes place through medical and educational internationalism, more and more young Cubans are converting *themselves* into an export, leaving the country not only for economic betterment, but also the opportunity to exercise the professions for which they have been so well trained but which, in the context of the dual currency, no longer pay a living wage. One starkly explained that “the problem is that everyone is leaving” (29, Havana, RS); this being particularly acute among the most educated, who might be expected to have internalized most fully the clear ideological message of patriotism and self-sacrifice integral to Cuban civic education, with former students of the prestigious Lenin school claiming that the vast majority of their classmates had left Cuba. Cuba’s young people are increasingly becoming global citizens in more than just outlook, jettisoning the altruistic image promoted in education of national emissaries, free of self-interest, working

beyond *la patria*, to take advantage, as educated global citizens, of the opportunities capitalist nations are seen as offering.

Globalizing Cuba

The gradual introduction of market mechanisms has created both opportunities and inequalities and this will surely affect the evolution of Cuban schooling to more practically prepare students for work. *Cuentapropismo* (self-employment), legal and illegal, has become more the norm than the exception; some former black market jobs are now legal and other new areas of employment are opening up. For example, one young man who graduated from the prestigious Lenin school is a chemical engineer, earning around \$20 per month, while also editing and translating for a Mexican publishing company for around \$150 per month (in Mexico this job would pay nearly two thousand dollars). As more work centers gain internet access (still rare in homes), companies around the world are outsourcing to Cuba, exploiting a population used to earning little. The schooled revolutionary values of hard work and sacrifice are being experienced in a context that reflects Cuba's critique of other capitalist countries, where people labor without dignity.

This *pluriempleo*, or having multiple jobs, is common; interviews suggest that the average Cuban in urban areas, such as Havana or Santiago, maintains her/his State job and freelances, but that navigating both roles is affecting their relationships and general state of wellbeing. Several young people (27–30, Havana, DB) report that their relationships are under stress, with one confiding that he and his wife have put their names in the annual *sorteo*, the online lottery system for Cubans wanting to leave the country. With *pluriempleo* they feel more secure financially, but they say they do not have time to be parents. Hopefully, abroad, Alex says, “We’ll have more opportunity, be compensated appropriately and have children who will not struggle or suffer during their childhood, as we did during the fall of the Soviet Bloc.”

Recent reforms that have relaxed rules on traveling abroad and migration, indicating at least partially globalizing Cuba, are one factor that has influenced for the first time, the population aged over sixty being greater in number than that under thirty, with the under-thirties emigrating more than any other age group, between 28 and 35% annually (ONE, 2012). This mass exodus has caused great concern about Cuba's future, especially in terms of labor and leadership. However, relaxations of visa controls will allow for greater numbers of Cubans to travel and work abroad without making a binary choice between *la patria* and personal development, enabling young people to achieve what many interviewees claimed was their wish: “to leave and to return.” Such temporary migrants may prove invaluable – returning refreshed with new perspectives, along with an appreciation of Cuba's comprehensive social provision and community cohesion. Similarly, this will put them in a position to foster international recognition and collaboration in areas where Cuba education excels, such as biomedical research, sports, and the arts.

A famous verse of Martí’s “*Ser culto es el único modo para ser libre*” (“To be cultured/educated is the only way to be free”), provokes lengthy discussions when interviewing Cuban youth. When asked what “*culto*” means, answers varied from having a formal education and growing from it, to knowing how to navigate society, “not be taken advantage of or be manipulated.” When asked, “Are you educated/cultured?” some gave a definitive “Yes!” while others said, “No. Because I have not been allowed to reach my potential. We have an internal embargo in this country, and that has to be lifted along with the external embargo with the United States.” The term “*libre*,” was defined as free in “one’s ability to think and critique society” and also as “access.” Access was understood as “access to information, travel and communication.” When asked, “Are you free?” answers were mixed and hesitant. Young people felt that their minds were free, that they were resistant to manipulation, yet restrictions remained on access. A librarian and leader in the Young Communists insisted that the verse must be understood, as it was written, as contingent upon prosperity.

*Being good is the only way to be happy.
Being cultured is the only way to be free.
With human nature in general,
however, to be good, one must prosper to be good.*

Interviewees posed their own questions: “Do we not work hard? Do we not know what sacrifice, hard work, and patriotism are? Then why have we not prospered? Are we not ‘*buenos revolucionarios*’ (good people)?” Another interview stated, “One must prosper to be good. Why have we not prospered? Martí says that ‘being good is the only way to be happy. We need prosperity’” (female, 18, Havana, DB). The young and educated are determined to find this prosperity, if not in Cuba then outside of the island, either working, traveling or living between the two, becoming more globally “cultured” and “educated.” Meanwhile, the socialist ideological incubator of Cuban schooling remains intact: at odds with the working reality in which these Cuban children will be inserted.

Conclusion

After 1989, socialist norms faced erosion and a new ideological fortress had to be built before the next battle. Nostalgia takes hold when facing an identity crisis, revisiting one’s cultural roots, the *pura cepa*. Nostalgia is present in all cultures, especially in times of rapid change when one longs for the simplicity and modesty of yore. Distinctive in the Cuban case, however, is that this nostalgic yearning for the *pura cepa* is not simply a feeling of loss, but it has been evoked by the impending threat of a loss – *preemptive nostalgia* for a loss that has not yet occurred.

What was once the image of the progressive *Hombre Nuevo* has now become that of an *Hombre Viejo* (Old Man), as reflected in the ailing and aging Fidel Castro, symbolizing a dying past, old legends and dead heroes (Frederick, 2012). Traditional

revolutionary values of *lucha* (struggle and sacrifice), woven into every speech and every classroom day, have been re-spun to explain the operation of sanctioned and unsanctioned *cuentapropismo* (self employment). *Lucha*, struggle and sacrifice, now frequently refers to resolving possibilities of employment for financial gain and stability where the state has failed. Sacrifice is an inherent part of the market struggle (trying to find a job and earn enough to live on) and the unknown future (will that job be found?).

In essence, young Cubans' expectations and demands are high. They are not content to see themselves simply as the most socially just poor nation, arguing that, "the very development of Cuba, fundamentally educational development, makes us compare ourselves with countries like yours... We make these comparisons because we have an educated mentality" (male, 26, Havana, RS). Situated in gradually globalizing Cuba, young people increasingly reject the binary of Cuban exceptionalism confronting homogenized capitalism. They want "to leave and to return"; they consistently state a wish to maintain the socialist model and value highly its social provisions, but argue at the same time for greater political and economic freedoms; they critique the necessity of choosing between making a social contribution and receiving a decent wage. As one explained, "just about everyone is going after money and not after spiritual growth and I would really like to be able to achieve this and to achieve economic wellbeing too" (female, 30, Havana, RS). Such present-day beliefs challenge school curricula that instead emphasize idealistic notions of citizens' labor contributions, personal sacrifice and service without acknowledging low state salaries and citizens' consequent need to participate in the informal economy.

To be "*buenos revolucionarios*" and to prepare Cuban youth for global citizenship, market changes and the reunification of Cuba's two currencies will be pivotal in adjusting salaries to be commensurate with the cost of living, alleviating families of ongoing stress and uncertainties, and retaining young people on the island. A changing political landscape holds promise for the U.S. re-establishing close ties with the island nation. With these closer ties, however, and increasing private enterprise and market mechanisms, come well-understood threats to the coherence of Cuba's ideological message of socialism, and education will need to incorporate young Cubans' reality if it is to create a generation of global citizens ready to take that message to the world.

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Part III

Practices: Enacting the Future in Local Contexts

As the previous sections of this book illuminate, globalization underscores the tension between the viscous and glacial response of schools to meet the demands of the twenty-first century and the supersonic pace of the social, political, economic, and cultural transformations taking place all around the world (Gardner, 2004; Carolan, Natriello, & Rennick, 2006). Indeed, in a survey of 32 research studies on educating for twenty-first century global education, Voogt and Pareja Roblin (2012) lament the large gap between “intentions and practice” (p. 299). In particular, they cite the paucity of research on how schools and teachers are implementing twenty-first century approaches to curriculum, instruction and assessment in classrooms and to what effect. This section offers concrete examples of how schools and school systems enact into practice the goals of a more twenty-first century globalized education within a range of contexts – from socio-economically and racially diverse public schools and systems to highly selective independent ones. Yet, these examples also reveal that the scope and pace of change varies from school to school, system to system, country to country.

As educators and education systems attempt to shift paradigms and change mindsets, we must continue to look critically as to whether it is possible to cultivate ‘global citizens’, ‘global literacies’, and ‘global learners’ that transcend class and political orientations, system organizations and leadership styles. Approaches featured in this section include the use of frameworks to form both professional learning communities and to establish common language around what it means to cultivate global capacities in students; the power of leveraging networks and personalized learning approaches to embed interactive communications technology (ICT) more strategically and across disciplines in classrooms; the critical importance of integrating indigenous and diverse populations in collaborative learning spaces; and the essential act of rupturing boundaries between school and the world to engage in authentic contexts and to honor multiple perspectives in schools.

As we argue for the importance of educating for global capacities, we must acknowledge that there is no shared definition of what these capacities are and no single “globalized approach” to doing so. This may be a good thing, suggesting the

generous elasticity of, and possibilities for, what it means to educate for the future. Countries such as Canada, Finland, China, Australia, Singapore and Thailand, featured in this section, offer different levels of latitude in how individual schools, school systems, and school networks enact mandates, priorities, and initiatives, such as the use of ICT in classrooms or high-stakes testing and accountability, all in service of cultivating global learners. Thus, even though approaches to global education appear country-specific, the case studies and practice-based models provided here demonstrate that there are common, if not universal challenges, strategies and inspirations for enacting twenty-first century intentions into in-practice realities around the world and that we have much to learn from one another.

In Chap. 16, “Teaching Global Citizenship Education with Empathy Model and Experiential Learning: Case Study of Action Research on Developing Empathy in a Hong Kong Secondary School,” Eric K.M. Chong links the local to the global by analyzing how global economic restructuring affects local lives in Hong Kong. We learn how student levels of empathy and action are cultivated through both experiential and authentic contexts coupled with pre-experiential, simulation-based approaches. His study finds that a predisposition toward understanding the plight of others leads to greater levels of empathy in students and a desire to take action in the world as students take on the role of the other.

In Chap. 17, “Reimagine Lakeshore: A School Division Change Initiative for the Twenty-First Century,” Jacqueline Kirk and Michael Nantais share how a twenty-first century school change initiative was enhanced through professional learning communities (Fullan, 2007; Fullan & Hargreaves, 2012) and how it deepened teacher perceptions of student progress. Their study underscores the value of university/school partnerships to enable change (Lieberman & Miller, 2001). Importantly, this chapter offers insight into the power of design thinking (Rouse, 1991) to engage and mobilize education stakeholders to re-envision approaches to teaching and learning for the twenty-first century in order to enable systemic change that helps prepare students for the global reality.

In Chap. 18, “A Case Study of Curriculum Innovation for Global Capacities: One Response to the Call of the Twenty-First Century,” Clayton Massey describes what happens when a school in Western Australia commits itself to cultivating twenty-first century global capacities and engages all stakeholders to acknowledge the challenge of educating for the future, participate in a design-based approach to solve it, and transform curriculum so that it is more problem-based and real-world focused. Here, we see how a school reconciles concurrent and seemingly conflicting forces that work simultaneously upon, and sometimes against, student readiness for the twenty-first century, including: (1) advances in technology to connect, interact with, disrupt and personalize instruction; (2) globalization of curriculum that transcends subject-specific knowledge and privileges skill-based competencies; (3) an emerging educational reform agenda that privileges direct instruction over globalized, skill-based, learning approaches.

In Chap. 19, “MEDIATION: Flexible Literacy Terms, Communication and ‘Viral’ Learning in 9–12 Classrooms,” Natalie Davey speaks to the power of common language around global/media literacy or what Jones, Clark & Enriquez (2010) call

“literacy flexibility” which, she argues, is the universal responsibility of all educators. Her research suggests that cross-discipline “accessible literacy labels” help “bridge gaps between subject areas and departments that are traditionally considered disparate, making cross-curricular media literacy training a viable possibility to equip students for their very present future” (p 13). Importantly, her study describes the work of a teacher-led cohort in a diverse, metropolitan school district in Toronto, Ontario that had identified a need – in this case, the critical importance of a cross-disciplinary, shared vocabulary around media literacy – and worked collaboratively to act on its implementation. The work speaks to the power of university/school partnerships and the relevance to schools and districts that struggle with how to cultivate ICT literacies in teachers, students and parents in heterogeneous populations with limited resources.

Chapter 20, “A Prototype Twenty-First Century Class: A School-wide Initiative to Engage the Digital Native,” Hui Yong Tay demonstrates how curriculum can be reconfigured in ways that enable personalized instruction and differentiation that is more aligned with how students use technology to navigate their own learning. In this case, school-wide use of iPads supporting a more porous and flexible curriculum, helps deepen student engagement and knowledge-building.

Chapter 21, “Preparing Students for a New Global Age: Perspectives from a Pioneer ‘Future School’ in Singapore,” Wen Chee Chung and his colleagues introduce us to one of Singapore’s five Future Schools, so named because it engages in innovative curriculum specifically targeted to meet the needs of the twenty-first century. This chapter offers compelling examples of how one high-performing school recreates the school environment so that it ruptures boundaries between notions of “inside” and “outside of” school and offers more authentic, real-time contexts in which students learn both independently and collaboratively so that they are “active producers of knowledge.” Here, school leaders re-envision what school is and can be – a place for research or for service learning; a space for iterative investigations into real-world challenges; an institution within an institution for teachers to share and publish learning about their practice; and a global site to convene scholars, students, and the greater community.

In Chap. 22, “Problematizing ‘Global Citizenship’ in an International School,” Emily B. Clark and Glenn C. Savage illuminate the nebulous nature of the term “global citizenship” and what happens in a single, independent affluent school in Northern Thailand when teachers are challenged to embed more of it into their practice. Even in a school whose mission specifically focuses on global citizenship education and uses the IB curriculum (which, by design, privileges global education), there is still confusion among key stakeholders about what the term means and how it is enacted in practice. This suggests that as more and more traditional public/government schools around the world embed “global education and citizenship” into their missions and curriculum, the confusion could magnify unless educators and key stakeholders come to common language and alignment.

Chapter 23, “Being Open to the Other: K-12 Teachers’ Multimodal Reflections on Hong Kong Curricula” Zheng Zhang and Rachel Heydon demonstrate the power of collaborative artifact-making to yield collective meaning-making around what it

means to teach and learn in the twenty-first century when teachers must reconcile the oppositional theoretical and actual forces that wedge themselves between intended and enacted curriculum. It suggests a divide between the experiences of in-service teachers and the anticipated experiences of student teachers who use different modes and forms of expression to take on imagined and real multiple perspectives.

In Chap. 24, “A New Wave of Learning: Get Started with Innovation!” Tiina Korhonen and Jari Lavonen examine how schools in Finland at the grass-roots level grow into strong networks to help cultivate information and communication technology (ICT) skills in teachers and students. The authors share compelling details and insights about the Innokas Network (IN) – an ecosystem of sorts that depends on multiple stakeholders for mutual support and sustenance to learn and grow together as they develop ICT skills in themselves and their students. The authors find that when IN members engage in purposeful work; access the insights, energies, and talents of all key stakeholders, both within and beyond the classroom; and constantly research and learn from their own experiences, they can help cultivate twenty-first century skills in themselves, their students and the larger network of community, family and school. This review of the work of the IN is instructive for all educators who wish to understand how cultivating twenty-first century skills, especially ICT along with collaboration/research skills, can be accomplished at scale.

The nine chapters in this section provide just a glimpse into the real work that schools and systems in six countries do to enact into practice what it means to educate for twenty-first century global capacities. However, these studies may inspire more questions than they answer: How, if there is no common agreement over which capacities students need for full participation in the world, can this work scale globally, or even should it? What happens when the concept of “school” no longer means a place we go to but instead a frame of mind we adopt as learners in the world? Are these initiatives too incremental, too country-specific to envision true transferability to different cultural and socio-political contexts at a pace that reflects the speed of change outside the classroom? What does it look like when all people, regardless of national affiliation, take responsibility for educating all learners as global citizens?

We hope this book will bring us closer to our shared goal of cultivating true global citizens, fully prepared to participate in the world – across space, time, and place – and in harmony.

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Chapter 16

Teaching Global Citizenship Education with Empathy Model and Experiential Learning: Case Study of Action Research on Developing Empathy in a Hong Kong Secondary School

Eric K.M. Chong

Abstract This study investigates how a Hong Kong Special Administrative Region's secondary school teacher developed and implemented global citizenship education by adapting a spiral teaching model of empathy, experiential learning and classroom-based inquiry learning activities in two teaching cycles. One key aim of Hong Kong's education reform is to prepare students for challenges in a globalization age. This case study used action research on two different cohorts of about 36 students in two school years' teaching cycles (2013–2014 and 2014–2015). The students were taught by a secondary school teacher with an aim of cultivating their empathy through experiential learning in authentic contexts. The author participated as a researcher who observed and facilitated the evaluation. The learning topic is 'understanding poverty' in this interdisciplinary junior secondary PSHE subject. The findings reveal that through an adaptation of empathy learning model, even junior secondary school students can develop perspective-taking empathy with experiential learning and classroom-based inquiry learning activities. Also, whereas the first teaching cycle started with experiencing different contexts of poverty before having classroom inquiry learning activities, the second teaching cycle started with exposing students to multiple quantitative and narrative descriptions of poverty and to investigate stories of those affected by poverty before having experiential learning of different contexts of poverty. There was a higher level of empathy by those students who were exposed to prior background and conceptual understanding before engaging in authentic learning. But the two cohorts of students could achieve the learning objectives of seeing through others' perspectives, making imagined

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connections between their lives and the lives of others who are less fortunate, linking the local and the global by analyzing how the global economic restructuring affects the local lives, and fostering their willingness to take actions to help those less privileged. The findings offer implications for understanding how to implement a teaching model of empathy with experiential learning.

This case study describes a Hong Kong Special Administrative Region (hereafter called Hong Kong SAR) secondary school teacher who implemented an empathy teaching model for the teaching of global citizenship education on two different cohorts of students over two school years in a junior secondary school through the Personal, Social and Humanities Education (PSHE) learning area of Life & Society, which is an interdisciplinary curriculum that contains learning themes such as interpersonal relations, social systems and citizenship, and economic resources. This study suggests that through an adaptation of an empathy-oriented teaching model that incorporates experiential learning to different contexts of poverty and classroom-based inquiry learning activities, even junior secondary school students can develop abilities to take on multiple perspectives, make imagined connections between local issues of poverty and the global ones, as well as take actions in their daily lives to help those less fortunate, as evidenced in their post-experiential learning whole class sharing. This study also uncovered how giving pre-experiential learning tasks to build students' understanding of the concept of poverty is more effective than starting from concrete experiences right away. The second school year's adapted empathy model, which starts with more contextual understanding followed by experiential learning activities, was found to be useful for the students to develop the skills to understand different people and to take on multiple perspectives in the future, which is important for a globalized age (CDC & HKEAA, 2007). Also, students could make connections between local and global poverty after gaining first-hand exposure to experiential learning activities, as evidenced both in their analysis of how global economic restricting affects local poverty levels and in their learning journal reflections. According to Krznaric (2008), "perspective-taking empathy concerns the ability to step into the shoes of another person and comprehend the way they look at themselves and the world. It allows us to make an imaginative leap into another person's being" (p. 10). The findings of this case study offer implications for understanding how to implement global citizenship education through a spiral teaching model of empathy in a junior secondary school PSHE subject area, and in particular for educators who aim at engaging learners in strengthening the links between local and global.

Hong Kong's Civic Education and Globalization

During the days as a British colony in the Far East, civic education in Hong Kong schools was commonly seen as depoliticized and as emphasizing moral education (Ngai, 2005; Tse, 1997). This depoliticized version of civic education has continued since the establishment of the Hong Kong SAR after the handover of sovereignty back to China in 1997. However, since 2000, the Hong Kong SAR Government tried to re-depoliticize, i.e. taking away the learning about politics in the official curriculum guidelines for schools, civic education by promoting a form of Chinese cultural national identity to promote national identification to avoid controversial political issues in civic education. This was largely an informal curriculum, although some schools adopted a formal civic education curriculum. It also emphasized moral training by involving the inculcation of traditional Chinese virtues (Leung & Ng, 2004). Thus, in the 2001 education reform movement, Civic Education was replaced by Moral & Civic Education and this meant that content related to politics, democracy, and human rights were substantially reduced (Leung & Yuen, 2012). In short, under the political imperative of cultivating among Hong Kong SAR citizens a sense of Chinese national identification after the return of sovereignty to China, more works on National Education which aims at cultivating Chinese national identification were to be included (Vickers, 2005). But on the other hand, as part of the educational reform, aiming mainly at equipping youth to face the competitive, knowledge based, global economy, a new compulsory subject for senior secondary students (S4-6), Liberal Studies (LS), was introduced in September, 2009 (Curriculum Development Council, 2001; Education Commission, 2000). The intention of Liberal Studies is to help develop students in different ways such as deepening multiple perspectives, value judgments, lifelong learning and fostering future career development. It also intends to enable students to understand the contemporary world and its pluralistic nature by helping them to make connections among different disciplines, to examine issues from a variety of perspectives, and to construct personal knowledge of immediate relevance to themselves in today's world (CDC & HKEAA, 2007).

However, with regard to the nationalistic efforts by the government, great turmoil erupted in Hong Kong in response to the proposal by the government to implement a new Moral and National Education (MNE) curriculum in all government and aided schools, which cover the majority of schools. In Hong Kong, this MNE curriculum has a particular aim of cultivating a Chinese national identity and patriotic feeling among the students. From July to September 2012, mass gatherings and street demonstrations occurred, staged by parents and students who were enraged when they found out that teaching materials and suggested teaching plans by the official education website did not give fair representation of China or give freedom of opinion to students in understanding their identity as Hong Kong citizens (Ngai, Leung, & Yuen, 2014). In fact, teaching kits of similar biased nature have been used in some schools since the handover (Leung, 2012). The proposal of implementing a

compulsory MNE curriculum was withdrawn after intense civil protest in the autumn of 2012.

Meanwhile, there has been increased anxiety among many Hong Kong people about their relationship with mainland China. Conflicting values and mutual distrust, particularly over issues of human rights, democracy and autonomy, have fomented demonstrations and protests on a monumental scale in recent years (Yep, 2007). In addressing how to move forward with civic education in Hong Kong SAR under a globalized age but with a political need to build up a Chinese national identity, Ngai et al. (2014) contend that civic education in schools should include political education, and opportunities to appreciate multiple civic identities, including those at the local, national, and global levels. Furthermore, programs for civics and citizenship should have a strong place in classroom learning and be supported by other learning experiences in the school curriculum. Chong, Leung and Yuen (2015) also argued for a type of civic education that aims at cultivating politically literate, critical-thinking and actively-participating citizens. Finally, Chong (2015) found that global citizenship education has developed from understanding responsibility to challenging injustice in the official secondary school curriculum guidelines and this could be a direction for the future of global citizenship education. This study attempts to fill in the gaps about global citizenship education by providing a case study on how empathy learning and experiential learning can contribute to student's sense of empathy and action.

Action Research, the School and Subject

The school under action research study is a government-subsidy school, sponsored by a Christian church established in Hong Kong over 100 years ago. The school has been providing religious and social services to the local Chinese community. The school ethos is basically open and receptive to new teaching ideas and methods, and teachers are usually given autonomy in curriculum leadership and in teaching unit designs. Teachers usually design their curriculum in alignment with the school mission and values in providing holistic education aligned with Protestant beliefs.

In this case study of global citizenship education, one Form 1 class in each school year (2013–2014 and 2014–2015) were the foci for this action research study, wherein that Form 1 class teacher acted as a teacher researcher who implemented two cycles of teaching global citizenship through an empathy model, and she was observed by the author of this paper who is the researcher. The school actually joined an Oxfam (Hong Kong) funded project together with two other secondary schools which adopted action research on the implementation of an empathy teaching model and experiential learning activities. Action research is “a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these prac-

tices are carried out” (Kemmis & McTaggart, 1988, p. 5). It is employed in this study in order to improve education and is geared towards *self*-improvement (Cross, 1987). The “participant of action research” refers to the teacher in charge of a Form I class in each school year and the researchers, including the author, come from a teacher training institution in Hong Kong SAR. The two Form I classes enrolled students of about 13 years old and thus they are junior secondary school students. These two classes generally have students of average academic capability, and most students are competent in communicating and learning in English. The subject in which this action research project took place is junior secondary Life and Society while the teaching topic is “understanding poverty”, which consists of nine lessons and four experiential learning activities (hereafter called “First teaching cycle”) and nine lessons and five experiential learning activities (hereafter called “Second teaching cycle”) respectively. The medium of instruction was English while those experiential learning activities outside the schools were mostly conducted in spoken Cantonese to match the common language of the people with whom the students interacted.

Global Citizenship Education, Empathy Learning

Citizenship education is increasingly emphasized in this era of globalization in which different parts of the world are drawn closer together. What affects one part of the world easily has ramifications on other parts of the world. Diverse allegiance to one’s community, culture, nation and global context helps shape the idea of global citizen (Clough & Holden, 1996; Dower & Williams, 2002; Heater, 2004; Steiner, 1996) and thus has implications for citizenship education. Indeed, there is also a rich discussion about what is global citizenship and global citizenship education (Anderson, 1979; Aronson, et al. 2008; Banks, 2004; Davies, 2006; Davies, Evans, & Reid, 2005; Dower & Williams, 2002; Falk, 1994; Kymlicka, 2003; 2004; Lee & Leung, 2006; Moon, 2010; Myers, 2010; Neubauer, 2007; Pashby, 2012; Pike, 2008; Schattle, 2008; Schultz, 2007) and how to teach global citizenship education (Bates, 2012; Cabezudo, Carvalho da Silva, Demetriadou-Saltet, Halbartschlager, & Mihai, 2010; Clough & Holden, 1996; DeJaeghere, 2002; Dekock & Craig, 1989; Evans & Reynolds, 2005; Noddings, 2005; Pike & Selby, 1988; Po, Lo, & Merryfield, 2007; Rapport, 2010; Steiner, 1996). In Hong Kong SAR, even the controversial Moral and National Education curriculum adopted an expanding, concentric circle model of multiple citizenships which starts from the personal and develops outward to the family, and then to local, national and global forms of citizenship (CDC, 2011). This is similar to the Heater’s (1990) Cube of Citizenship model that identifies multiple facets of citizenship.

This action research investigates how one teacher adopted an empathy-based teaching in her two years of teaching the same topic of “understanding poverty”.

The intent of empathy education is to move people beyond feeling just pity for others. Empathy education intends to help people see from others' perspectives so that they understand the feelings of others (Krznic, 2008). Students are guided to understand the relationship between an external phenomenon and themselves. The empathy model used in this action research study could be referred to as thinking-feeling spiral, which was developed by Joan Skolnick, Nancy Dulberg and Thea Maestre (2004). This model aims at helping students to develop empathy, to experience shared emotions, to understand the feelings of others, and to take on others' perspectives. It includes the following four teaching steps: (1) Making concrete and personal connections; (2) Inquiring and imagining; (3) Investigating content resources; (4) Acting "as if".... The spiral of empathy learning can be conceptualized in relation to specific learning aims, teaching materials/methods, and questions that may be asked in teaching.

Indeed, the four learning steps in the empathy model of thinking-feeling spiral (Skolnick, Dulberg & Maestre, 2004) are not one-off in their operation; rather, they act as a spiral in which when the learning comes to Step 4, "Acting as if taking other's perspectives", students are supposed to reflect and apply what they have learnt in another spiral of learning cycle, which starts with "Personal concrete connection" again. Thus, this spiral of empathy learning contributes to achieving the learning aims of affective engagement and understanding other's perspectives. In this action research, the first teaching cycle (2013–2014) starts with experiential learning that gives rise to personal concrete connection, while the second teaching cycle (2014–2015) starts with much more pre-experiential classroom inquiry learning tasks for students to learn about poverty before they engage in experiential learning outside the classroom. The two teaching cycles are discussed below with reference to the adaptation of the empathy learning model of a thinking-feeling spiral (Skolnick et al., 2004), which is explicated below.

The Action Research Teaching Cycles

First Teaching Cycle (2013–2014)

The school tried out the first teaching cycle of empathy in the school calendar year of 2013–2014, and this teaching cycle was conducted between January and March in 2013. The school used an inductive learning method (Michalski, 1983) by adopting experiential learning of personal concrete connection at the beginning of a learning unit on local poverty. Next, the unit built upon students' understanding of abstract concepts and definition of poverty through inquiring, imagining, and investigating content resources via classroom-based inquiry learning activities. Experiential learning helps students to develop their authentic understanding about the subject matter (Kolb, 1984). It is a form of learning that emphasizes experience as the source of learning and development (Kolb, 1984). When students engage in

Table 16.1 Types of poverty and experiential learning activities in first teaching cycle

Collaboration NGO partners	Types of poverty	Learning activities
Oxfam (Hong Kong) Interactive Learning Center	Sub-divided flats, poor family	Workshop, drama, group discussion
Comprehensive Social Security Assistance (CSSAA)-Alliance	Residential buildings' rooftop flats and sub-divided flats	Site visit, interview residents who live on social security assistance
Mission to New Arrivals	Residential buildings' rooftop flats, homelessness	Site visit, experiencing living on the streets
People's Service Center	Elderly in the public housing	Site visit, delivering vegetables to the elderly

the real-life learning contexts, they tend to retain knowledge for longer periods and to develop meaningful skills. Also, Kolb (1984) contends that students would change their conception or opinions through experience. McGill and Beaty (1996) also argue that the power of learning in action comes from learning through experience to change rather than to repeat simply previous patterns.

Yet, before the students reached out to the community for experiential learning activities, the teacher gave them two pre-learning tasks requiring them to obtain newspaper cuttings about real life stories and images about poverty which aim at stimulating and engaging students' interest on the topic of 'understanding poverty'. Students collected news stories and drew pictures of what they thought about poverty. Through a liaison with four non-governmental organizations that aim to promote awareness about different dimensions of local poverty in Hong Kong (see Table 16.1), the teacher arranged the students to join four experiential learning activities to understand different types of poverty in local contexts in Hong Kong, namely, homelessness, subdivided flats, rooftop flats, and the elderly poor living in the public housing estates.

Making Concrete and Personal Connections – Experiential Learning Activities

All the experiential learning site visit activities related to different contexts in Hong Kong. They were aimed at helping students make concrete personal connections to issues of local poverty. The students took part in these experiential learning activities in groups because of their large class size and because of the difficulty of ensuring everyone could join every site visit. Yet, students could join at least one type of site visit. The students also had a booklet or learning journal which contained basic information and learning tasks about different types of poverty and some questions for them to conduct inquiry during the site visits. Students were required to complete the learning tasks and record their reflections which were then posted in the school's exhibition hall at the end of the first teaching cycle. Table 16.2 provides elements of the experiential learning students encountered during the various site visits.

Table 16.2 Types of poverty and experiential learning activities in the Second Teaching cycle

Collaboration NGO partners	Types of poverty	Learning activities
Oxfam Interactive Learning Center	Sub-divided flats, poor grassroot family	Workshop, drama, group discussion
Concerning Social Security Assistance (CSSA)-Alliance	Residential buildings' rooftop flats and sub-divided flats	Site visit, interviewing residents who live on social security assistance
Mission to New Arrivals	Homeless – sleeping in the streets	Site visit, experiencing living on the streets
People Service Center	Elderly in the public housing	Site visit, delivering vegetables to the elderly
'Ming Gor' Chinese barbeque food store	Poor people in a community of urban decay	Site visit, interviewing the shop owner and the poor

As part of the process, the teacher arranged first, for all students to attend the interactive learning workshop organized by Oxfam (Hong Kong) as an introductory activity. The interactive workshop, using a form of participatory drama learning (O'Connor, 2010), inquired into stories of Hong Kong's poverty. Students decided the actions of the actors and engaged in group discussion and reflection — using reflection as a “means for reliving or recapturing ... experience in order to make sense of it, to learn from it” (Wade, 2000, p. 20). Students were put into a simulation that involved a poor household in a sub-divided flat and they enacted the dilemmas faced by local poor people under the pressures of increasing inflation and decreasing wages. During the dramatic enactments, students were given opportunities to decide on key decisions that actors should make during critical moments. In the post-drama sharing session, student empathy was aroused when they engaged in a discussion on the connections between their experiences during the simulation and their own understanding of poverty in Hong Kong. This simulation also invited students to imagine the implications of the social effects of economic changes on the poor.

For the visits to the rooftop flats of residential buildings, students were arranged in small groups to visit different types of rooftop flats, which were built with unstable metal cardboard or concrete. The legality of such rooftop flats was certainly in doubt, but there was a lack of law enforcement throughout the decades. The students were trained by teachers in advance to craft questions to ask the residents there. During on-site observations, most students tried to comprehend what they saw on the rooftop by asking questions and observing the environment. After gathering the interview data and on-site observation notes in different locations, the different student groups came together and shared what they observed in different locations to the whole group, along with the facilitator of the CSSAA in their center. Through sharing with each other, students learnt that long-term illness, prolonged periods of

unemployment, lack of updated working skills, and family problems are some possible reasons behind why people live in the rooftop houses. This engagement with residents in authentic settings caused most students to feel that they should see the world from the perspectives of those who are disadvantaged so that they could understand their situation more deeply and authentically. Some students wrote in their learning journal that from then on, they should care more and understand more about poor people. Also, during the post-teaching cycle interviews with a sample of students, the researcher also heard that the engagement experience with the disadvantaged enhanced their understanding of the ways of life of those in poverty.

For the group who engaged in experiential learning by observing the lives of homelessness, such as those sleeping on the streets, their process was equally as intense: students spent half an hour sleeping on the streets during the day to get a sense of what it feels to be homeless, and to observe the reactions of passers-by. This activity was intended to help the students create personal connections with the homeless. Immediately after the activity, the students verbally shared to the whole group at the NGO center that while some passers-by showed sympathy and even asked them why they slept on the streets, some passers-by showed contempt towards their actions, though the students could not tell why. Some students expressed that their experience of the kind of discrimination that the homeless experienced in their daily lives compelled them to be more sympathetic to those who cannot afford a place to live.

For students who experienced poverty faced by the elderly living in the public housing, arrangements were made for them to pick up unsold vegetables after the market was closed in the late afternoon. Under the guidance of the social workers of the People Service Center, students used trolleys to collect several baskets of unsold vegetables and bread from some market stores. Many students said they had no such experience of collecting vegetables before. The students were then taught how to wash and pack the vegetables by the volunteers of the People Service Center. An hour later, the elderly living in the nearby public housings queued up to get vegetables free of charge. The students learnt from the People Service Center that the elderly usually showed up every day to get free vegetables in order to supplement their daily meals. When some students were giving free vegetables to the elderly, a few students took the time to talk with a few elderly on why they came. The students learnt that free vegetables can improve daily diets because the elderly did not have enough money to purchase a variety of food. Also, the students learnt that the rising inflation in recent years had significantly eroded the quality of living of the elderly. In short, it was an effective and authentic experience for the students and allowed them to make personal connections with the elderly, especially to understand their motivations for accessing free vegetables.

Inquiring and Imagining – Classroom-Based Inquiry Learning Activities

After finishing the first cycle of experiential learning activities, the teacher returned to the classroom-based inquiry activities that helped students to inquire about and imagine the lives of others (Skolnick et al., 2004). First, she provided students opportunities to learn about a basic definition of poverty and the different causes of poverty. Next, the teacher introduced the difference between the concepts of absolute poverty and relative poverty, and how to measure poverty by using the Gini coefficient and by requiring students to understand international measures of poverty. The teacher summed up this inquiring and imagining step of the empathy model (Skolnick et al., 2004) by asking the students to reflect on their own feelings about poverty and its impact given the students' authentic experiences in the field. The teacher provoked students to consider the similarities and differences in their understanding of the conditions of the poor by comparing passive definitions of poverty and their own experiences. The researcher observed that students could make comparisons and analyses by aligning passive definitions of poverty with their own experiences during the learning activities.

Investigating Content Resources – Learning About Different Stories

Next, the teacher arranged the students in groups to investigate the content resources related to local poverty by using primary and secondary resources. As part of the empathy model (Skolnick et al., 2004), the teacher shared stories on the effects of poverty on six families in Hong Kong. The students examined these different stories of poverty and offered explanations for personal and local causes of poverty. They also analyzed the local Gini co-efficient and compared it with other countries to determine whether poverty is a serious problem in Hong Kong. Furthermore, students investigated the meaning of poverty in Hong Kong in groups, with equal participation and simultaneous interaction in each group (Kagan, 1994). This occurred because roles such as group leader, recorder, presenter, were assigned and this encouraged students to listen to different perspectives.

Acting as If...Ask Students to Solve Problems

Finally, to help her students extend their perspective of empathy toward others, the teacher asked students what they could do as individuals to tackle local issues of poverty. Students then presented their suggestions via online sharing tools and offered their reflections on their own experiences during the experiential learning activities. They offered empathic perspectives on the people whom they met and suggested ideas for ways to mitigate issues of poverty, such as donating money and clothing. Overall, students put forward suggestions on poverty mainly as a policy

issue (i.e. in terms of what the government can and should do). As individuals, they felt that their only role in alleviating poverty was to donate money. In their reflections and post-experiential learning presentations, students suggested that reducing poverty is primarily the government's responsibility instead of a personal or community-based one.

Reflection After First Teaching Cycle

After the first teaching cycle, the researchers conducted an evaluation with the teacher who applied the empathy learning model. The researcher, while bearing in mind that exemplary entry behavior in qualitative research should be unobtrusive (Glesne, 2006), conducted an in-depth evaluation interview with the teacher, which lasted for more than an hour in order to capture her views on perceptions of the effectiveness of teaching model of empathy, as well as an assessment on what students have learnt.

First, experiential learning was found to be constructive for students to build up their knowledge, skills, values, and attitudes on the topic of 'understanding poverty'. Opportunities to visit rooftop flats, sleep in the streets, or deliver after-market vegetables to the elderly, enabled students to take on multiple perspectives, as evidenced in their presentations and learning journals. Consistent with the aims of empathy learning, students demonstrated their ability to take on the perspectives of others. In particular, the students wrote that they felt sympathy to the poor people, their sense of empathy towards the situation of poor people was enhanced, and they would like the government to take immediate actions to reduce the gap between the rich and the poor. Thus, the students were able to shift the focus from themselves to others and to understand other people's perspectives.

Yet, global causes of local poverty were found to be lacking in students' thinking during the first teaching cycle. It was observed that the students mainly thought in terms of local causes such as migration of industries to China and the changing local economic structure that exacerbated the poverty problem in Hong Kong. However, the students hardly considered that these changes of local industrial locations and economic structures actually originated from the globalization processes of division of labour between different countries. Students could only describe the phenomenon of poverty, but stopped short of analyzing its causes beyond local conditions. The teacher opined that in the second teaching cycle (2014–2015), she would like to ask the students to think about poverty on a global scale, to encourage them to establish meaningful inter-connectedness between personal, local, and global levels, and to challenge them to think about what they could do to alleviate issues of poverty. Another problem that was identified by the teacher was that students usually could only think of the government as being able to address issues of poverty, but very few of them proposed that the people themselves could also take action. Therefore, making the connections between personal actions, local and global poverty informed the direction in the second teaching cycle.

If empathy learning leads to student action, then it was determined by the teacher that the learning cycle of “Acting as if...” involving taking on multiple perspectives, could be added. Thus, the teacher added a category of “other stakeholders” in the second cycle in order to encourage students to envision other stakeholders beyond the government as potential sources for solutions to poverty in Hong Kong and beyond. Students were asked to consider other parties, including schools, non-governmental organizations, and the community as potential sources of solutions to mitigate local and global poverty. This added step in the above-mentioned empathy learning model, can enrich the learning cycle of empathy learning by shifting the focus from “personal concrete connection” to “reflection and applying”.

On the other hand, since the students did not have any basic understanding and knowledge before they engaged themselves in some concrete experiential learning activities outside their schools, the students had difficulty understanding what they saw during the experiential learning activities or making personal connections with the different people whom they met. Also, the students were not fully grounded in a shared definition of poverty or what was meant by terms such as “street sleepers” before their experiences. They did not know much about the lifestyles of those in poverty until they experienced their situation more authentically.

Since each group of students joined just one of experiential learning activities, though they were impressed by the experiences, these experiences were not rich enough for them to build up an adequate knowledge base on poverty. This limited experience posed a challenging question of whether the students could inquire and imagine the lives of others. Therefore, during the subsequent classroom-based inquiry learning and imagining activities, the teacher had to supplement student knowledge about local poverty and build up their conceptual understanding about poverty by asking students to share pictures that they had collected about poverty or drawings about poverty. The teacher then linked these with their experiential learning activities by asking students to draw connections between more passive stimuli and active experiences. In the second spiral of teaching in the subsequent school year, the teacher planned to build up the students’ knowledge foundation and conceptual understanding of poverty before students engaged in experiential learning activities, in order to predispose students to the conditions they would encounter.

Empathy-driven action on the part of students was perceived as weak by their teacher in the first cycle. Students placed more onus on the government to solve issues of poverty than their own potential to contribute solutions. The teacher believed that linking local issues of poverty to global ones would encourage students to take on deeper global perspectives and envision shared responsibility as a stakeholder in finding solutions to issues of poverty.

Second Teaching Cycle (School Term 2, 2014–2015) – Adopting Improvements After Reflection

Inquiry Learning and Imaging

The second teaching cycle was conducted in 2014–2015 on another Form 1 class of students, but with the same teacher teaching the same topic. Based on the reflections above, the second teaching cycle adopted some improvements, such as establishing the students' knowledge base and conceptual understanding of poverty before engaging them in experiential learning. This included: establishing the students' knowledge base and conceptual understanding of poverty by engaging them in lessons of inquiry learning and imagining activities, such as inquiring into the meaning and definitions of poverty and the measurement of poverty through interpreting narrative information and analyzing quantitative household data; and imagining the lives of the poor by drawing pictures and acting out a drama. Following this, students embarked on experiential learning activities in the community and then returned to classroom-based inquiry learning activities. During the inquiry learning and imagining activities in the second teaching cycle, the students were arranged in nine groups of four members utilizing the idea of Cooperative Learning which is a teaching arrangement that uses small, heterogeneous groups of students who work together to achieve a common goal (Kagan, 1994). Students work together to learn and are responsible for their teammates' learning as well as their own.

The two pre-learning tasks, which were to select newspapers articles and draw pictures of poverty by the student themselves, were adopted again in this second teaching cycle to motivate students' interest on the topic of 'understanding poverty'. Based on the first teaching cycle's experiences that revealed students limited knowledge about the concept of poverty and real life examples of local poverty, the teacher facilitated inquiry learning by asking the students to share their selection of newspapers articles and their own drawings of local poverty to the whole class. Students mainly drew pictures that interpreted poverty in terms of having money or not, people having no jobs or low-paid jobs, and people in poor in health. In the post-lesson evaluation, after students had engaged in their experiential learning, the teacher shared that she was impressed to see her students drawing different characters experiencing poverty in different contexts, including low-wage working class women, the elderly, people suffering from long term illness, and a contrast between rich and poor people. She was also impressed by the short descriptions the students wrote to accompany their pictures, such as "I cannot afford my daily expenses and I just want to have a better living" and "my mum has to do two part-time jobs and in my spare time, I will help my mother to collect used packaging cardboards in the streets."

Next, in order to help the students imagine the lives of the poor and to inform the teacher herself about levels of empathy among students, a "freeze frame" picture was taken of each group's student representative who acted out a static drama which showed their understanding of the rich and the poor. This is an example of class-

room participatory democracy (O'Connor, 2010) where students own their own learning and enable the teacher to gauge levels of understanding, in this case, about issues of poverty and society. The teacher borrowed this teaching technique of static drama with the effect of imagining the lives of others from the interactive learning workshop in the first teaching cycle. After some minutes of discussion and preparation, each group's student representatives acted out their own "freeze frame", which included people who have and have no money, the homeless, those sleeping on the street, those making a living by doing low-paid cleaning jobs, and rich people taking away the money from the poor. In the evaluation meeting with the teacher, the researcher pointed out that some students acted in a way that projected inequality between the rich and the poor. This is important for future lesson planning in any spiral cycle of empathy teaching because students should realize that this perceived status inequality between rich and poor may make them just feel pity but not empathy towards people who are different from them. The researcher also advised the teacher to help students to address this perception of status inequality on the rich and poor by asking them to reflect on their perception again after the coming experiential learning activities.

When it comes to a common definition of poverty, the teacher asked students to imagine the lives and situations of the poor by using the measurement of income distribution by decile group in Hong Kong. The result showed that the poor households face a declining trend of half of the median household income per month in the period of 2001 to 2009. In fact, the key learning message that was summarized by the teacher was to let the students see that poor households have had to endure declining household income over the years. The students were also guided to compare the median household income per month among the poor and that of their own families, which were collected by the students before the lesson. Then, the teacher consolidated students' understanding about the concepts of poverty, relative poverty and absolute poverty by using questioning techniques and guiding them to write down their own definitions of poverty in one or two concise sentences. It was found that most students' definitions of poverty captured the key concepts of relative and absolute poverty, and some of them wrote words about the impact of being poor.

The teacher also grounded the students' understanding about poverty by using quantitative measures. Students were guided to inquire into how to measure poverty both internationally and in Hong Kong. The teacher prompted the students to think about how the poverty line was set internationally and by whom. One student used his previous knowledge to say World Bank. Next, the teacher asked, "What is the measurement of poverty in Hong Kong?" A student replied "CSSA", which is just an abbreviation and the teacher suggested other students to help him. At last, another student was able to say the correct answer – "Comprehensive Social Security Alliance". But the teacher did not stop at that. She asked about the aim of this CSSA policy. A student answered that the government provides an allowance for those in need such as the elderly, sick people, and those unemployed. All these interactions have shown that an engaged inquiry learning process could help students to leverage prior knowledge during this learning unit. Then, the teacher asked, apart from the CSSA, was there another measurement of poverty in Hong Kong? A student replied,

“half of median household income per month”, which was officially adopted to measure poverty in Hong Kong. Then, the students were arranged in groups to discuss the numerical meaning of “half of median household income per month”. During the whole class discussion, one student raised a question of how to select the median household income among nine thresholds of household income figures given by the teacher. Under an engaged learning atmosphere, through each group’s collaborative efforts, the students chose the fifth among the ninth level as the median household income, using the phrase “equal or below to...” as the qualifier before “half of median household income per month”. This demonstrates increased sophistication in their analysis in the inquiry processes. Then, the teacher asked what students discovered after calculating “half of median household income per month” in a ten year period of time from 2001 to 2009. One student was quick in responding that half of median household income kept decreasing over the period from 2001 to 2009, and that people earning “equal or below to \$8,750 are regarded as poor people”. Finally, the teacher showed a graph that portrayed an upward trend in the number of CSSA-supported households from 1994 to 2008. A student answered the teacher’s questions of “What do you see? Do you think it is serious?” that the numbers shows a big increase of CSSA-supported households from 1994 to 2008, which demonstrates a serious poverty problem in Hong Kong. These experiences suggest that students could support their observation and analysis with concrete figures and apply what they have learnt before. In short, the teacher found the students engaged more deeply in issues of poverty and were able to interrogate its causes and its impact on daily lives in Hong Kong. These exercises also helped the students to think of gaps in the government’s ability to address issues of poverty and potential actions that they themselves can take.

Next, the students were asked to read stories about two families in 2009 and to analyze whether the characters in the stories were facing poverty. The teacher did not give much explanation on these two families so that students needed to apply what they learnt to real life situations. But the teacher reminded the students what they have learnt about how to measure poverty. At first, most students needed time to understand the two families’ income situation. One student volunteered to answer and observed that in the first story, since the family income bearer earns less than the poverty line of 2009 as measured by half of median household income, he is considered poor. In the second case, another student was puzzled by whether earning income that is more than the poverty line of 2009 is poor, though the family in question has to support an elderly and three very young people with CSSA. This time, the teacher clarified that although the family is earning more than half of the median household income, it is taking the CSSA; thus, this family is considered poor.

Another inquiry-based activity was introduced when the teacher presented two different perspectives on poverty by giving an example of students having two divergent views on the seriousness of local poverty. This activity aimed at exposing students to the different perceptions on the issue of poverty and the possible scenarios faced by the poor in their daily lives. While one view shows the declining median household income trend and thus a worsening level of poverty, another view

observes that since Hong Kong has a high living standard, its relative level of poverty is not as serious when compared with levels in developing countries. This activity enabled the students to see different perspectives on an issue, which is an aim of empathy learning. Then, the students were allowed to discuss why there would be two perspectives, which requires more abstract thinking.

Next, the teacher presented six local poor family scenarios and asked the students to reflect on how poverty affects the different family members. This is another step in helping students to inquire and imagine the lives of the others by introducing stories and experiences of others. The teacher raised questions such as “How do you feel about this? What are the similarities and differences between you and him/her?” before asking the students to think about the effects of poverty on the members of the family, including their relationships, health, leisure time, and education. This activity was effective in arousing students’ empathy and allowed them to imagine the lives of others, as evidenced by student reflections in their learning journals.

Investigating the Content Resources

In order to develop students’ literacy about how to measure poverty in this second teaching cycle with another cohort of students, the teacher introduced the Gini coefficient as an indicator that could measure the gap between rich and poor. This is another step involving students’ investigations of content resources on poverty, and it was observed that the students learnt that the greater the value, the wider the gap between the rich and the poor. The students were also given the trends of the Gini coefficient of Hong Kong from 1971 to 2011, with about five years as the interval, which shows an upward trend. Furthermore, in order to engage students in affective learning, the teacher raised the question of how do they feel after they found out the increasing trend of Gini coefficient of Hong Kong from 1971 to 2011, which supports the argument that there is a widening gap between the rich and the poor. Some students replied that they were amazed by such an increase in the Gini coefficient and that they did not know this before. A student said he would like to know more about the real life situations faced by the poor. Next, the students were shown the comparison of Gini coefficient between Hong Kong and other Western developed countries, which drew the students’ attention to the comparatively high Gini coefficient of Hong Kong to that of some western countries.

Next, students read several reports on the real lives of poor families in Hong Kong. In their investigations of the effects of poverty on these families, students gained a general understanding of what it means to be poor and were asked to speculate on the immediate, intermediate and long term effects of poverty on families. However, judging from researcher observations, junior secondary school students struggle to discern the differences between intermediate and long-term effects of poverty on individuals. This may be due to a lack of conceptual understanding as well as to a lack of authentic lived experience. As a result of this observation, the teacher offered guiding questions and a graphic organizer that helped students contrast intermediate and long term effects of poverty.

The teacher then asked students to discuss in small groups about empathy-related questions. These included: Is it just an individual case, or are there other people who have the same kind of situations? Is it fair to this group? Etc. Students discussed these questions actively and they re-examined their own pre-conceptions about the causes of poverty on individual and the meaning of fairness in a society. After their discussion, students concluded that there could be many more people who face similar difficulties, both locally and globally, and that it may be inequality that creates negative impacts on these populations.

Making Concrete and Personal Connections – Jigsaw Puzzle of Collaborative Learning Strategy

Similar to the first teaching cycle, the teacher adopted experiential learning and classroom-based inquiry learning activities to help the students make concrete and personal connections. The students joined an interactive learning workshop organized by Oxfam (Hong Kong) that emphasized affective engagement with a same focus on the plight of the poor living in sub-divided flats. Learning from the first teaching cycle's experience that students usually have limited knowledge about poverty, the teacher gave an introduction and briefing for students before visiting the Oxfam interactive learning center in this teaching cycle. The briefing highlighted the concept of local poverty beneath a background of economic changes that arose as Hong Kong entered a more globalized age in which many manufacturing industries left the city while the multi-national corporations moved in to establish their headquarters and business services. As observed from their active participation in the interactive drama, students were able to imagine those living in sub-divided flats and the living difficulties faced by a typical poor family in Hong Kong, such as a lack of money to subscribe to internet services, in which access to the internet matters to civic engagement (Dahlgren, 2007), and families with little money for the children to participate in a friend's party. The students also talked about their understanding of poverty and its impact on people's lives in the post-drama group sharing, in particular on how global economic changes affect the lives of an ordinary family in Hong Kong. The teacher had also prepared a reflection worksheet for the students to write after joining the Oxfam-organized interactive learning activity. Some example reflective questions include "How do I feel about the people living in sub-divided flats and their situation?" "Have I come across similar experiences before?" These questions helped raise the students' awareness and understanding of local poverty issues.

After deepening students' knowledge about poverty through both quantitative and qualitative preparation, as well as training experiences with Oxfam, which allowed them to engage in deeper levels of empathy, the teacher arranged the students to have experiential learning experiences involving different contexts of poverty in Hong Kong. This was basically similar to the first teaching cycle. For the site visits in this second teaching cycle, the teacher adopted a collaborative learning jigsaw strategy (Aronson, 1978; Aronson, Bridgeman, & Geffner, 1978; Aronson &

Patnoe, 1997) by picking one student from each student group to take part in at least one type of experiential learning activity, so that each student could contribute to the knowledge base of other group members by sharing his/her unique experiences after the visits. This collaborative learning jigsaw strategy asked students to utilize his/her own experience in building up each other's understanding about different dimensions of poverty through discussion and sharing. Students had an ultimate learning objective of accomplishing the final learning task of pulling together different experiences in each group and giving a whole class presentation on what they had learnt about different dimensions of poverty. Students also had to explain the connections between local and global poverty. Thus, each group member (or an 'expert' in a particular type of poverty, so to say) would visit a particular poverty setting so that each group could assemble their individual experiences at the end to create a fuller picture of different dimensions of poverty. In organizing this collaborative learning jigsaw strategy, students were assigned activity tasks which included analyzing basic information, questions on thinking about the specific poverty contexts, and several interview questions to facilitate their inquiry with real-life people during the experiential on-site visits. The interview questions actually came from an earlier brainstorming activity from the whole class. Thus, the experiential inquiry was led by the students themselves. See Table 16.2.

The first 'expert' group of students visited the rooftop residential flats and experienced homelessness by sleeping in the streets. They first attended a briefing session by the Mission to New Arrivals on the overall situation of those living in the rooftop flats in recent years, especially on what global economic forces caused them to live there. Then, the students were formed into two groups and paid on-site visits to an old residential building. They walked up seven floors and saw several broken flats packed on the rooftop. From the researcher's on-site observation, the students were astonished by how people could live in such deteriorating living conditions.

The second 'expert' group visited the People Service Center. Same as the previous teaching cycle, the students were tasked to collect vegetables and bread from a nearby market after the market was closed. They helped the Center's staff pick up vegetables and then washed and packed them. Students were also reminded to think about and find answers to how the elderly poor managed their lives. Students were given a debriefing afterwards on the importance of treasuring the vegetables and helping the needy by redistributing food to them. In the sharing session, some students expressed their understanding of the importance of having free vegetables and bread from the perspectives of the elderly, as these could supplement their daily nutrients. Also, the students felt the need to help the elderly poor, and this authentic experience motivated them to do something in the future. One student offered to organize a free vegetable distribution event in their school community.

The third visit was organized by the Concerning Social Security Assistance (CSSA)-Alliance again. The 'expert' group of students who chose to join this activity was given a briefing on where they would visit and what they could expect to see before visiting the sub-divided flats and rooftop residential flats. Then, they set off to visit residents of these dwellings. After the visits, students expressed sadness in seeing people who lived in such confined spaces and shared that they were

struck by the stories of residents who described their descent into poverty caused by poor health, limited job skills and family problems.

Finally, in order to develop deeper understanding about the complexity of local poverty, the teacher arranged for the students to take part in one additional experiential learning activity similar to those in the first teaching cycle. This aspect of poverty provided insights into urban decay involving the poor having to save on their daily expenses. Students also interacted with those regarded as “role models” in the way they try to give back to society. The visiting site was a small Chinese barbeque food store where the shop owner gave out free meal boxes at a fixed time each week to the poor elderly who live in a decaying urban area. The barbeque food store’s owner believed it was a social responsibility to give something back to the community, especially to the elderly who have difficulty in maintaining their lives. Students were tasked to interview the store owner on his ideas of social responsibility and how he would use the donations and other resources given to him by other people in order to keep on giving free meal boxes. The students also interviewed the elderly who came to pick up the free lunchboxes and learnt more about the poor who are living in a decaying neighborhood.

Acting as If...Comparing the Local and Global Perceptions and Making Suggestions on Alleviating Local Poverty

When the students came back from the experiential learning activities, they came together to share their experiences and feelings, and make suggestions about what they could do to help alleviate poverty through the jigsaw approach (Aronson, 1978; Aronson et al., 1978; Aronson & Patnoe, 1997). As part of the jigsaw approach, student “experts” returned to their groups and shared their individual learning experiences. During their discussions, students brainstormed answers to questions such as: “How would I have felt in this position?; What is the most impressive experience? Why?; Why do people live in cubicle/rooftop flats?; What are the effects of living in such places and what difficulties are these people facing?; What can the government do to help them?; What can I do to help them?” Students shared their opinions and ideas through rich conversations. Experts returned to their original groups to share their collective experiences and envision potential actions and solutions.

In the guidelines for preparing their final presentation, students were asked to give their opinion on what they learnt from the interactive learning workshop. Then, each group utilized each “expert” member’s experiences in their respective experiential learning to reflect on poverty, its causes, challenges to its victims, and potential solutions. Students were required to share their reflections and solutions in their final presentations along with a final, open-ended question asked by their teacher regarding global poverty and shared responsibility.

Both the teacher and the researcher agreed that in the final student presentation, with the incorporation of a stakeholder’s perspective that included considerations of the kinds of actions that an individual, school, community, NGOs can do to

tackle poverty, students were able to raise suggestions other than that of what the government can do, such as giving social welfare and creating jobs for the poor people. In particular, some students suggested that non-governmental organizations can provide training courses on skills and job searching for disadvantaged people. On an individual basis, they can donate food, money, clothes and food to the poor people. Most students shifted from one of passive acceptance of poverty to one of more active agency on what they could do by writing solutions, actions, and suggestions in their presentations, which demonstrated their deeper understanding about the problem of poverty, as well as showed their empathic attitude to the plight of the poor. On thinking about poverty in the global level, most student groups found video clips on the internet which showed global poverty issues such as hunger, malnutrition, child labour, and child poverty. They gave a brief introduction about the videos about the global poverty, and they highlighted the difficulties faced by the people and children in other parts of the world. They also made comparisons between global poverty and what they had observed in Hong Kong. Thus, students' sense of poverty on a global scale was developed and they started to perceive poverty as a global problem with local solutions as a starting point. Many students shared that after the experiential learning and inquiry activities, they learned more about the gap between rich and poor in Hong Kong than they thought possible. They also felt a sense of agency in their beliefs that they could connect with people in different living environments than their own and actually help them.

Conclusion

Generally speaking, Hong Kong teachers respond to the globalization phenomenon by adopting global citizenship education in their teaching (Chong, 2015). This action research of a case study of a Hong Kong secondary school teacher finds that by adapting an empathy teaching model that incorporates experiential learning and classroom-based inquiry activities, even junior secondary school students can achieve key learning objectives and raise their levels of empathy at the same time. By taking on multiple perspectives, making imagined and real connections between their lives and those of others, and by connecting local issues to global ones, students demonstrated a sense of agency and responsibility for others who are less fortunate. Students started thinking about taking action in their own lives to address local issues of poverty and began to consider how globalization affects local economic structures that subsequently impact poor families. The findings over two school terms also reveal that implementing global citizenship education through a spiral teaching model of empathy can either start with experiential learning activities before classroom-based learning activities, or can start with inquiring and imagining activities before engaging the students in experiential learning activities. With regards to the latter, the teacher can help students to deepen their knowledge about poverty through both quantitative and qualitative preparation, as well as through training workshops with Oxfam. These allow them to develop deeper levels

of empathy before they engage in collaborative jigsaw learning following their experiential learning experiences involving different sites of poverty in Hong Kong. The teacher also proposed adding “other stakeholders” in order to facilitate student thinking about how stakeholders, beyond the government, can help to alleviate issues of poverty. This can be done by asking students to reflect on what students, the school, non-governmental organizations and the community can do to address local and global poverty. This study offers educators insights into how one teacher in Hong Kong helped her students address a local issue through experiential and inquiry-based learning approaches, and how these approaches helped learners cultivate empathy as well as build connections between local and global issues.

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Chapter 17

Reimagine Lakeshore: A School Division Change Initiative for the Twenty-First Century

Jacqueline Kirk and Michael Nantais

Abstract In 2012, Lakeshore School Division in Manitoba, Canada, embarked on a systemic change initiative called Reimagine Lakeshore. The intention was to prepare students for the realities of the twenty-first century by meeting the needs of all students in the division. The division garnered support for this work from the provincial Department of Education and through a community-university partnership grant from the Canadian government. School division leaders adopted a design-based process for change developed by Giesbrecht (2014). The process included input from all stakeholders. Leaders cultivated a culture of trust and risk-taking that encouraged experimentation and sharing. The objective of this research was to determine the success of this change initiative and to identify the successes and challenges. Researchers employed a mixed methods approach that included document analysis, online surveys, participant interviews, and focus group discussions. Statistical analysis and thematic analysis procedures were used and indicated varying degrees of success in moving toward greater quality, equity, and engagement across the division. The multiple perspectives represented within this research will provide valuable reflection for anyone considering educational change for global capacity.

In 1964, McLuhan wrote that modern technology had created a “global village.” Today this is truer than ever. Zhao (2009) contends that the twenty-first century saw the “death of distance” (p. 100) mainly as the result of transportation and communications technology, ushering in the era of globalization. How do we deal with globalization? What are the implications for education in the twenty-first century? How can sustainable systemic change take place to prepare students for the global reality? In Manitoba, Canada, one rural school division embarked on a program of

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systemic change, called Reimagine Lakeshore, with the hope of designing an education program to ensure quality, engagement, and equity for their students, residents of the global village.

Global Capacities

Much is written about the implications of globalization for education in the twenty-first century (Bennett, Cornwell, Al-Lail, & Schenck 2012; Comer, 2015; Eng, 2015; Lee, 2012; Lingenfelter, 2013; Noddings, 2015; Tomlinson, 2015; Zhao, 2009, 2015). Zhao (2015, 2009) emphasizes the importance of entrepreneurship. Levin (2015) calls for adaptability to change, while Tomlinson (2015) contends that diversity is the key. Fullan (2013), and others including Zhao, write about the importance of digital technologies in the twenty-first century. Bennett et al (2012) promote the importance of global stewardship and Noddings (2015) contends that the aim of education should be “to produce better adults” (p. 233). These scholars also present their ideas for the various skills and attributes that define global capacities. There are some commonalities in these proposals, as well as in the frameworks promoted by organizations such as the *Partnership for 21st Century Learning* and the *Asia Society*. Rosefsky Saavedra and Opfer (2012) capture many of these common elements,

...[global capacity lists] emphasize inclinations, such as curiosity, creativity, and collaboration, that are not, strictly speaking, skills. Some lists emphasize technology, and others stress attitudes and values more. However, most focus on similar types of complex thinking, learning, and communication skills, and all are more demanding to teach and learn than memorization and other types of rote skills. (p. 5)

Shared attributes of global capacities include skills and dispositions such as critical thinking, creativity, problem solving, and a respect for diversity (Comer, 2015; Lee, 2012). Zhao (2009) contends that education is “... intended to help every child realize his or her potential. Every child counts!” (p. 159). The challenge is to understand how education must change to achieve these outcomes.

Systemic Change

When Lakeshore School Division leaders decided to implement a change to meet the needs of twenty-first century learners, they considered the complexity of changing a whole system. Although the literature documents that many traditional attempts at systemic change have not improved student outcomes (Schmoker, 2010), there is general consensus around several elements that are known to promote whole-system change. Strong leadership that consistently communicates a common vision is an important component (Fullan, 2010; Kotter, 1996; Kouzes & Posner,

2012; Senge, 1990). Kotter International (www.kotterinternational.com) further explains that it is important to “assemble a group with the power and energy to lead and support a collaborative change effort.” Of the many suggestions in the literature, there seems to be the most agreement around the idea of teachers collaborating to extend their knowledge, to evaluate their effectiveness, and to learn from each other (Adelman & Taylor, 2007; Fullan, 2010; Green & Elheridge, 2001; Guskey & Kwang, 2009; Hattie, 2012; Kotter, 1996). Hattie (2012), in his meta-analysis of over 900 studies, finds that the only thing that really makes a difference in student achievement is teachers working together to build knowledge and to consistently evaluate the impact that they are having on learning. Guskey (2014) calls on educators to start planning professional development backwards from desired student outcomes. Additionally, risk-taking and innovation result in the design of programs and procedures that have a positive educational impact (Hansen & Liftin, 1991). Leaders in Lakeshore School Division incorporated many of these essential components when they designed the Reimagine Lakeshore initiative. They created a firm vision; they brought stakeholders together to learn how to improve student outcomes; they implemented an action research approach to evaluate changes; and they created a culture that celebrated risk-taking.

The Context

Lakeshore School Division (District) covers a geographically large area, about 7,000 km², in the Interlake region of the Canadian province of Manitoba. The division has ten schools of varying configurations, almost 1200 students and 98 full time equivalent kindergarten to grade 12 teachers. In most years, there is approximately 10% turnover in teaching staff. In addition, the student population of the two largest high schools is about 60% Aboriginal. The senior administration consists of a superintendent and an assistant superintendent, both female, which adds to the school division’s uniqueness.

In December 2012 over half of the division’s teachers and trustees gathered to hear superintendent Martell state, “we are no longer meeting the needs of the students in our classrooms and we need to do something dramatically different” (Geisbrecht, Martell, & Peters, 2014, The Challenge section, para. 1). These needs included addressing graduation rates, increasing credit acquisition, improving student engagement, and increasing overall achievement to build students’ capacity for the twenty-first century (Martell, personal communication, November 5, 2015). Thus began the process of Reimagine Lakeshore.

This change initiative was undertaken with the intention to instigate school improvement in a risk-free environment that would ultimately lead to improved achievement for all students. School division officials appealed to the provincial Department of Education for support and were rewarded with the time and expertise of a consultant, who accepted a significant leadership role in the project. They also agreed to allow their initiative to become part of Brandon University’s Vital Outcome

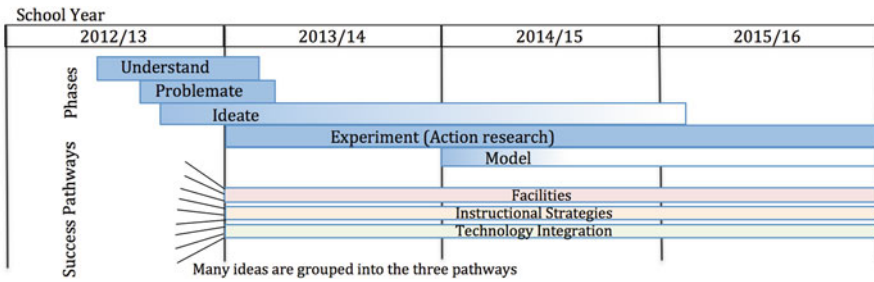


Fig. 17.1 Timeline of the five phases as implemented in Reimagine Lakeshore

Indicators for Community Engagement (VOICE) for Children and Youth research project, a Community-University Research Alliance (CURA) funded by the Social Sciences and Humanities Research Council (SSHRC) of Canada (www.voiceresearchproject.ca).

The initiative used a design process (Giesbrecht, 2014) to “facilitate system change and teacher transformation” (Martell & Peters, 2014). Although design has traditionally been conceived as a process for visual media, “there is a growing awareness of the capacity of design to solve broader problems within society” (Giesbrecht, 2014, p. 163). The process that was used to facilitate this systemic change initiative consisted of five phases (Giesbrecht, 2014, pp. 169–170). Figure 17.1 is a graphic representation of how the five phases were implemented in Lakeshore School Division.

1. Understand – Teachers worked together to develop a deeper understanding of the issues that they hoped to address by working with data, investigating the literature, visiting sites that were having success in that area, and reflecting together about the growth in their collective knowledge. Fullan (2010) confirms that successful broad-spectrum school improvement requires capacity-building with a focus on instruction to be undertaken both collectively and by individual teachers. Although this phase formally ended in the fall of 2013 (See Fig. 17.1.), teachers continued to engage in increased amounts of professional learning.
2. Problemate – Educators collaborated to utilize the knowledge they amassed during the *understand* phase to create a problem statement to be addressed.
3. Ideate – Educators and administrators articulated innovative solutions that had potential to address the identified problems. During *problemate* and *ideate* teachers identified 14 problem statements and potential solutions, which were then conflated into three success pathways (See Fig. 17.1.). The division-wide process ended in the spring of 2013 but teachers, who worked on action research projects, continued to formally articulate and investigate innovative solutions.
4. Experiment – Teachers added to the collective knowledge about each of the areas by gathering data and sharing their learning in community meetings. Both successes and failures were acknowledged as valuable learning experiences. Fullan (2010) points out the importance of “mobilizing the data as a strategy for improvement” (p. 21).

5. Model – Teachers were asked to *model* the knowledge that had been developed within the division. This included a continued focus on action research as a medium for teacher growth. This phase was never fully formalized in Reimagine Lakeshore (See Fig. 17.1).

Lakeshore School Division started to prepare for the systemic change initiative several years earlier as division personnel tried “to understand the strengths and challenges of the school division through the examination of qualitative and quantitative data” (Martell & Peters, 2013, p. 12). This data included all aspects of the division, from attendance figures to focus group discussions with stakeholders. Using a series of surveys, focus group discussions and open community meetings, input was gathered from parents, students, trustees, teachers, support staff, and other community members. Consolidating and working from this information, as well as other division data, teachers, working first in school groups and later in self-organized cohorts according to interest, were asked to imagine something that they believed would truly make a difference in their classrooms and schools. The opening page of the Reimagine Lakeshore website (reimagine.lakeshoresd.mb.ca/) poses these questions:

What do you think of when you think of 21st century learning? Are students getting those types of experiences in school today? What do you hope students will take away from school when they graduate? How can we reimagine school to better meet the needs of our students and our communities?

Teachers were encouraged to review the literature, to visit schools that had found success with similar initiatives, and to propose projects that would see those changes become realities.

The school division supported the plans with necessary resources and freedom to experiment without the fear of failure. This support was exemplified when a school trustee stood and stated, “The board is behind you. We want you to try some things in your classrooms; if those don’t work, try some other things. It’s OK to fail.” (Geisbrecht et al., 2014, Phase 4: Experiment section, para. 1). As a result, experiments were initiated in three “success pathways”; facilities, instructional strategies, and technology integration. The action research projects were funded through school division and VOICE grant funds. Teachers, who volunteered to conduct action research projects in their classrooms, worked with Brandon University researchers to learn more about the action research process. Progress on these experiments, and other smaller initiatives, were shared on a web portal and during division-wide meetings. Finally, each action researcher contributed a formal report that added to the collective knowledge of the community.

Action research projects within the three pathways varied widely in nature and scope. Under facilities, one school reimagined their library as a learning centre for all students. Various types of furniture were purchased to accommodate different activities and work areas were created so that students had a comfortable and inviting space in which to learn. Additionally, resource teachers were relocated to the space to provide support for all students working independently on assignments for a variety of courses. In the technology pathway, one teacher made use of iPads to

take students on a virtual tour of India. As an outcome, students created a digital artifact of their learning. One project in the instructional strategies pathway was called “ICE” or Integrated Canadian Studies and English course. In this project, two compulsory grade nine courses were integrated and delivered by a teacher team to all grade nine students in the school. These examples are an illustration of the more than 30 action research projects that teachers in Lakeshore conducted during the experiment phase of the design process.

Methodology and Data Sources

School division administrators invited researchers from Brandon University to assess the success of the change initiative and to identify the factors that led to the successes and challenges that were experienced by administrators, principals, and teachers in the Division. The research was guided by the following questions:

1. From the perspectives of administrators, principals, and teachers, how did the system change as a result of engagement in the Reimagine Lakeshore process?
2. Did the Reimagine Lakeshore process result in improvements in quality, equity, and engagement?
3. What are some of the indicators of successful systemic change in Lakeshore SD?

This study utilized a mixed methods design (Creswell, 2012). Quantitative analysis consisted of simple descriptive statistics, while qualitative analysis used thematic procedures (Merriam, 2009). The second research question, as asked by school division leaders, prompted us to look for increases in quality, equity and engagement. To evaluate whether or not the process had generated any progress in those three areas, required us to establish an understanding of how the school division defined each of the terms and to find appropriate data on which we could make a judgment. The working definitions that were established by the school division during the process are outlined below.

Engagement. Engagement was loosely defined by the stakeholders as the readiness and aptitude that students had to engage in learning, in social activities, and in community.

Quality. Reimagine participants recognized quality as the functionality of all parts of the system working together to ensure that all students have the opportunity to reach their highest potential. Quality was identified as a joint responsibility of students, teachers, administrators, board members, and community.

Equity. The school division adopted the definition by Sahlberg (2012) and considered equity as the responsibility of the system to put supports in place to “ensure that differences in educational outcomes are not the result of differences in wealth, income, power, or possessions” (p. 28).

Because we did not have approval from our ethics review committee to enter classrooms, to view student work, or to gather data directly from students, we decided

that the best way to answer the questions of quality, equity, and engagement would be to rely on the opinions of professional teachers and principals working within classrooms. We made the assumption that teachers and principals, who had consistent contact with students throughout the Reimagine Lakeshore initiative, were in the best place to make judgments about variations in the amounts of these three elements. Furthermore, we depended on the triangulation of the responses from teachers across the division and collected through both surveys and focus group discussions to ensure the accuracy of the results. In addition to teacher and principal perspectives regarding quality, equity, and engagement, our data sources included:

1. Lakeshore School Division Documents. School division administrators provided a wide spectrum of data including enrollment numbers, graduation rates, attendance data, action research reports, student surveys, and focus group results. This data was received in aggregate form and assisted researchers in understanding how the system had changed.
2. Online Surveys. Principals and teachers in the school division were invited to participate in an online survey at the end of each school year. Respondents provided information about their opinions of the Reimagine Lakeshore process and about their participation in the initiative.
3. Focus Group Discussions. An open call for participants was circulated to all teachers and principals in the division. Twelve volunteers, including teachers and principals, were randomly sorted into two groups and the discussions took place simultaneously, guided by an established list of questions and facilitated by university researchers. A student research assistant was present to take notes and make observations. Additional focus group sessions took place with those teachers involved in formal action research projects.
4. Interviews. Semi-structured, recorded interviews were held with school division administrators and with the Manitoba Education project coordinator. Two university researchers conducted the interviews collaboratively. A student research assistant was present to take notes and make observations.

The data was collected, collated, and analyzed for trends and themes.

Findings and Discussion

Analysis of the data indicated many areas of success as well as some challenges to be addressed. Long term sustainability of Reimagine Lakeshore is yet to be determined, however, the early successes have placed the division on a promising trajectory for future change. This section examines some of these successes and challenges.

Participation

Data analysis indicated a high level of engagement and excitement throughout the school division, particularly in the first phases of the Reimagine process. While direct involvement of teachers and administrators in the process was voluntary, approximately 67 % of survey respondents at the end of the second year (61 % response rate) indicated medium to high levels of participation, and only 11 % reported no participation. Attendance data indicated that 72 % of staff (teachers and principals) attended at least one divisional meeting about the initiative and 38 % attended at least five meetings, with 6 % attending all ten meetings. It should be noted that these gatherings took place after school hours and required travel for most participants. The primary reasons for non-attendance were related to the time and location of meetings, and competing priorities, such as having young children at home, rather than a lack of interest in the process. Excitement about the process was expressed by participants with comments such as, “It’s very exciting and gratifying to be involved in this process. I can’t wait to see what changes are in store for our students” and “I think this has led to those kinds of conversations that make education relevant.” A Manitoba Education consultant working with the division noticed these changes as well: “the changes are enhanced engagement. I think there’s a lot of excitement and passion across the division and I’ve seen a lot more people who probably were unengaged, becoming engaged.”

A strong interest in the process was also evident at the governance level. Four out of seven divisional trustees attended multiple Reimagine Lakeshore meetings. The support of the Board was seen as vital by division administrators, who stated, “We gave permission through the process for people to take risks, and what was really key was that the Board gave them [teachers] permission” as well.

In a follow up survey at the end of the third year, (47 % response rate) 68 % of respondents indicated medium to high participation in the Reimagine process and 7 % reported no participation. These figures are consistent with the first survey, however, it must be noted that fewer staff completed the second survey. Although participation appeared to remain consistent in the third year, 57.5 % of respondents noted that the momentum for the process had decreased over the year, and 37.5 % thought the momentum had been maintained. Such a dip in momentum is common for change initiatives (Fullan, 2001).

Role of the Design Process

The design-based process (Giesbrecht, 2014) played an important role by providing a “deliberate way to move through this sort of messy change process” (MB Education consultant). In general, both division administrators and focus group participants agreed that the design process provided a framework to guide the work. It helped introduce and develop a mindset that focused on innovation and risk-taking,

but in a thoughtful, deliberate way. One division administrator suggested that “it didn’t feel like education language, it felt like something fresher, and I think that intrigued people.” One focus group participant stated that the process “gave me a starting point and I know different [people] here have talked about getting out of the rut and it kind of gave me that chance to see how to get out of the rut.” Another said the process “made us focus – is this working or not? – and within that process were those opportunities to fail.”

The process, however, was not without some criticisms and challenges. One focus group participant was “not fond of the process,” explaining, “I don’t know if there was anything terribly revolutionary in the process that we didn’t know before.” Another participant pointed out that their discomfort with the design process originated from the fact that it was based on building a product. “Education is not necessarily product-oriented; it’s a different type of environment.” Education is about the realities of “human nature as opposed to a product.” Both of these educators, however, agreed with the consensus that the process provided a structure that encouraged sharing and experimentation.

Both division administrators and some focus group participants also spoke of the speed of the process. Generally, it was noted that some parts of the process needed to be quicker. In some cases, momentum was lost; in others, teachers just wanted to move faster with change. One focus group participant expressed this sentiment, “the design was a hindrance. It held us back. We had to wait and go through the steps.” This impatience to move forward was expressed by several participants, but another pointed out the importance of the understand phase, and that time was needed to get everyone to a similar point. “I think it was important to get that understand part down pat. I think a lot of people were ready to jump in whereas maybe they didn’t completely understand the whole picture.” Others also expressed a need to start slow, to understand, then speed up the process, “you need to go slow to go fast.” This tension proved to be a frustration for some; it seemed to depend on each individual’s readiness. One participant explained this tension, “it’s not fast enough, but I don’t know if that’s my issue or the issue of the process. It’s never fast enough. It’s never good enough. It’s just the nature of the beast.” The lesson here, it seems, is that in any change endeavour that involves people, some participants will want to slow it down and others will want to move along faster.

Overall, the design process provided a structure for this initiative and helped stakeholders focus, understand, and reimagine. Leadership becomes extremely important to understand the readiness of those involved and to strike an appropriate balance. As the Manitoba Education consultant pointed out, change is messy. Although the linearity of the design process provides structure, change is rarely linear.

Culture of Trust and Risk-Taking

Much of the excitement across the division seemed to arise from the culture of trust and risk-taking that was encouraged and nurtured. In the years preceding Reimagine Lakeshore, senior administration had taken steps to cultivate relationships and build trust to create a culture within which change could occur. One focus group participant explained that the division gives them “permission to think outside of the box, permission to try new things, to fail forward, to take chances and to take risks . . . I think that’s really powerful.” Survey comments also referred to this new culture and how there was an environment created in which staff were encouraged to experiment and innovate, based on data. Trust was being extended so that there was not a fear of failure, there was an understanding that innovations were being implemented for the purpose of improving student learning. In addition to sharing at monthly meetings, these innovations were shared via the division web portal and archived action research reports.

Such a culture is not easy to maintain, the division administrators talked about the “delicate balance” between “pressure and support.” The intent was to make the process voluntary, yet it is difficult to enact change without large-scale participation (Fullan, 2010). Support for professional learning and experimentation was extended to encourage staff to participate. One senior administrator noted that they were “putting pressure on principals and teachers” to use data by asking, “Why are you doing what you are doing, if you don’t have any information?” The pressure was given with support, both resources and trust, which allowed staff to take risks. Leadership was an important part of the early success of this process, as one survey respondent stated. “I am very appreciative of the leadership our division has. We are supported on so many levels.” Developing this culture, one that valued the use of data to build understanding and that encouraged innovation to enact meaningful change, was a key feature of the Reimagine process. One survey comment suggests that this cultural shift expanded teachers’ twenty-first century capacities, “I love the idea of Reimagine; it opens doors for innovation and creativity in a changing educational world. It fosters risk-taking and change making and helps to put our twenty-first century students at the heart of learning.” Indeed, a powerful outcome.

Sense of Community

Another important change that was evident from the data, and from the authors’ work with action research cohorts, was the collaboration, sharing, and connecting that became part of the cultural norm. Collaborative capacity building promotes growth (Fullan, 2010; Hattie, 2012; Schmoker, 2010) and division participants recognized that there was “more expertise and more innovation in-house” and that new ideas could be found right in the division. Participants described a sense of community and openness to sharing expertise, successes, and failures. Teachers talked

about the value of sharing ideas and conversing with others, not just from their own school, but with schools from across the division, “That was really a nice feeling, to feel that you were part of something larger and that you had others along the way... the sharing that came about from that was really nice.” The literature supports that dialogue among key stakeholders facilitates change (Adelman & Taylor, 2007; Green & Elheridge, 2001). A few long time educators noted that in the past there was a sense of isolation between schools, even competition, and now a feeling of community occurs both within schools and across the division. Senior administrators pointed out that this sense of community has helped build the understanding that each school and community has different needs and requires different levels of support, but that they are still one division working together.

Action Research

A key part of the Reimagine process was the use of action research. Each year, schools, teams of teachers, and individuals could apply for funding to pursue an innovation in one of three pathways. Two university researchers, the authors, supported these projects. In the past 2 years, over 25 projects were undertaken. During sharing sessions, the professionalism, excitement, and passion of participants were evident as participants shared their work. Survey participants noted that the work in their particular pathway was successful, to some degree, for both students and themselves. One telling response was that the project “has made a difference to my teaching practices by awakening me to different methods of delivery and assessment as well as making a difference to my students’ engagement.”

A few teachers, however, did find that the requirements of data collecting and reporting were deterrents because they were time consuming. Given the demanding role of the teacher, this is no surprise. Some participants found that they needed more support and guidance through the process, and another found a lack of baseline data reduced the effectiveness of their findings. The biggest benefits that participants found by taking part in action research were that it helped them focus, added an element of accountability, and encouraged them to become more reflective.

Overall, visible improvements in the three pathways were reported by staff responding to the yearend surveys. Figure 17.2 shows the responses, clearly showing change, especially in the area of physical spaces for learning. A senior administrator summed up these apparent successes: “When I actually looked at the summary of all the action research, a lot got done. We do have some reflective practitioners that tried really hard to make a difference in their classrooms for kids.” In focus groups conducted by the Assistant Superintendent, students across grade levels confirmed the changes particularly in facilities, technology integration and access, as well as increased support from teachers.

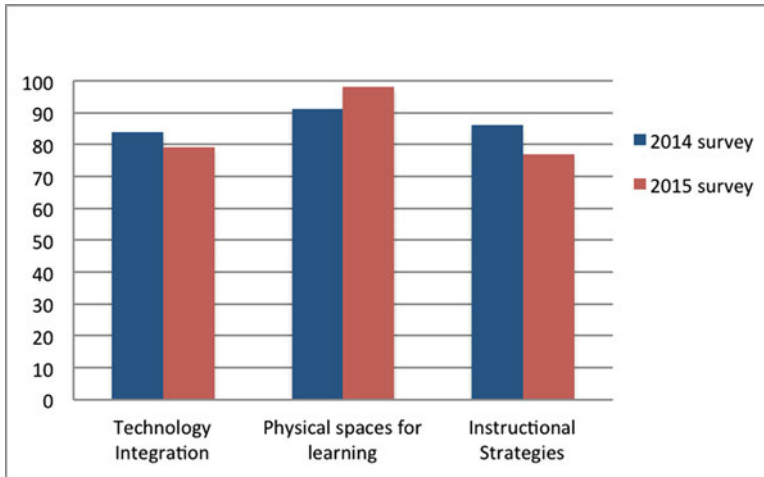


Fig. 17.2 Percentage of survey respondents noting “some” or “significant” change in action research pathways

Successes and Challenges

The Reimagine process has met with a great deal of success in its 3 years. In a survey conducted at the end of the second year of the process, 84 % of survey participants believed that Reimagine Lakeshore was somewhat successful or successful, with only 3.5 % thinking it was not successful. Survey participants were also asked to consider the effect of the Reimagine process on some of the main goals, including equity, student empowerment, and student engagement. A majority of respondents noted some change or significant change in all of these areas, as shown in Fig. 17.3. While these results indicate success, most areas show that there is still room to improve. For example, there were still 35 % who saw little or no change in equity, arguably an important goal of twenty-first century education (Zhao, 2009). Indeed, one focus group participant stated, “we have those students that are achieving things they have not achieved before, but we are still losing kids”, indicating a general consensus that the process is never complete.

In the first full year of Reimagine Lakeshore, graduation rates rose from 50 to 92 %. The following year they dipped but recovered to 84 % in 2015. While a specific break down is not available, the Superintendent commented that the graduation rate of First Nations students was higher than ever in 2015 (Martell, personal communication, November 5, 2015). In Manitoba there is little standardized testing. Although some achievement data is available, it involves a small number of students, it is classroom based, and therefore, varies from year to year leaving any overall results inconclusive.

Staff and administrators alike shared a few challenges in addition to those already discussed. These included difficulty in getting all teachers involved. Some of this

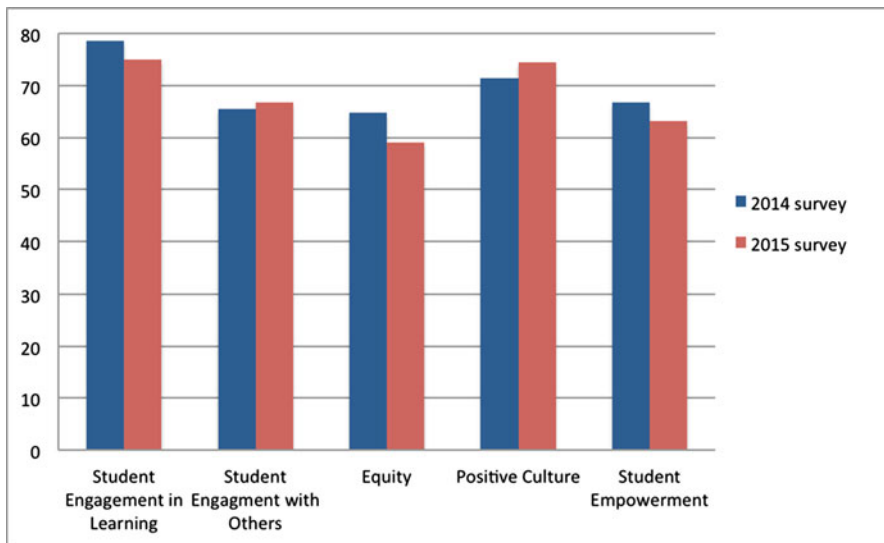


Fig. 17.3 Percentage of survey respondents noting “some” or “significant” change in a given area

apathy could be due to staff turnover; however, it was also apparent that some did not accept the invitation to participate. One survey respondent expressed the frustration this way, “Those who jumped in with 2 feet are away to the races, those who did not, are not!” Another common refrain was a lack of funding. While thankful for the funds available, both from the school division and the partnership with Brandon University, many desired changes were held back because of insufficient funds. It would seem that every change effort has its share of challenges, finding ways to solve these is a necessary step for more complete success.

Perhaps the biggest challenge to date has been an apparent loss of momentum in the third year of the Reimagine process. Senior administrators stated, “Somehow we lost a bit of the momentum around Reimagine because we didn’t come together collectively on a monthly or every 6 week basis. So our collective momentum has fallen off a bit.” This sentiment was shared by survey respondents, 57.5% of whom believed that the initial momentum had decreased. Several reasons were shared that might have contributed to this falling off. First, both the senior administration and several staff pointed out that regular meetings for sharing and collaborating did not take place in the third year. These meetings were missed by many who valued the sharing that took place. Secondly, the provincial consultant had moved on to other projects and it is possible that her leadership was missed. A complicating factor in the change effort has been an approximately 10% change in teaching staff each year, or about 20 teachers over 2 years. These staffing changes also included changes in school administration, an important part of the reform effort (Fullan, 2010). In addition, senior administrators talked about various competing priorities, many coming from a provincial level. These priorities took time away from reform efforts

and spread a small administrative and teaching staff even thinner. One survey respondent made this insightful comment about this change in momentum, “There is a difficulty in sustaining any initiative, as that initial enthusiasm moves into the work itself, and then seeks affirmation in seeing results.” Such a loss of momentum in any change initiative is expected (Fullan, 2001), however, solutions to counter this loss are important to find.

Even with challenges faced and decreased momentum, important changes have been evident as a result of Reimagine Lakeshore. The formal work has given way to other initiatives that evolved from this project. One interesting unintended outcome was an increase in professional activity. Voluntary summer professional development opportunities were filled to capacity. This exciting outcome was expressed by a senior administrator,

I think it's the level of professionalism that I see in our administrators and our teachers. The level of reading people are doing about education that I do not believe existed prior to Reimagine. It's the kinds of conversations...around education.... I sometimes have a hard time to even keep up with the level of reading people are doing.

Conclusion

Lakeshore School Division's learning vision states, “Teachers, with the support of principals, will develop plans, classroom based or school-wide, that will meet the needs of all learners and engage them in learning.” The Reimagine Lakeshore design-based approach was one process undertaken to address this vision. A major outcome of the process was developing a culture of trust and risk-taking, allowing innovation that is meant to address the learning needs of every student for the twenty-first century. The ongoing process of reimagining education to increase quality, equity and engagement is enabling change in the division. Data analysis has indicated ongoing progress and, perhaps, the most obvious improvement has been the development of a professional learning culture and a sense of community with staff working together for the benefit of all learners. Division administrators made the observation that perhaps the biggest change is the increase in professional knowledge; teachers “know more and are more confident.”

More time must elapse in order to tell if this change is sustainable and if it has long-term effects on student learning. Maintaining the momentum that started the venture and ensuring the involvement of all teachers are problems still to be solved, yet, this process has brought stakeholders in the Lakeshore School Division together to work towards a common goal, and it has met with much success.

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Chapter 18

A Case Study of Curriculum Innovation for Global Capacities: One Response to the Call of the Twenty-First Century

Clayton Massey

Abstract This case study presents a twenty-first century, skill-oriented curriculum innovation developed at a non-selective, 120 year old, independent secondary boys' school located in Perth, Western Australia. This chapter examines two elements of the innovative instructional approach known as *The Personal Learning Program*. These elements are the 'project' and the 'challenge'. The 'project' and the 'challenge' are part of a skill-based curriculum model designed to equip students with the requisite global capacities for success in twenty-first century life. The aim was to create a blueprint for twenty-first century skill-based instruction. The case study affirms research on how twenty-first century skills enhance student learning and engages all stakeholders. *The Personal Learning Program* challenges the conventional wisdom about the construction of learning opportunities, learning preference and skill development. The case study presents a new way of considering global capabilities, their development and acquisition. Through *The Personal Learning Program* the case study presents a new methodology for a constructivist-oriented, twenty-first century secondary curriculum, aimed at improving the educational engagement in the early years of secondary education. The study offers direction for schools and systems looking towards developing an inter-disciplinary, global skills focus through curriculum and classroom learning practices.

Background

In Australia, the first decade of the twenty-first century has brought change in three wide-ranging forms. The first is in the area of teaching and classroom practice, largely influenced through rapid advances in learning technology. The second area of change is in skill development, driven by a focus on global learning capabilities rather than subject-specific knowledge. The third element is an emerging educational reform agenda promoting explicit and direct instruction, a methodology at

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odds with globalised, skill-based, learning approaches. This case study presents a twenty-first century, skill-oriented curriculum innovation developed by the author at Guildford Grammar School, a non-selective, 120 year old, independent secondary boys' school with a population of 800 students, located in Perth, Western Australia. This chapter will examine two elements of the innovative instructional approach known as *The Personal Learning Program*. These elements are the 'project' and the 'challenge'.

The 'project' and the 'challenge' are part of a skill-based curriculum model designed to equip students with the requisite global capacities for success in twenty-first century life. The aim was to create a blueprint for twenty-first century skill-based instruction. School leaders considered that the existing curriculum model was not only limited in its academic skill development, but also in its ability to prepare students to adequately meet the demands in their lives beyond the school gate, as twenty-first century citizens, due to a sole focus on fact and knowledge.

The approach has been in operation since 2010, and was prompted by a 2007 state government directive. At that point in time, the decision was made to change the entry age for secondary education, in line with other states, resulting in an additional year of secondary schooling in Western Australia. Prior to the announcement, school leaders at the site had formed the belief that the existing structure of the curriculum was limited, repetitive, lacked engagement and was in need of review. In addition, a number of learner attributes and skills for twenty-first century learning had been identified as lacking, and the additional year provided the wherewithal for development in these areas within a new, school-based, junior secondary curriculum.

Guildford Grammar School is an independent educational institution attached to no larger organisation. This position of autonomy permitted the school to consider twenty-first century competencies from a number of viewpoints: school improvement, customer/parent feedback, results, perception, surveys, knowledge that education could be delivered more effectively. The institution was aware of an existing and extensive research base in the area of school improvement, and processes involving the measurement of both qualitative and quantitative educational outcomes for students. The opportunity to embrace change was rooted in the desire to design the best system possible for the next century, not replicate the last. The innovation drew heavily on the now defunct Australian Boys' Education Lighthouse Schools (BELS), and Success For Boys, research projects¹ which illustrated the effectiveness of targeted, specific skill-based interventions. This case study represents a second generational response to these research projects, grounded in but focused beyond boys.

Guildford Grammar School presents an uncommon situation in which the school community is made up of both a primary and a secondary school. Being an autonomous independent school, and not at the mercy of external policymakers or directional forces, the school exists as an independent educational microcosm. The

¹An Australian Government initiative operating between 2003 and 2008 that provided short-term funding to individual schools to address specific educational issues effecting the academic performance of boys.

nature of the school community also presented the opportunity for the researcher to canvas the input of educators across the entire educational spectrum, from Kindergarten to the final year of secondary schooling. Involving all staff, the process first sought to establish the missing twenty-first century skillset.

The case study illustrates what happens when early adolescent education is approached with a focus on global skills and abilities. The result is not only a case study of twenty-first century capabilities, but the development of a theoretical framework formed around key skills, knowledges and abilities related to twenty-first century capacities. These skills and abilities are grounded at the level of the learner. Through concise connection between skill and pedagogy, links were established between the target capacities and the innovative curriculum structure. By focusing on capacities rather than knowledge, the school has conceived its own 'success quotient' for the twenty-first century.

Literature Review

The researcher's response was to develop a skills-based instructional approach called *The Personal Learning Program*. The case study considered twenty-first century learning environments as well as twenty-first century skill development. The approach, and its founding theoretical framework, are based upon existing theories of cognition, skill acquisition, intelligence and preference, applied in the context of global skill development. The theoretical proposition draws upon Piaget's theory of Cognitive and Physical Development, Erikson and Vygotsky's parallel theories of Cognitive Dissonance, Vygotsky's theory of Proximal Development and the work of behavioural theorists (notably the research of Galton, Jung and Baynes, Thorndike and Goleman).

Notions of aptitude, intelligence and knowledge have long contributed to the debate relating to cognition, learning and pedagogy; however, the introduction of social, emotional and interpersonal skill sets charts a major shift in the notion of 'intelligence'. By the mid 1990s, the generally-agreed twenty-first century education principles of personal development, life-skills training, and development of specific academic, physical and artistic abilities were summarised by Dryden and Vos as "learning how to learn, and learning how to think" (1997, p. 91). The component notion of "learning how to think" provides a useful perspective to consider the 'intelligence' paradigm shift.

Whilst Dryden and Vos' intention was to underscore the importance of divergent thinking capabilities, the term aptly captures the change from personal development to social consciousness. Here, knowing the accepted, recognised and rewarded characteristics of thinking, the social mores of the day, becomes more valuable than fact or knowledge.

The past thirty years in education have seen conceptual shifts in both ideology and core competencies. A significantly increased range of skills has usurped a content-based curriculum. The researcher-generated conceptual framework based

on Sternberg’s “Successful Intelligence” (Fig. 18.1, provided later in this chapter) charts the current education landscape, outlining the major ideological positions and competencies, their sub-components and the relationship to one another. Mastery of all domains provides a formula, of sorts, for a twenty-first century ‘success’ quotient.

Erikson (1950) states that adolescence has, as its primary task, the formation of identity. In examining the nature of contemporary adolescence, affiliation, orientation, identity and gender, a number of theorists² observe that adolescence has

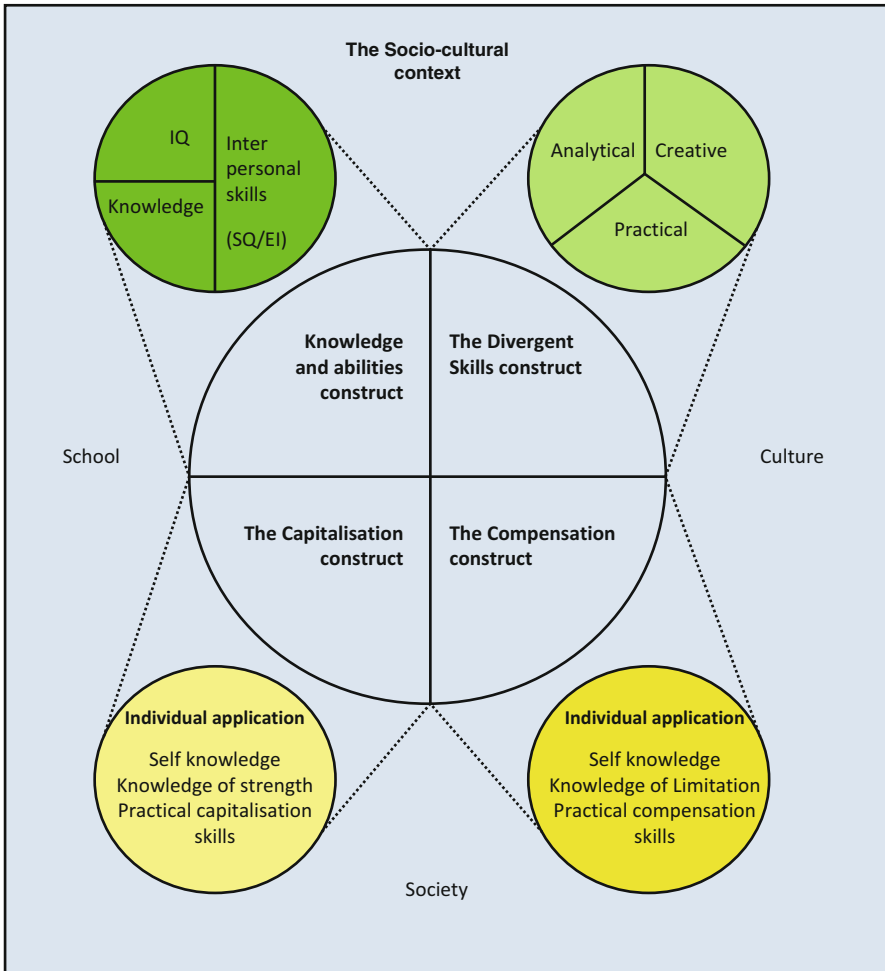


Fig. 18.1 A conceptualisation of “Successful Intelligence” (Based on Sternberg and Grigorenko 2007)

²Notably Fleer, Hedegaard and Tudge (2009) in relation to the construction of childhood; Kroger (2007) in relation to identity; Arnot and Mac an Ghail, (2006) in the construction of gender.

become a time of both 'globalisation and individualisation'. The teenage world, they suggest, is both expansive and selective, providing the space in which individual identity can be constructed. Davies, (in Arnot & Mac an Ghaill, 2006, pp. 238–239) refers to 'performative' capacity, illustrating how male identity is closely related to performance. The performance tasks associated with *The Personal Learning Program* provided students at the site not only with the opportunity to demonstrate foregrounded skills, but also in a context that had the effect of naturalising these skills through institutionalised practice.

The case study and theory broadens thinking in the definition of 'skill', specifically as it applies in the global arena. This is a site where the school invests equally in social and academic learning. Central to the project and challenge orientation is a strong focus on innovation, problem solving and a collaborative orientation, based on the tenet that these skills are requisite twenty-first century and global capacities. Accordingly, the curriculum primarily aims to develop character traits and abilities strongly aligned with these capacities. The organisation of the curriculum and approach through projects and challenges establishes real-world application.

The school uses the time of transition to secondary education as an opportunity to re-establish expectations, and to develop these global skills and 'hardwire' these abilities. Effecting leverage from systemic changes, the school undertook a 2-year review of the curriculum, focusing on the skills required to succeed in the new millennium. The product was an initial list of twenty-first century competencies, focused on global skills and abilities. The result was a 3-year curriculum program developed around these abilities.

The primary aim of the initiative was to introduce an innovative instructional system focusing on the social, cognitive and multi-modal development of early adolescent males. The case study presents a new way of considering twenty-first century skill development and acquisition. Over the past century, thinking related to 'trait', 'archetype' and 'intellect' has undergone development and change. Numerous theorists produced personality and trait-based schemes, inventories or assessments related to identifying, developing or quantifying wider socially-based competencies, however Goleman's (1996) theory of Emotional Intelligence united previously disparate conceptions of trait, personality and social competencies. Henceforth, a raft of emergent and divergent 'intelligences' incorporating 'soft skills' entered the discourse of ability: social intelligence, ecological intelligence and learned optimism to name just a few. Increasingly, these 'soft skill' attributes of personality, trait, social grace, communication and disposition are seen as the requisite skills for success in education and life beyond schooling in the global and twenty-first century world.

The learning system originated from the theoretical proposition that a broader conception of skill was required to be successful in the twenty-first century. The researcher defined 'skill' as a necessary capacity to recognise and respond to incapacity; an ability to address or compensate for skills not previously acquired or required. The idea that capacity was malleable, and competencies required reflexivity, was viewed as central to both the framework and principles of this twenty-first century initiative.

The preceding framework illustrates this proposition, and draws on the work of Sternberg and Grigorenko (2007), connecting the development of twenty-first century competencies and global capacities with the concept of “Successful Intelligence”.

Sternberg’s theory provides a comprehensive, educationally-formulated framework representing the social, cognitive and multi-modal requisites of education in and for the twenty-first century. The concept of “successful intelligence” is important for its acknowledgement and inclusion of a *compensation construct*. It is here that a concept of and response to individual weakness is embedded within the skill set: that knowledge of, and compensation for, a known deficit is a strategy for success.

Furthermore, the complex interplay of constructs and composite skills, knowledges and abilities accurately embodies the concept of twenty-first century competencies; the suite of skills necessary for success in education and life beyond schooling.

The theories forming the basis of the theoretical proposition can be similarly placed within these constructs. Theories of knowledge and knowledge acquisition, biological development and skill development find reference in the *knowledge and abilities* and *skills constructs*. Theories of preferred modality align with both *skill* and *capitalisation constructs*. Accommodation of new and conflicting conceptions is similarly reflected in the *skill* and *compensation constructs*.

The conceptual framework presents four central elements; each of these components is *skill* and *ability* based. The fifth element is the *socio-cultural context*. The *socio-cultural context* necessarily frames the *skills* and *abilities constructs* for a number of reasons. Context has informed all four constructs (*knowledge and abilities, skills, compensation* and *capitalisation*), at all levels, from the deficit proposition of the case study to broader educational debate.

Design

Twenty-first century skill development is approached through the ‘challenge’ and the ‘project’. The challenge approach is centred on critical and creative thinking, innovation and design thinking, including authentic problem solving using new technologies, multi-modal skills and new literacies. The design of project-based work highlights conceptual connections crossing traditional subject disciplines and boundaries, concurrently providing opportunities for collaboration, creativity, real-world learning, community-mindedness and service learning. Examples drawn from courses developed at the site illustrate how students acquire target skills in order to solve non-standard, and non-preferred, problems. Both course content and pedagogical approaches contribute to twenty-first century skill and capacity building.

Figure 18.2 (following) outlines the four courses comprising *The Year Seven Personal Learning Program*, and represents a sample of courses in one year aimed

<p>The Carlin Challenge</p> <p><i>Skills focus – communicating and solving practical problems</i></p> <p>This course is designed to introduce students to problem solving, teamwork and divergent thinking strategies as well as the concepts of Applied Physics, Engineering and Mathematics.</p> <p>Students will learn how to use ‘The Problem Solving Cycle’, as well as ‘The Design Process’ for conceiving, prototyping and building a working medieval catapult³. The overall emphasis is on the development of applied literacy and numeracy skills, applied in scientific and technology contexts. The challenge will address innovative design, technical initiative, product development and competitive trialling.</p>
<p>Comfort Zone Challenge</p> <p><i>Skills focus – learning styles, self-reflection and developing new talents</i></p> <p>This course is designed to allow students to develop their understanding of themselves as learners. Students will learn about their preferred learning style, brain-based theories, multiple intelligence, personality type, emotional intelligence and emotional awareness. They will also learn about the learning process, active listening, building identity, healthy competition and avenues for requesting help. The emphasis will be on developing a new and greater understanding of oneself as an individual, a male and as a student. Students will begin a reflective journal of their experiences. In addition to learning about ways in which learning occurs and identifying their own preferred learning styles and strengths, students will undertake a five-week team project, with the express purpose of devising a challenging task outside the previous experience of all members of the group. The project will culminate in a performance or demonstration.</p>
<p><i>Historical Heroes</i></p> <p><i>Skills focus – research skills, achievement and public speaking</i></p> <p>This course focuses on an in-depth study of one famous or notable person from history, researching widely and comprehensively on that individual with a view to performing as that person. The course includes independent learning strategies and skills, wide and deep research, public speaking and higher-level thinking skills. This course is designed to introduce students to academic research, presentation and public speaking skills, as well as develop an understanding of the characteristics of notable individuals.</p>
<p><i>Community-Focused Project</i></p> <p><i>Skills focus – action-based responses, increased social awareness</i></p> <p>This course is designed to introduce students to the notion of service beyond self, the concepts of privilege and disadvantage, in order to lead to local action. In the first week, students will explore the notions of justice and equity, and the factors leading towards certain groups or organisations within our local community requiring assistance. Through the Project, students will contribute time and effort to school-based activity supporting a local service or community organisation.</p>

Fig. 18.2 Catalyst Year Seven *Personal Learning Program* course outlines (Catalyst Student Handbook, 2009, p. 17) (The catapult to be designed and built was a scaled-down version. Scale, and materials used, varied from term to term to ensure originality of design and challenge)

at curriculum, instruction, assessment, and opportunity for students to engage more deeply in twenty-first century learning focusing on developing global capacities.

These courses represent 40% of the teaching and learning week for students. They are complemented by the minimum permissible time for compulsory instruction in the mandated subjects of Mathematics, English, Second Language Studies, and Health/Physical Education. A further 20% of the school week is allocated to subjects chosen, optionally, by students. Lessons in *The Personal Learning Program* are delivered in seven 2-hour blocks of time across a fortnight. Students rotate through the four units of work across four terms in one school year.

The Personal Learning Program is staffed by four teachers, each employed to deliver one course. On appointment, these staff members are charged with developing projects and challenges, and need to ensure requisite content is delivered, and targeted skills are developed. Teachers delivering the courses are given autonomy from existing school department structures. The researcher provided the teachers charged with delivering the courses training in the philosophy and intent of the curriculum. Ongoing support was also given.

Purpose of Initiative

The impetus for development of the program was a desire to develop skills for success at school and in life beyond the school gate. There was a strong feeling by stakeholders that students were not only disengaging from traditional methods of teaching and learning, but also did not have requisite skills and competencies central to being a citizen of the twenty-first century. The skills deficit was predominantly social, and anecdotally attributed to the impact of technology on ‘soft’ skills such as collaboration and teamwork; and also ‘real world’ capacities and problems such as physical construction of a prototype, or delivery of a speech to an audience.

Educators at the site agreed that the twenty-first century demanded a wide range of capabilities and competencies. The ability to select appropriately dependent on time, place and circumstance was part of the approach (a twenty-first century ‘tool-kit’ is described in Table 18.1 to follow). In addition, there was a strong sense that the traditional model of instruction was failing to effectively deliver basic competencies in the fields of literacy and numeracy, never mind twenty-first century capabilities.

By developing broad and extensive, yet specific individual capacities, Faculties believed student achievement levels would increase. Regardless of learning area, or educational discipline, there was widespread accord as to the composition of a multi-dimensional overarching skill set. The skill set was subsequently organised under four headings: Personal Skills, Social Skills, Learning Skills and Thinking Skills. The origin of skill set headings can be found in Sternberg’s theory of Successful Intelligence, as well as the researcher’s conceptual framework. The four

Table 18.1 Personal Learning Program skills

Through *The Personal Learning Program*, students will receive explicit instruction in personal, social, learning and thinking skills. We view this ‘toolkit’ of skills as being integral to life, learning and problem solving. The skill ‘toolkit’ is as follows:

Personal Skills	Learning Skills
Reflection	Research
Knowledge of self as an individual and learner	Explanation
Independent learning	Expression
Presentation and performance	Comprehension
Creativity	Communication
	Use of technology
	Wide general knowledge
Social Skills	Thinking Skills
Self-management	Analysing
Working collaboratively	Investigating
Knowledge and development of Emotional Intelligence	Transferring
Active citizenship, including service beyond self	Thinking critically
	Problem solving
	Experimenting
	Manipulating
	Applying skills and concepts

Catalyst Student Handbook (2009, p. 7)

groups of skills were directly connected to the social, cognitive and multi-modal twenty-first century focus of the curriculum.

The twenty-first century toolkit is an important element on a number of levels. It encapsulates a curriculum structure designed to develop a range of skills, in order to broaden the repertoire of skills and strategies available to students. Within that structure, there is an inherent expectation that, as a result of developing the broad skill set, students will selectively consider and apply those skills to all tasks undertaken.

Involvement

The case utilised Parlett and Hamilton’s “Evaluation as Illumination” (1972, pp. 1–35) as the overarching qualitative methodology. Parlett and Hamilton’s “Evaluation as Illumination” recognises that innovative instructional programs cannot be separated from their learning milieu, the network of cultural, social, institutional and psychological forces surrounding them. In adopting this methodology, a wide range of data and perspectives may be collected to observe and describe the processes at work, and to interpret results related to the hypothesis and theoretical proposition.

All members of the School community were involved; however, the central focus of the case study was the 2010 Year Seven cohort. Associated with this population were the 104 stakeholders of the student population, their parents, 8 teachers and 7 associated administrators. The researcher was also leader of the initiative. Whilst the case study focused on just one year group, the initiative impacted all members of the community, as changes to whole-school structures affected all elements of the school's organisation.

The involvement of the entire community was critical to buy-in and success. This was a school culture and collective thinking exercise. The belief was that everyone needed to improve in these twenty-first century skills, staff included. Involvement was achieved through a collaborative approach, and through consensus. Staff members became subject experts. Students fed back their experiences through reflective journals and termly surveys. Information evenings and feedback forums were held, at which parents expressed their hopes and aspirations for their children at the end of their schooling.

At the conclusion of the first year of implementation, a secondary method of data collection was employed: the semi-structured interview. The semi-structured interview was regarded as an important data collection element, not only in its synchronisation with the qualitative method, but also due to its theoretical foundation with the 'perspectives' approach of the case study and the overarching Parlett and Hamilton methodology. These perspectives, however, were contrasted against external measures of efficacy such as historical academic data sets, and pre and post testing using the Australian Council for Educational Research (2005) Middle Years Ability Test.

Method of Implementation

Critical to the success of the initiative was the appointment of an individual from within the school teaching community to act as the change agent. Throughout this process, the researcher operated largely as a curriculum broker, facilitating the mutual needs of the school, staff, parents, and students, the newly devised curriculum and its twenty-first century skill set. School-based knowledge was essential in the process of internal reform.

Four phases were subsequently undertaken to develop the new learning system.

1. **Research and consultation**, including establishment and agreement of the principles behind the new structure
2. **Operation of the curriculum**, through development of programs, plans and documents associated with the new courses
3. **Delivery** of the program
4. Researcher succession, **review and refinement**

The process of working through all four phases took three years, with Phase Four becoming an ongoing annual process at the school. Research and consultation were undertaken over six months, and the operation phase lasted for eighteen months.

The process itself contributed to the establishment of an enhanced, positive culture at the school. For parents, the opportunity to contribute to a vision of the future of education, based on both the short and long-term view of their sons' needs was appreciated. For staff, the idea of building capacity for senior years, as well as success beyond school, resonated professionally. The initiative connected two initially disparate ideas. The first was the premise that there was a set of skills critical to success in the twenty-first century. Building on idea of 'intelligence', the initiative established a set of twenty-first century skills. These skills formed the basis of all courses in the new curriculum structure.

The second idea was the strategy of organising curriculum around project-based and challenge-based learning. Both projects and challenges deliberately presented scenarios or tasks that were outside the experience, or preference, of the students. These were tasks specifically designed to expose students to activities in which they had no prior experience or field of reference. Through participating in the project or challenge, students would attain the multi-modal, twenty-first century skill embedded in the task. For example, in one challenge course, students undertook a quiz in order to establish their preferred learning style, using Gardner's Multiple Intelligence schema. Students were then given a task in their least preferred domain.

The initiative was concretised as compulsory curriculum for all twelve-year-old boys. This initiative took place alongside broader organisational changes undertaken at the same time, including an alteration of lesson length from forty-five minutes to one hour, a change in the nomenclature of subject names, and an enhanced optional study program integrated within the curriculum. Throughout, staff remained subject specialists, and additional staff members with skills and training in the specific areas of the challenges and projects were recruited.

Findings: Success Factors

Key outcomes, for students, of an innovative instructional system focused on global capacities included enhanced social practices, improved results in literacy and numeracy, as well as greater engagement, response to, and application of, the twenty-first century skill set. Additional outcomes included measures of improvement in critical thinking, creativity, collaboration, multi-modal literacies, authentic problem solving and real-world learning. The foci of the following discussion will be social practices, literacy and numeracy, and engagement.

Social Practices

The ability to “work collaboratively” was a central global capacity within the innovative instructional system. The focus on this capacity was twofold: to develop specific role-related communication skills (such as chairperson, note-taker and presenter) and to develop the twenty-first century skill of collaboration to build individual capacity through group settings.

Zeindner (in Corr & Matthews, 2009, pp. 719–732) identifies collaborative capacity as one of five key emotional competencies “falling under a variety of names such as ‘life skills training’, ‘self science’, ‘education for care’, ‘social awareness’, ‘social problem solving’, ‘social competency’ and ‘resolving conflicts creatively’”. The collaborative approaches of challenge and project created adversity, which in turn delivered enhanced socially considerate attitudes amongst the student population of the case study.

This approach revealed a new illustration of Premack and Woodruff’s (1978) “Theory of Mind” in the context of delivery of twenty-first century capacities. “Theory of Mind” explores the way in which students, typically pre-school children, deal with false belief or challenges to their assumptions of fact. Courses within *The Year Seven Personal Learning Program* required students to reconceptualise their pre-existing beliefs related to a task, the opinions of others and the school environment, and accommodate the diverse viewpoints and different experiences of others. Banyard, Davies, Norman and Winder (2010, p. 294) state that “a well developed theory of mind is essential for children to survive the daily politics of school life”, further connecting the development of this ability to the quality of social interaction.

Collaboration was shown to be more than a skill within a skill set; it was reported in semi-structured retrospective interviews as influencing group dynamics and social attitudes. The coexistence of collaboration, social awareness and support involved in capacity-centred tasks was shown to be formative in developing socially aware and socially empathetic individuals. Overall, set tasks required enhanced social skills. The presence of these “superordinate goals” (Banyard et al., 2010, p. 229) gave joint purpose in the way that the task could only be achieved if everyone cooperated and all parties were involved. *The Community-Focused Project* was also a task conforming to Allport’s (1954) “contact hypothesis”, an intergroup contact theory embodying the requisite four characteristics for cohesion: social equality, a common goal, cooperation to achieve, and the support of those in authority. The experience showed that, in working together towards a common goal, early adolescent boys developed qualities of compassion and cohesion which endured beyond the task.

Literacy and Numeracy

Measurement of the impact of the Guildford Grammar School twenty-first century curriculum, particularly as it applies to literacy, numeracy and problem solving in Year Seven, was undertaken using the Australian Council for Educational Research (ACER) Middle Years Ability Test (MYAT). This test assesses performance in Literacy, Numeracy and Non-verbal Reasoning (problem solving) domains. The test instrument was developed by ACER in 2004. ACER provides Australian normative data for the MYAT test, both by year and gender, permitting comparison between results pre and post intervention. The Australian norm data was obtained from 2099 students across Years Six to Nine and from all States and Territories. Using these data, comparisons and conclusions of gain or loss can be drawn, relative to the national norm. Historically, internal data sets and state-wide examination results, tracked over more than a decade prior, placed all cohorts at the School between 5 and 15% below state averages and norms on any given measure.

MYAT testing was undertaken in November 2009 by all students scheduled to be involved in the Catalyst curriculum in 2010. Pre testing was completed using Form A of the test. Post testing was conducted using Form B in November 2010, exactly 12 months later. All three Catalyst year groups (Years Seven to Nine) were involved in pre and post testing. The data set is presented in the form of the average percentile. The average percentile represents the result of all students in the 2010 Year Seven group in the assessed domain. Table 18.2 presents pre-intervention results for all Catalyst students.

The calculation of percentile ranks (both average and individual scores) is adjusted by the marking/conversion instrument, applied from year to year. In short, the annual anticipated progress, as a result of teaching and learning, is factored into the percentile placement, using a norm table for the appropriate year level. Therefore, mere maintenance results in percentile decline over time.

Table 18.3 places Year Six 2009 observations against Australian norms. The first two data columns indicate that Year Seven intake students were substantially below the national average.

ACER provides commentary related to the normative data at the transition from primary to secondary or middle schooling. This commentary explains a constant national average for both Year Six and Year Seven.

Table 18.2 Pre-intervention MYAT results, November 2009

Pre catalyst	Average percentile
Guildford grammar school averages	Pre Year 7 (2009)
Literacy	38th
Numeracy	44th
Non Verbal Reasoning (Problem Solving)	41st
Overall	38th

Table 18.3 Results of MYAT testing pre (2009) and post (2010) intervention

Year 7 2010 results	Results end of Year 6 2009	Anticipated result for Year 6 (National average)	Anticipated result for Year 7 (National average)	Results end of Year 7 2010	Difference Year 6 to Year 7
Literacy	37.9	51.0	51.0	65.1	+27.2
Numeracy	44.2			67.4	+23.2
Non verbal	41.6			67.0	+25.4
Overall	38.4			67.0	+28.6

There is evidence of a plateau effect noted by the researchers. This is most marked in the transition from primary to secondary school [from Year Six to Year Seven] in those states that contributed the most students to the norming samples [New South Wales, Victoria and Queensland] (Australian Council for Educational Research, 2005, p. 22)

Despite being assessed as below national averages prior to exposure to the innovative curriculum structure, students defied the ‘plateau effect’ typical of the normed national cohort, and typical of the transition to secondary education. Further, students involved in the innovative curriculum structure made gains in all three assessed areas (literacy, numeracy and problem solving). Improvements achieved were in between 58.21 % (literacy) and 65.08 % (numeracy); these improvements being the difference between pre and post test results expressed as a percentage.

Whilst Year Seven was the single focus of this case study, equivalent gains were posted in Years Eight and Nine, using the same instrument.

Engagement

Whilst parents are often actively involved in the process of primary schooling, a child’s transition to the secondary arena typically brings less parental involvement. At the early adolescent stage of development, communication between parent and child typically diminishes. Collins and Laursen (2004) summarise the changes that usually occur at early adolescence in relationships and communication with parents.

As families navigate the transition from childhood to adulthood, the frequency and the content of their interactions change. Increasing adolescent autonomy inevitably alters patterns of self-disclosure, commonly shared experiences, and perceptions of privacy and responsibilities. (p. 333)

The challenge project approach provided planned opportunities for greater involvement of parents at Year Seven level, as parents were invited to observe end-of-term *Personal Learning Program* presentations.

Assessing 50 studies at the point of early adolescence, Hill and Tyson (2009, p. 740) found “parental involvement was positively associated with achievement” and further “involvement that reflected academic socialization had the strongest positive association with achievement”. Retrospectively via semi-structured inter-

views, parents reported that their sons expressed a strong desire for them to be involved in their learning at the outset of Year Seven. Parents appreciated the opportunity to participate in their sons' learning at the point of transition to secondary schooling, prior to the typical adolescent social withdrawal from parents. In this regard, parents also considered themselves better socially connected with the school.

Most notable, and counter to the experience of most secondary parents, was the fact that boys shared with their parents both the challenges presented to them and the difficulties they faced in completing them. Parents commented that these discussions with their sons were not complaints, rather, excited and open discussion of the challenges presented. Parents welcomed their sons' conversations at the end of the day, as they sought their parents' advice and experience to help them in their schooling. It was noted by one parent participant that this was the best homework he had ever helped his son with. All parents identified elements of the twenty-first century skill set as outcomes for their sons. Enhanced student skills, observed and reported by parents in retrospective interviews, included knowledge of self, preferred learning style, creative and artistic disposition, problem solving orientation, collaboration, empathy, inclusivity and community connection.

Challenge-based courses led parents to form a perspective of improved ability and creativity, reporting capacity developing through the process. Challenge was observed through boys "making changes", "getting organised" and "performing"; examples of the multi-modal skills of manipulation and application. Project-based courses provided capacity for real world problem solving, collaboration and the application of global skills. In challenge-based courses, twenty-first century skills and abilities were shown to be adopted, adjusted and applied.

This curriculum, focused on global capabilities, has maintained its twenty-first century skill focus since 2010. The program continues to deliver improved results in literacy and numeracy, as well as broader capacities. Improved student achievement has been a quantifiable outcome for the program and has resulted in significant growth in enrolments at the school. In 2013, the School opened a purpose-built learning facility specifically designed to deliver project and challenge-based courses.

Discussion

The case study affirms research on how twenty-first century skills enhance student learning and engages all stakeholders. As a curriculum innovation, *The Personal Learning Program* challenges the conventional wisdom about the construction of learning opportunities, learning preference and skill development. Although a limitation to generalization, the single-site, and single-gender, nature of the intervention provided an important closed system opportunity to observe and test this hypothesis. In exploring the theoretical proposition, preliminary groundwork was conducted in the field of improvement-oriented, skill-based responses and intervention.

The case study presents a new way of considering global capabilities, their development and acquisition. As emerging conceptions of ‘soft intelligences’ incorporate key elements of gender-based traits, physiologically, psychologically, culturally and genetically formed learning patterns, styles and preferences, the study provides a new body of research and theoretical framework for approaching education and learning outside of traditional fields, measures and methodologies related to skill and ability.

The ability to build capacity in students has been the strength of this curriculum model. Despite strong evidence that skill-focused learning in the form of projects and challenges provides students with enhanced capability, the approach is increasingly under threat from a legislated push towards a national content-focused curriculum.

The Personal Learning Program at Guildford Grammar School presents a new methodology for a constructivist-oriented, twenty-first century secondary curriculum, aimed at improving the educational engagement in the early years of secondary education. Cross-curricular and rich tasks are not new approaches; however, the distinct secondary orientation and deliberate joint focus on project, challenge and twenty-first century skill development provides a significant difference. The case study offers direction for schools and systems looking towards developing an interdisciplinary, global skills focus through curriculum and classroom learning practices.

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Within Australia, Clayton is a prominent educational expert, trainer and presenter. Across his twenty-seven year educational career, Dr Massey has been invited to speak and contribute to numerous local, national and international conferences and forums. He is in demand to deliver professional learning workshops, presentations and addresses to school teachers at all levels, based on his seminal work in the area of twenty-first century skill development.

Chapter 19

MEDIAtion: Flexible Literacy Terms, Communication and “Viral” Learning in 9–12 Classrooms

Natalie Davey

Abstract Jones, Clarke, and Enriquez (2010) claim that “literacy flexibility” is “vital for an increasingly digital and globalized society, but it is largely neglected in school literacy curricula” (p. 95). To engender such flexibility Milner and Milner (2012) suggest “that the first step toward helping students navigate digital texts effectively is for the teacher to analyze [personal] strategies for [media] comprehension” (p. 214). The flexibility inherent to becoming media literate teachers and students is the basis for the MEDIAtion project. It focused on pre-service teacher candidates from York University in Toronto, Ontario who are placed in classrooms throughout Canada’s largest school board, the Toronto District School Board. An interdisciplinary group of teacher candidates developed seven innovative and cross-curricular terms to act as a common vocabulary that would specifically name educational strategies around media literacy. They then used this common vocabulary to gauge levels of response (or non-response) from their mentor teachers, school administration and students in their school-based practicum placements, asking if and how a school-wide instruction of digital and media literacy skills could be more explicitly implemented with a common cross-curricular vocabulary.

Theoretical Background

If the old adage is true, that “it takes a village to raise a child,” than in the “global village” of twenty-first century schooling, no matter one’s curricular area of focus, we are all teachers of literacy. Unfortunately, at the secondary school level literacy

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is typically associated with the role of the English department. Such literacy compartmentalization, specifically in regards to media literacy, impedes attempts at implementing cross-curricular initiatives. In terms of twenty-first century skill development, media literacy is essential in building up the global capacities our students need to succeed in today's "village." Through the use of social networking tools, for example, team building is possible even across great distances as our students come together across vast distances, utilizing the tools of twenty-first century learning to communicate and create in ways their teachers could only have dreamed of not so long ago. Yet, what may be seen as "simplified" with the use of sophisticated technology is simultaneously made complex for educators and schools as the realities of being media savvy are shown not to be the same as being media literate. This paper suggests that navigating the global village must be a whole school venture so as to take twenty-first century skills beyond the classroom into the world at large. It suggests the need for common language elements, or what is described in this chapter as "accessible literacy labels," to help bridge gaps between subject areas and departments that are traditionally considered disparate, making cross-curricular media literacy training a viable possibility to equip students for their very present future.

Jones, Clark and Enriquez (2010) claim that "literacy flexibility" is "vital for an increasingly digital and globalized society, but it is largely neglected in school literacy curricula" (p. 95). To engender such flexibility Milner, Milner and Mitchell (2012) suggest that "that the first step toward helping students navigate digital texts effectively is for the teacher to analyze his or her own strategies for comprehension when viewing a website or blog" (p. 214). Agreeing with both statements, this paper suggests that a common vocabulary of understanding between teachers to name their own strategies, paired with online-specific terminology would add to more consistent modeling of digital literacy instruction and inclusion in all classrooms. Using a shared vocabulary, science and English teachers alike can model and teach literacy life skills in their day to day, helping students to transition from class to class, saturating them in ongoing literacy training. This saturation is necessary to survive with any critical awareness of a world dictated by smart phones and online access. To develop a shared media literacy vocabulary, documented Internet and gaming language (Johnson, 2007) has been considered with digital literacy in mind. Some examples of this language are "text grab" as associated with reading and "cheats" to define the process of webpage analysis. Cross-curricular links are made as these terms link to words like "headings" in English and "labels" in science instruction. Students familiar with gaming vocabulary know that "cheats" refer to "codes to [get information that] help you win" (p. 238). This research paper speaks to the necessity of using terminology that is becoming more universal to those steeped in an online culture. In doing so we can unite pedagogical practices in literacy instruction as we strive to provide young people with the tools to read the texts of their lives with critical care.

Literacy, Media Literacy and Twenty-First Century Learners

As our society increasingly becomes more dependent on technology and the online world, we are seeing distinct changes regarding literacy and how we define literacy in the twenty-first century. Lotherington & Jenson (2011) assert that,

Multimodal literacies transcend the alphabetic world that is the focus of classroom literacy instruction. A generation ago, the world of literacy was based on paper. Now, literacy engages people in texts and discourses that traverse space and time on screens in which we can access and mix semiotic resources that include a multiplicity of languages. (p. 226)

Our definition of literacy and what constitutes a literate individual is rapidly changing in our technologically dependent society. Literacy can no longer be thought of as a singular paper-based activity, but rather a socially engaging and evolving process that connects with students through many diverse media. Thompson (2008) speaks to this notion where she states,

The multimodal learning taking place allows students to critically examine how different texts convey meaning, how the modes convey meaning differently, and how texts evoke different responses from the reader, writer, listener, and viewer. (p. 146)

Along with these changing literacy identities is the notion of placing literacy in context. The context and identity of literacy appears to be shifting from a more traditional paper-based approach to one that increasingly relies on online resources and a student’s ability to critically evaluate web-based materials. Gee (2000) argues that literacy is closely associated with situated identity and that,

Social languages are distinctive in that they are used to enact, recognize, and negotiate different socially situated identities and to carry out different socially situated activities. However, this identity and activity work is never done by language alone. (p. 413)

Additionally, Thompson (2008) echoes these perspectives regarding the significance of identity and placing learning in context where she states,

I want my graduate students to understand that adolescents should not leave their identities (i.e., their multiple literacies) at the classroom door but rather should find ways to engage with school-based literacies that encourage them to integrate what they know and do out of school with what they do in school. (p. 144–145)

Non-traditional forms of literacy such as gaming or texting language may offer more pedagogical options when promoting equitable and inclusive classroom environments. For some students who struggle with more traditional forms of literacy, strategies which blend online terminology into cross-curricular materials may offer a greater degree of inclusivity as more students from a greater variety of socio-economic backgrounds can relate to a common classroom language or discourse. Gee (2000) supports this linkage where he states, “It is certainly one of the deepest sources of inequality in schools that poorer and minority children are often in classrooms where literacy is delivered as if it were some sort of general and stand-alone

thing” (p. 413). The possibilities for placing literacy in context for the students may be strengthened as more educators embrace the online world. Additionally, this context setting may assist in providing a more inclusive approach to literacy at the secondary level.

Cross-Curricular Literacies into the Twenty-First Century

In arguing that literacy cannot be the exclusive domain of the English department, this research project advocates for a strengthening of relationships across departments and subject areas that have traditionally been thought of as disparate. Schramm (2002), as quoted by McClune, Alexander and Jarman (2012), affirms this perspective by stating:

Interdisciplinary is a leading candidate for the school reform of the twenty-first century. It is not a cure-all but a direction that is promising because an integrated curriculum would appear to address concerns with adaptability and foster a sense of community through shared goals, cooperation, and teamwork. (p. 29)

A more flexible literacy, specifically media literacy, that encompasses terminology and vocabulary students are familiar with from their everyday lives could help to foster this interdisciplinary approach as learners move from one subject area to another. This would allow students to see more common ground between diverse subject areas such as in English and science. McClune et al. (2012) elaborate on this idea where they discuss idealized cross-curricular literacy strategies:

Model cross-curricular initiatives are characterized by extending subject boundaries with authentic links between contributing subjects, synthesis that is sensitive to and informed by subject cultures, and enriched pedagogy (p. 67)

and that

A genuine context for interdisciplinary cross-curricular collaboration would be characterized by lesson content that can be demonstrably authentic, deriving from the typical subject knowledge and customary practices in each contributing subject. (p. 68)

The development and co-construction of relevant and contextualized vocabulary with students would fit these criteria put forth by McClune, Alexander and Jarman (2012) making a common media literacy language more meaningful. Thus, to introduce the MEDIATION study I will borrow again from Mary Thompson (2008), who writes of literacy, “It is often assumed that digital technologies are required for multimodal teaching to occur; however, teachers are using everyday tools to bring multimodal thinking into what their students produce and create” (p. 147).

In section “[Cross-curricular literacies into the twenty-first century](#)” the MEDIATION study discusses a cross-curricular media literacy initiative observed in a variety of urban secondary schools, based on interactions with teachers, administrators and students. Pre-service teachers investigate and discuss whether and to what extent said schools have adopted a cross-curricular approach to media literacy. This study considers the significance (or lack thereof) of whole-school approaches

to media literacy education. The observations made in this study will suggest that a common and more flexible language around media literacy, situated in-context and developed with students, based on technologically relevant terms, may greatly aid in the development of pedagogical tools to strengthen media literacy initiatives delivered school-wide.

Methodology: The Genesis of MEDIATION with PAR

York University is located in the large urban city of Toronto, Ontario, Canada. A great number of its Bachelor of Education teacher candidates complete their practicum placements in schools that help to make up the largest board of education in the country, the Toronto District School Board. Of the 110 secondary schools, the wide range of students served by, and teachers serving in, the TDSB provided a diverse sampling for the MEDIATION project, a grassroots media literacy initiative grown out of York University’s ongoing partnership with its TDSB host schools. Recognizing the challenges of teaching media literacy at the secondary level, through a Bachelor of Education seminar, I connected with a small cohort of teacher candidates who came together to develop a shortlist of shared media literacy terms that we postulated might help counter instructional challenges around media literacy in the cross-curricular school environment. The desire of this grassroots project, what started off as a class discussion and turned into a full-blown Participatory Action Research project, was to make academic research in media literacy more accessible for both K-12 teachers and their students. According to Reason and Bradbury (2008), PAR seeks to understand the world by trying to change it, and reflectively, “emphasizing collective inquiry and experimentation, grounded in experience” (p. 49).

Though traditionally the Action component of PAR is more explicitly political in nature, the implicit action taken by the student teachers could be argued thus as well. In their striving to bring new “knowledge” to their host teachers, staff and students, the MEDIATION team were acting with a political bent. The cohort wanted to see if these terms would be adopted and put into practice with both staff and students if they disseminated them at their various practicum placements spread across the landscape of the TDSB. The goal was to see if in the “real world” of teaching, a shared vocabulary of accessible media literacy terms could mediate some of the challenges of communication in the ever-changing digital landscape of their students’ lives, both in and outside of school. In-class discussions became “formalized” when one keen student teacher took on the task of creating a list of what the group deemed would be helpful language to use commonly, both cross-curricularly and cross-placement, to span the various practicums the student teacher cohort was completing for a term in the large public Toronto-based school board. Figures 19.1 and 19.2 give a brief snapshot of what terms were decided on by the cohort and the ensuing events that occurred to make what started as discussions between colleagues into a full-fledged research project.



Fig. 19.1 MEDIAtion terms

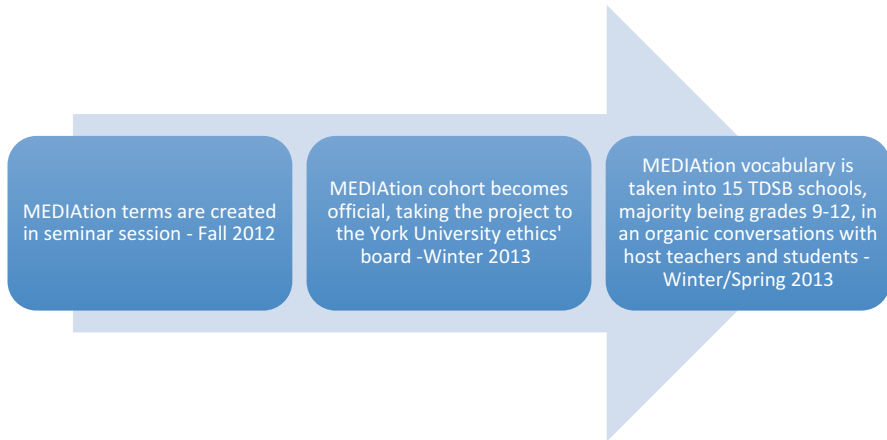


Fig. 19.2 Emergent PAR logistics for the MEDIAtion project

The Research Question and MEDIAtion Vocabulary

In developing the common vocabulary the secondary schools were to receive, the cohort was asked to consider the new realities of an ever-changing digital landscape and their students' varied but inevitable engagement with technology. They then asked what responsibilities – in loco parentis – do teachers have to a student population without the skills/strategies to navigate this complex online terrain? Such ponderings begot more questions such as how much more effectively educators might teach students to be critically conscious of the online world if, as a staff, they start on the same page? The MEDIAtion research question evolved and in the end asked: **Would school-wide instruction of digital and media literacy skills be more easily and explicitly implemented if a common cross-curricular vocabulary were available to educators?** From this question developed the following seven terms and their defining characteristics. These terms were to be tested in 15 secondary schools across the Toronto District School Board:

Expanded MEDIATION Vocabulary

#1: Content Context: the conscious awareness of how, where, and why the information that we find online is situated in the way that it is and understanding who it is that creates and disseminates the content (e.g. Google vs. an academic/peer reviewed journal)

#2: Personalized Context: the conscious awareness that the individual’s situation greatly impacts his/her access to technology/media, as well as the ways in which the technology and media world aims to access the individual.

#3: I.D. Tracking: the conscious awareness of how websites track down a user’s personal information. If an individual has ever input their personal information (age, gender, location, interests etc.) into a website, it is very likely the case that other websites will be able to use this information to strategically market their product, service or information.

#4: Explicit Inferencing: the conscious awareness that one must be explicit in his/her practice of making inferences (‘researched’ educated guesses) about the veracity/truthfulness of the people met with or interacted with online.

For example: An online identity is the identity an individual portrays on the Internet. This may be a real or fictional representation of the person. This “avatar” is seen in social media, online dating, etc. Issues of safety should be considered, therefore, when online the practice of Explicit Inferencing means students make it a conscious habit to question the information they are receiving from other online identities.

Associated Vocabulary: PARSING (or sifting/filtering) means identifying and manipulating relevant vs. superfluous input from digital sources.

#5: Personal Online Narrative: the manner (or storied version of how) a person presents him/herself online. One’s personal online narrative is connected to creativity and desire as the presentation is crafted in (the various) ways an individual wants to be seen.

#6: Liking/Online Valued Language: A new expression of Value, which is quantitative. It is a reducing and over-simplification of online interactions.

Associated vocabulary: “upvoting” – stemming from online environments like Reddit, there is a more global value attached to an “upvote.” “Liking” adds more personalized value whereas an “upvote” is connected to the online community in which the post was presented.

#7: MEDIATION: Online “insider” language. For example:

- (a) “Cheats” is a gamer term referring to insider knowledge with the potential to aid one in advancing through a specific game. In the online context here is no negative value attached to this term, whereas in a classroom “cheating” is completely negative.
- (b) “Trolling” is abusing the anonymity of the internet to create drama, controversy, gaining attention.

NOTE: Anticipated difficulties were prepared for as the student teachers made their foray into the varied school settings. They recognized that some push back was possible from teachers who were wary of “research” being imposed upon them by the faculty, on top of the general frustrations many teachers already feel with technology (and/or the lack thereof) in schools.

First Meeting of the Core MEDIAtion Members (November 2013)

Upon regrouping for our first meeting, three common observations were made of schools and their responses to the shared vocabulary:

1. Teachers and administration alike generally did not respond well to material that was perceived as “imposed” in emerging from the Faculty of Education.
2. Feedback suggested that the terminology needed more context and simplification.
3. Based on attendance at Parent Council meetings, it was noted that parent-to-teacher communication seemed “reasonable” and “ok” but a disconnect existed in teacher-to-teacher communication, as observed in staffroom discussions.

At this early point in the process, two general problem areas were defined as “Language” and “Technology.” The MEDIAtion members saw that the former prompted questions from staff members such as “What kind of language is this?” Such a question suggested there was a language barrier between them and their future colleagues, causing them to consider the potential inaccessibility of their own developed terms.

They divided the latter problem into three sections:

- (a) A technological gap in knowledge between different teachers,
- (b) A technological gap between different classrooms and different schools, and the sad reality that
- (c) Technology was not accessible to all students.

Though the TDSB is the largest public school board in Canada, the challenges of ensuring equitable funding for technological goods are still very present for administrators in different areas of the city. The cost to upgrade old buildings so as to accommodate even simple Wifi drops keeps certain schools in a disadvantaged state, while newer buildings are able to utilize the same resources with greater ease. Referencing the TDSB’s website, highlights from their technological mandate are:

In our classrooms, you may see many forms of technology including interactive whiteboards, mobile laptop carts, or tablets. A primary goal is to provide teaching and learning opportunities that use technology as a tool to support student learning and extend the classroom beyond the walls of the school. This includes teaching digital citizenship and understanding how to navigate safely in the online environment.

We are working to provide:

- All TDSB sites with wireless connectivity
- Every teacher with access to digital tools in their classroom
- Every student with access to an electronic learning environment (inside and outside the classroom)
- Parents with electronic access to teachers and information about their child and the school environment (<http://www.tdsb.on.ca/HighSchool/Yourschoolday/Technology.aspx>)

These highlights showcase the desire on the part of the board to provide teachers and students with the tools they need to navigate the media and technologically-driven world they live in, but inside the schools themselves the MEDIATION members saw firsthand how many hurdles still exist, often manifesting in frustrated and negative attitudes exhibited by staff and students alike.

Despite the initial negativity exhibited by some of the mentor teachers and host schools, even in the early stages of the project, there were some positive reactions from key players as observed by the MEDIATION members. A number of younger mentor teachers were keen to discuss the initiative but did take issue with “the complexity of necessary knowledge” for the dissemination process to be “effective.” One member had a positive interaction with her school’s Parent Council, stating, “They seem to have the desire to have this type of language used in order to better communicate with their own children!” The Parent Council group in question considered incorporating some of the MEDIATION terms into a survey they were intending to send out, one that would discuss different methods of communication for parents to practice with their children.

The core members decided to proceed differently in their second attempt to disseminate the MEDIATION terms in their new TDSB school placements. They determined that core members would:

- (a) Ask more questions instead of immediately introducing the project. For example asking, “How would you teach media literacy and critical consciousness?”
- (b) Engage in more conversations with students as opposed to focusing their interactions on teachers, and
- (c) Attempt to seamlessly integrate the terminology/concepts into their practice without explicitly calling attention to them.

These next steps were put into place in junior middle school placements where they would be working with junior middle school-aged students and their staff.

Second Meeting of Core MEDIATION Members (February 2014):

Coming together for a second meeting a month after their middle school placements allowed the core MEDIATION members time to consolidate the observations they had made in January. I opened the meeting by reiterating the question that had been

set for this specific in-school experience: What would be done differently in the middle school placement to present media literacy to staff and students?

The MEDIAtion group responded to the prompt by presenting initial observations of media presence in their schools. Across the board, there were no blanket similarities as each school, located in different areas of Toronto's diverse neighborhoods, lived out various environmental realities. One member noted a SMART board stationed in her classroom but noted that it was being used as a prop to hold up materials; in her time at that school it was never actually turned on. Others saw students and teachers consistently working and playing on computers but never witnessed any explicit discussion about their online activity. I mentioned a professional development workshop I had attended during their practicum placement that was focused on a literacy website promoting virtual classroom tours for teachers. Ironically the website made no mention of media literacy through tabs or resources. Similar to their observations, the disconnect was glaring and added to our discussion about what was both explicitly and implicitly missing in media literacy education.

Whether the topic of media literacy was framed positively or negatively, MEDIAtion members found the middle school teachers generally keen to talk about it when explicit questions and opinions were asked of them. One member said that her mentor teacher was "not only interested in the entire thought process behind our project, she was even willing to participate!" Her mentor teacher's openness made room for the member to teach the students two complete lessons on strategies to analyze online data. These lessons, out of an allotted ten, opened the door for the MEDIAtion vocabulary to be seamlessly introduced to both students and teacher. With similar keenness, two other MEDIAtion members referenced resources their mentor teachers introduced them to, such as the Canadian website www.medi-smarts.ca and in-class strategies, such as Word Walls explicitly promoting media literacy. The member described the Word Wall as "super visual so students could see displayed the difficult language that students need to learn like "deconstruct," "contextualize," "stereotypes" and "gender."

One teacher candidate encountered a mentor teacher who was pushing for inclusion of media literacy strategies in her classroom even when her students did not necessarily have access to it at home. This mentor teacher was familiar with the neighborhood in which the school was located and therefore, recognizing the tendency of students to share media resources (i.e. students would visit each other's homes to utilize working internet connections), she decided a class blog would be useful. The teacher's idea was that the blog could be used for parents and students to stay connected with her, and in return she would provide online resources for her students so that, in her words, "they can be competitive with other students."

Utilizing a more roundabout process for the inclusion of media literacy terms in this practicum placement, MEDIAtion members agreed that these hopeful examples must have come to the surface because the mentor teachers were asked explicitly about their own strategies as opposed to having top-down policies dictated to them from administration and Ministry initiatives. Still, various core members sensed that there was a divide between the technology utilized in "real life" by both teachers

and students and the academic technology explicitly acknowledged in the school setting. They noted that policies encountered at the pre-service level pushed for the development of media literacy skills in new teachers, including a mandatory pilot online course for all Education students. Yet within the setting of the practicum classroom one MEDIATION member had a computer teacher claim that a promotion of shared media literacy terms, though in line with the board of education’s direction, was not worth the effort as the vocabulary would be “outdated within a few years due to ongoing technological advancements that the schools could not keep up with.” The member, upon listening to this computer teacher, felt the response was a “cop out because she was shutting conversation down instead of inviting conversation around a topic everyone is already participating in!” Another member piped up saying, “It’s like they’re not even willing to see what they do have. It’s like teachers assume students have knowledge, but what is it really?” This statement begot the question: Are students digitally fluent? Does their own digital and media lexicon encompass an understanding of how media is in many ways dictating their lives? For example, in one middle school with a special focus on athletics, the MEDIATION member who spent her practicum there noted that all students had laptops or iPads and seemed very comfortable with their various resources. The assumed knowledge of the grade seven students, commonly referred to as “digital natives,” seemed to negate any explicit talk about these resources and their influence on daily life.

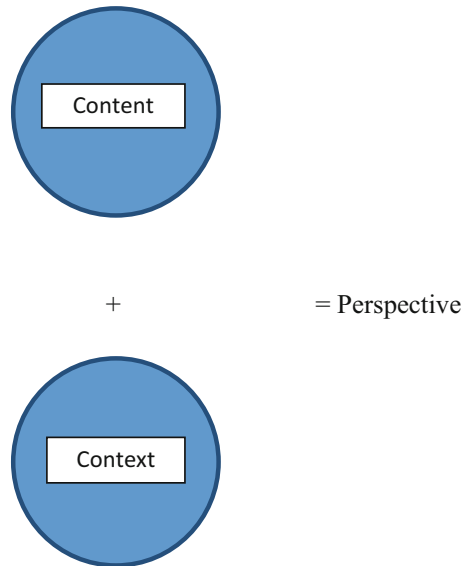
The MEDIATION core members came to a decision about the general receptivity of the middle school teachers as springing from the new, more integrated approach of asking first and only then sharing knowledge. One member suggested that, “if it was a push from the bottom up instead of top down that worked we could really start the integration of this language and these terms best with students first.” The term “translation” was then discussed as members who spoke languages other than English noted that some of their mother tongues do not have equivalent online terminology. Therefore, on websites like Facebook, a familiar term such as “like” is still utilized in its English form. This realization seemed to add to the MEDIATION members’ conviction that a common vocabulary was all the more necessary to bridge gaps for students in Toronto’s multicultural and multilingual context.

Moving into the final stage of the project, the core members decided that they should revisit their terms and tweak them according to the feedback they had received from the middle school teachers, students and their own reflective work. They decided to use the original vocabulary in their final practicum placements but make a more explicit effort to better “read” their audience of both educators and students, making it a definitive goal to use the vocabulary in daily conversations and lessons, not limiting themselves to staffroom talk. As one member emphasized about the realities of the online world: “We’re all on it and in it, all participating at some level together.”

NOTE: The following changes to the vocabulary were made:

To **Content Context** MEDIATION members felt that ID tracking might be absorbed into this term and also felt that “Cultures of media,” specifically visual cultures and sound cultures of media, needed to be clarified as “the way groups of

Fig. 19.3 Personalized Context and Personal Online Narrative



people construct and present themselves as a culture of people online.” The members also decided that **Content Context** was such a useful term that it could cross over into terms 2 and 5, **Personalized Context and Personal Online Narrative**. Because this term became considered a cross over term, the MEDIATION members chose to add a small graphic to help emphasize its importance (Fig. 19.3):

To term 6, **Liking/Online Valued Language**, small grammatical changes were made so as to clarify the definition:

An expression of value that is quantitative. It is important to note that it has the potential to reduce and over-simplify online interactions.

Associated vocabulary: “upvoting” – stemming from online environments like Reddit, there is a more global value attached to an “upvote.” “Liking” adds more personalized value whereas an “upvote” is connected to the online community in which the post was presented.

Discussion: Final Meeting of Core MEDIATION Members (May 2014)

The summary MEDIATION discussion was fruitful, for when the core members came together for our closing meeting, many returned with very positive reactions from the TDSB partners. Members shared positive experiences with in-school media literacy; for example, one young woman who spoke of teaching four history courses at an alternative setting in the TDSB covering all of her material online with the

program Edmodo. Where she felt surprised and most inspired came not from the students, though according to their feedback they seemed to enjoy the course. Rather, it was from the expressed desire of her mentor teacher to be coached through the online teaching process that the MEDIATION member realized she had gained a likeminded colleague in her media literacy campaign.

One member commented on the sharing of resources that started to happen in the final practicum based on their own growing familiarity with and usage of their common vocabulary. This teacher candidate had received a suggestion for a Twitter activity from another MEDIATION member and then modified it for use in her grade 9 French class. In doing so she successfully made use of the common MEDIATION terms, embedding them in that lesson, albeit in another language.

One member was placed in a neighboring board of education, the Peel District School Board, and brought back with her an exemplar of a document entitled “THINK.” Made visible on posters around her school, it offers tangible suggestions for students as they navigate a way through their burgeoning technological landscape in and out of school. [[Digital Citizenship THINK poster \(2013\)](#)]

Other members still experienced reticence from both their mentor teachers and even within themselves. One core member’s experience with his challenging mentor teacher meant he did not get to integrate any of the terms until he started his official teaching block. His MT suggested he deliver the shared terms to other teachers in the school but explicitly stated that she was not interested. This type of negative response was all too common at the start of the MEDIATION project in November, but come May, it was noted by the core members that in this final practicum more mentor teachers seemed positively responsive, especially in the alternative classroom settings. One teacher candidate’s discussion around issues of technology and media literacy seemed to re-inspire her mentor teacher’s own interests in these topics, causing him to renew his inclusion of online math software in the classroom.

It is not easy to measure how “successful” the integration of the shared vocabulary was with the TDSB partner schools, for each teacher is, in the end, going to choose to use them or not, discuss them or remain silent. Administrators and parent councils may jump on board for a short time but one of the realities of school life is that new ideas are introduced at every staff meeting and to keep one going with any momentum is a task unto itself. In many ways, the MEDIATION group acted as a microcosmic example of a school, showcasing for a short time what can happen when teachers and administrators act together for a common goal, utilizing feedback from the community of students and parents who are invested in the process the more they are included. By the final meeting, whether or not the MEDIATION terms had become holistically absorbed into any one of the practicum school cultures, the core members felt positive about their initial experiences with a cross-curricular teaching of media literacy. The initial desire for the MEDIATION project was to unite pedagogical practices in media literacy instruction in the ongoing striving to provide young people with the tools to read the texts of their lives with critical care. A reasonable and hopeful conclusion for such a research project is that an interest has been piqued in some of the various school settings to explicitly talk about media literacy, and all the more that these young teachers will continue this process wherever they end up as educators.

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Natalie Davey is an experienced educator who has worked with students in mainstream secondary and post-secondary classrooms, as well as alternative educational settings. Her doctoral research focused on educational determinants for incarcerated youth. From that work there has emerged for Davey a growing passion to look at what is meant by twenty-first century learning strategies and how to provide access to this important skill set for even the most marginalized of learners.

Chapter 20

A Prototype Twenty-First Century Class: A School-Wide Initiative to Engage the Digital Native

Hui Yong Tay

Abstract iPads are so ubiquitous now that one sometimes forgets that they came onto the scene and into schools only very recently in 2010. Hence, there is relatively little in current literature on the impact of the use of iPads in teaching and learning. This chapter presents the findings of a 3-year study undertaken in Nanyang Girls' High School (NYGH) in an all-girls' secondary school in Singapore. The school had launched the use of the iPad in 2011 through a project called Prototype twenty-first Century Class (P21C²), an initiative to engage, excite and empower the Digital Native through 1:1 computing environments using the iPad. This chapter describes the key personnel and the implementation involved, with examples of how it changed teaching and learning in class. It also analyses the critical success factors as suggested by the findings of the study. It concludes with some implications this study suggests about the pedagogy for the digital native.

Background

It would be hard to talk about the twenty-first century without mentioning the digital revolution. Around the world, digital technology is transforming our social and work life. However, one area that has remained almost stubbornly impermeable is education. School lessons continue to consist largely of teacher talking at the front of the class with the learners listening passively with their brains possibly “flatlining”¹ as reported by a MIT study (Poh, Swenson, & Picard, 2010).

This is despite all that has been written and said about how today's young learners are growing up surrounded by information technology and digital media. Theirs is the generation that does not know a world without 3G phones (available from 2001), Facebook (from 2004), Youtube (2005) and smart phones (2007). Prensky

¹Electronic monitor registering no brain activity.

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(2001) calls them the Digital Natives. Characteristics of these Digital Natives include the way they access information: they are so connected to the Internet that it is likely their first port of call to find or check facts. They also prefer more random access (like hypertext) where they can immediately access information of interest (through hyperlinks). They also function best when networked. As such, Prensky argues that the current pedagogies in school are incompatible with the habits of these learners. He exhorts schools to invent Digital Native methodologies to engage them. Indeed, why do teachers still need to dole out learning content when students can easily access online resources themselves? Instead, teachers can concentrate on developing the learners' ability to appraise information and delve deeper into the ideas. Teachers can also take advantage of Web 2.0 tools for online collaboration and feedback. In other words, technology can facilitate the development of self-directed and collaborative competencies that have often been seen as important twenty-first century capacities by both academics (Stobart, 2014) as well as governments, including that of Scotland (Education Scotland, n.d.) and Singapore (Ministry of Education, 2014).

Purpose of the Innovation

It was with the intention of developing such self-directed and collaborative learners that Nanyang Girls' High School launched Prototype twenty-first Century Class (P21C²), a 1-1 computing initiative using the iPad. The students, aged 13–16 years old, in this 1700-all female school are typically among the top 5% performers in the national primary school exit examinations. P21C² aimed at developing these high achievers to be “reflective, responsive and responsible (3R) learners” through “a technology-enabled environment that will facilitate students' growth in twenty-first century world where they have to critically examine information and be active co-constructors of knowledge” (Nanyang Girls' High School, n.d.). The school envisioned that each child with a personal mobile learning device at hand would result in a less teacher-directed, more student-centred pedagogy. There would be more opportunities for learning to be more differentiated as each child can learn at her own pace and style, supported by ready access to multi-media learning resources. These resources, including world-wide web for real-life, authentic examples and applications of knowledge learnt, can in turn enable learners to take the initiative to clarify when in doubt or explore further on their own. Using collaborative features (e.g. group scribbles, wikis), students would be able to share ideas and provide feedback to each other. Apart from helping to hone their metacognitive ability, such collaboration, it was posited, would help develop the social skills that would stand students in good stead throughout their school and working life.

Literature Review

This vision to use the iPad as a personal learning device to engage the Digital Native was grounded in research. Studies have shown that the iPad can be used to good effect with children as young as age two (Geist, 2012). Researchers reported how preschoolers were engaged in math and science content (Aronin & Floyd, 2013) or showed higher quality of peer talk and hands-on engagement (Kucirkova, Messer, Sheehy, & Panadero, 2014). The finding of greater student engagement is a common theme even with other age groups: elementary (Culén & Gasparini, 2011), high school (Ward, Finley, Keil, & Clay, 2013) or university (Manuguerra & Petocz, 2011; Wakefield & Smith, 2012).

Apart from learner engagement, another theme in literature on the use of the iPad focuses on how iPads in class facilitated group discussions because of the ready access to research and reading material (Geist, 2011) and opportunities to work collaboratively among peers (Beach, 2012; McMinn & Li, 2012).

Educators have long known the positive effects brought about by group discussions and peer collaborations: from engaging students in the inquiry process (Hammer, 1995), to more learning at higher levels (Garside, 1996), and enhanced understanding after considering other people's perspectives (Roehling, Kooi, Dykema, Quisenberry, & Vandlen, 2011). It can also contribute formative feedback to teachers about their students' understanding (Cirillo, 2013). The research also suggests that the same positive effects can be found even if the discussions were not face-to-face. Some studies have found that students' active participation in online discussions contributed significantly to final student results (Palmer, Holt, & Bray, 2008) and greater self-efficacy (Lineweaver, 2010).

More evidence of the positive effects of student discussions can be seen in research into the flipped classroom, so called because the content traditionally delivered in school is set as homework (often through videos) while class time is dedicated to discussions and problem-solving. Researchers have found that this change in lesson activity from teacher talk to more active student involvement resulted in more student engagement and ownership of their learning (Herreid & Schiller, 2013; McLaughlin et al., 2013) and deeper dialogue that went beyond facts to debates (Hoffman, 2014).

The effects of classroom discussion appear to apply differently to different ability groups (Kahn, 2007). In a meta-analysis of empirical studies conducted to examine effects of classroom discussion on students' comprehension of text, researchers found discussions had more effect on students of below-average ability than for students of average or above-average ability (Murphy, Wilkinson, Soter, Hennessey, & Alexander, 2009). One possible explanation was that students of higher ability levels already possess the skills needed to comprehend and so did not need the discussion as much.

To summarise, the literature suggests that the use of iPad results in greater student engagement, in particular, the kind of engagement that results in developing self-directed learning, facilitating group discussions and other opportunities to work collaboratively with others.

Involved Personnel

P21C² was conceptualized by the P21 team, led by the principal, and key personnel such as Dean, Curriculum (the author) and Head of Information and Communications Technology (ICT), and a small group of teachers who went on to pilot the initiative in 2011 with two secondary one (aged 13) and two secondary three (aged 15) classes. At this pilot stage, iPads were loaned to students who could use them in school and bring them home, to be returned only at the end of the academic year. More of the staff came on board when the project was slowly rolled-out to one whole level (secondary two) in 2012 and then to two whole levels (secondary two and three) in 2013. At this stage of level-wide adoption, the iPads were purchased and owned by the learners themselves to be used as a personal learning device.

Critical to the success of the initiative has been the support of the parents of students in the programme. As part of the programme protocol, before the students come on board P21C² at secondary two, the school meets with their parents to explain the rationale of the initiative and to address their concerns (e.g., loans of iPads for those from financially disadvantaged backgrounds, how to monitor their child's use of iPads). This school-parent partnership continues to be a regular feature with workshops conducted by the staff to demonstrate to parents how the iPad is used in various subjects.

Method of Implementation

Preparation for P21C² began a year before the pilot (see Fig. 20.1 for key events), with the P21 team meeting to plan the pedagogic approach that was consistent with the existing vision of a Reflective, Responsive and Responsible learner. The approach is summarized as 3Es: to Engage, Excite and Empower learners with the help of technology (Fig. 20.2). The learner is expected to not just consume information from the internet but to engage in critical and metacognitive reflection on the information as well as build on this knowledge. The approach also aims to excite the learner through bringing about real life connections, and opportunities for differentiation and peer collaboration. Lastly, teachers empower learners to be active and self-directed through opportunities to be engaged in the feedback loop.

Hence, a lesson would likely feature students engaging in resources (typically developed in-house and organized in an iTunes course), working collaboratively with their peers, perhaps giving peer feedback (through online platforms like Edmodo).

Because all academic departments are involved in implementing P21C², the school facilitates capacity building with the appointment of ICT-mentors within each department who would drive the pedagogical change. The school also appointed Technology-Integrated Specialists (TIS) who would meet small groups of teachers during regular time-tabled slots. Discussions during this time centre around ICT-enabled strategies that would meet teachers' curricular needs in the coming

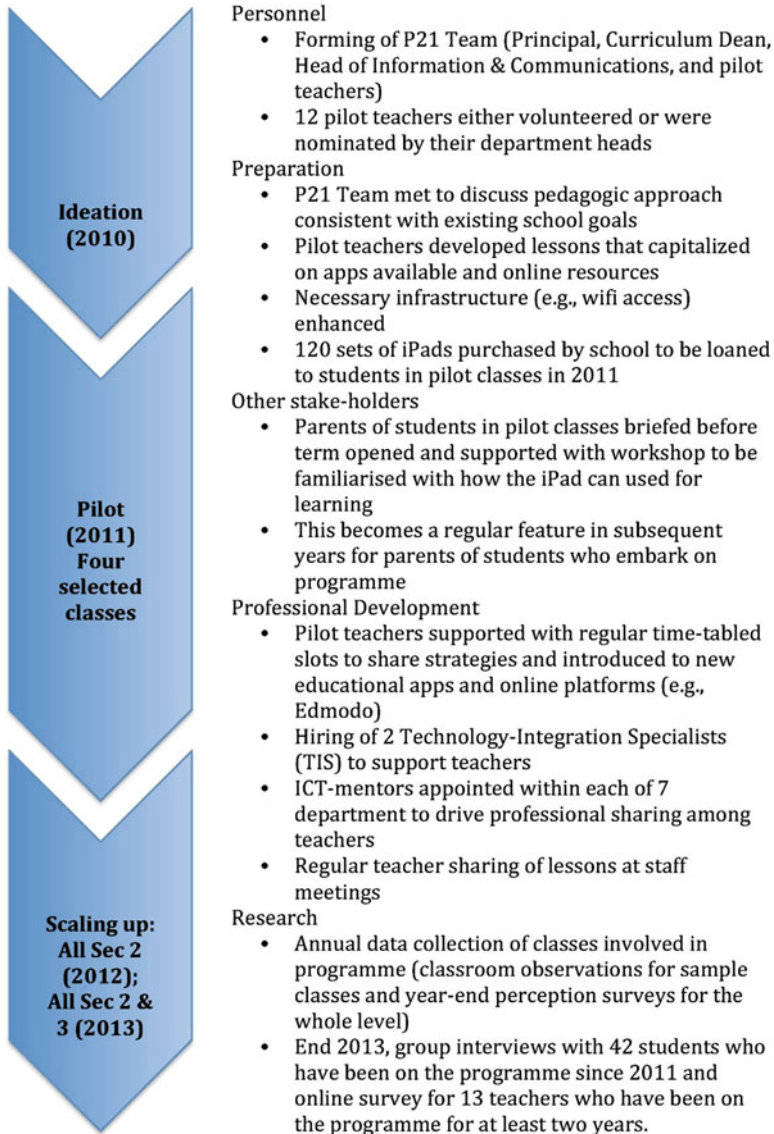


Fig. 20.1 Key events in implementation of P21C²

weeks. Lessons are also video-taped for critique and sharing within and outside school. There are termly updates and sharing scheduled once every semester, during which teachers are selected to present their lessons to the rest of the staff. Initially, these presenters were early adopters but increasingly, those who saw themselves as less tech-savvy were coaxed and coached into sharing as well, as a way of encouraging others like themselves.

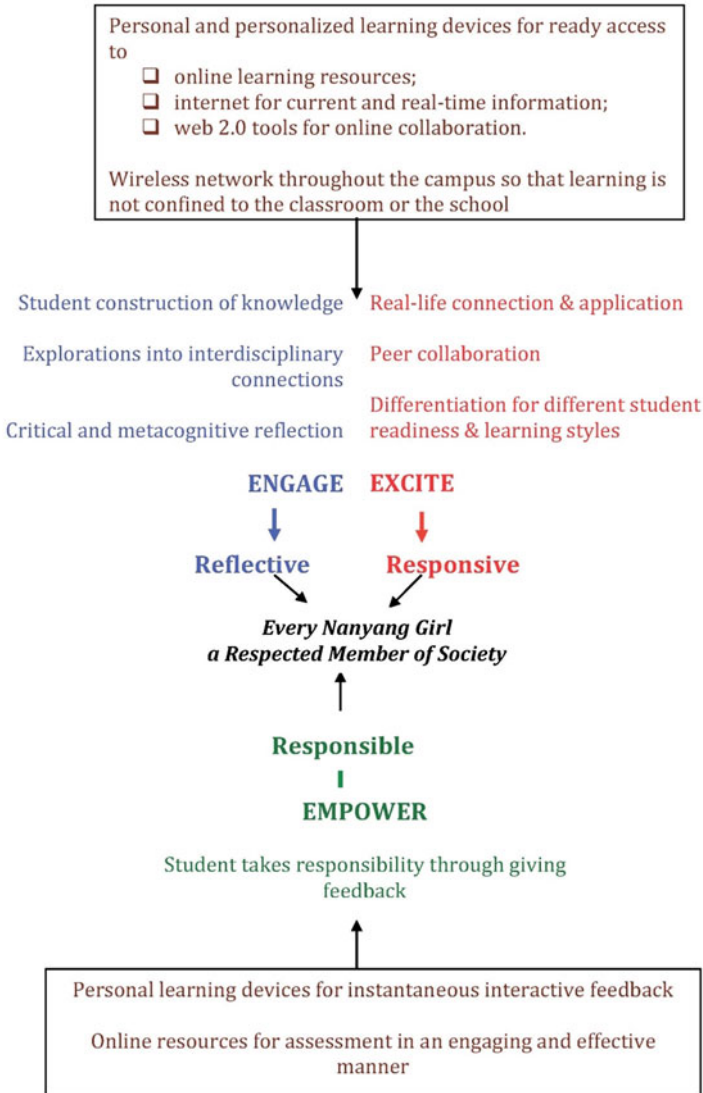


Fig. 20.2 How P21C² fulfills the school vision of a Reflective, Responsive and Responsible (3R) learner

Findings: Success Factors

The school conducted a 3-year study to investigate the impact of P21C² on student engagement. Data was also gathered through lesson observations and perception surveys. Each year, an online survey invited all students involved in the programme

to answer the following questions on a 5-point Likert scale (5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree, 1 for strongly disagree):

- I find lessons using iPad more engaging.
- I find I learn more things/more deeply with the use of the iPad.
- My learning extends outside of class time with the use of the iPad.
- I have more opportunities to collaborate with my classmates over schoolwork with the iPad.
- Generally, I would recommend the use of iPad in other levels.

Overall, it was found that the use of iPad was associated with more learner engagement leading to more self-directedness and collaboration.

In particular, the study tracked the data from two classes Secondary 1 cohort (13-year-old) who had been on the programme since the pilot in 2011 (hereafter referred to as P21C² pioneers in this present paper). The data was analysed to see if there were differences across levels and over the years. The findings were triangulated against the group interviews with both the teachers and students who had been in the programme since it was launched. The data from the semi-structured group interviews helped to shed light on the longer term impact of the programme.

Though the focus of the initiative was not on improving student academic results, the study also found that the P21C² pioneers performed better than their peers in the year-end examinations. Because the iPad was used across subject areas, the indicator for academic results used was the mean subject grade (MSG) which is the average of all the grades in the subjects taken by the student. Because of the way it is calculated, the lower the MSG the better with MSG=1 as the perfect score. The MSG of 2011 secondary one pioneers was compared with their cohort in 2012 and 2013 even though by then, the cohort was also involved in the programme. The intent was to see if there was any difference in results of these students who had been in the programme longer than their peers.

One possible confounding factor taken into consideration while analyzing the students' results was the effect from their abilities. In the study, the measure used as indicator of their ability was the t-score (i.e. Transformed Scores) achieved at the national examination at the end of their primary school education. To test if the P21C² intervention had a differentiated effect on different ability groups, the students were grouped by their t-score into lower quartile, median and upper quartile; and the results of each group were analysed for any significant difference. It was found that there was indeed a differentiated effect: the low as well as the high ability groups in P21C² pioneers did better than their non-P21C² counter-parts in 2011 and 2012, but not in 2013.

In short, the study found that the P21C² initiative brought about a positive effect, particularly for the low and high ability groups. Looking over the data, there are two obvious factors that contributed to the positive results (Fig. 20.3).

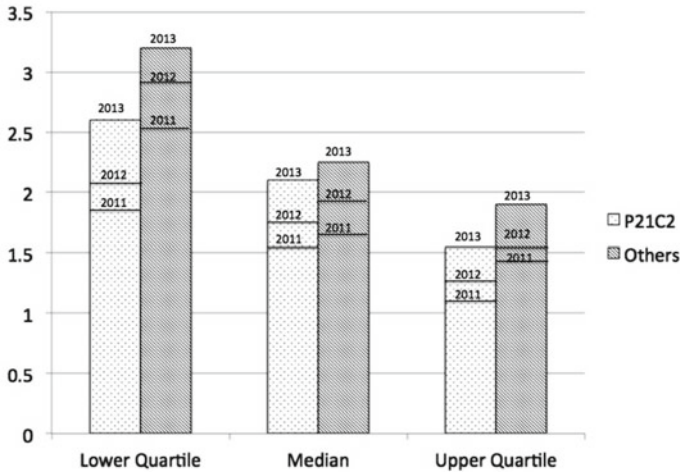


Fig. 20.3 Academic results of students who have been on P21C² since 2011 compared with their peers who joined the programme later (*Note.* For mean subject grade (MSG), a smaller number indicates better results, with 1 being a perfect score)

Connectivity

Data from surveys found that the students consistently reported that they found lessons using the iPad more engaging. Details of what specifically they found engaging were uncovered in the themes gleaned from qualitative remarks in the surveys each year as well as the group interviews of students who had been in the programme for 3 years: they were now able to access information or learning resources whenever needed. The availability of online resources, in turn, enabled more self-directedness. They spoke of taking “the initiative to look things up”. One spoke candidly about how if she did not pay attention in class, she would look it up online. Another said that even if something was not covered in class, they could “immediately access and study it (them)selves. Like, (they) need to find out for (them)selves”. Some felt they were also “reading the news more often” and “more engaged with things around the world”.

The connectivity that enabled the students to be more self-directed resulted in a change in the role of the teacher. Previously, the teacher served to dispense knowledge. In one participant’s words, previously, “it was a crisis without (a) teacher”; now, “You can go online. Everything is there, e.g., Youtube”. Though one participant thought that this resulted in less incentive to pay attention in class since one could read it up later, another felt that, “For learning of concepts, you can go online. To get help to select material, you need help from teachers.” In other words, teachers now served as a “source of clarification”, as suggested by another participant. Many spoke of how convenient it was to get help or explanation from the teacher via email

or online platforms. One participant reiterated, “It is good sometimes that we don’t rely too much on the teachers. It is quite good.”

Because of the connectivity, learning had also become more collaborative because it was now “convenient to share information with one another more easily.” Participants felt that there was “a lot of discussion” on platforms like Edmodo and googledocs set up their teachers to encourage students to contribute different viewpoints or to critique each other’s views. One participant said that they learnt from one another through the “to and froing of conversation”. This conclusion is supported by the survey remarks by the teachers who had been involved in the P21C² programme for at least 2 years. They highlighted the use of online platforms such as Edmodo and Todaysmeet to encourage students “who are less vocal” to contribute as well as for teachers to check understanding. One teacher mentioned how students’ “authentic work” gleaned from online discussion was used later in class to “address the actual challenges that the students faced”. One teacher commented that students were just beginning “to see the value/power of sharing” while another commented that “some students who were reluctant to contribute views and thoughts are now more able and willing to do so”.

Change in Pedagogy

When the 13 teachers who responded to the above-mentioned survey were asked if the use of iPads had brought a new dimension to their lesson design, 61.5 % strongly agreed and 38.5 % agreed. The teachers specifically mentioned apps that helped students deepen understanding, for example, the use of mindmapping apps (for example, Popplet and Mindmeister). Because these online mindmaps could now be edited simultaneously, teachers created opportunities for students to work collaboratively to create them and to give peer feedback on each other’s work. Teachers not only used production tools (such as iMovie and Keynote) for creating animations for teachers to facilitate understanding, especially for more visual learners; they also used them as new tools for assessments. One example in a Geography class was when students watched a silent iMovie animation on tectonic plate movements before working together to tape a voice-over to accompany the animation, hence demonstrating their grasp of the target concepts. iTunes U was also mentioned as “a great platform as a central repository for subject materials” which also offered opportunities for self-assessment through the in-built widgets that gave feedback on students’ answers.

When asked if the use of iPads had opened up more opportunities in developing students’ twenty-first century skills, again there was a very positive response with 46.2 % strongly agreeing and 53.8 % agreeing. In their qualitative comments, the teachers highlighted self-directedness (“taking ownership of their own learning”; “more independent learners”) as well as collaboration (“working collaboratively from multiple locations” and “beyond classtime”). The teachers also highlighted critical thinking and metacognition. For example, though iPads allow easy access to

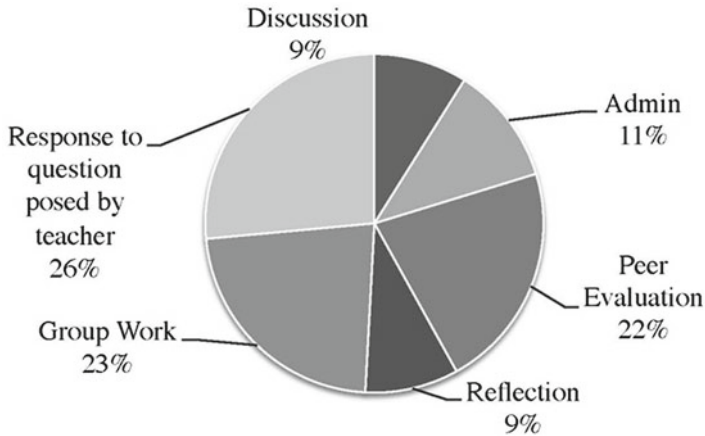


Fig. 20.4 Comparing different types of posts by students on Edmodo

a wealth of information, students need “information and literacy skills on how to evaluate and use information to construct their own knowledge as necessary skills”.

One respondent noted that “apps and technology (that) allow students to make their learning and thinking visible, encourage meta-cognition, thinking about (their) own learning and processes”.

Certainly, the case for the teachers’ change in pedagogy would have been more convincing if supported by classroom observation data. For a few weeks in the school year, a research assistant was stationed at the back of the classroom with a stop-watch to clock the amount of time spent on various class activities: teacher talk (disseminating information), group/class discussions and others. Data, which were collected from a sampling of classes, did not show a significant difference in classroom activities when the iPad was used and when it was not.

However, it could be that the findings were limited by the design of the study that had measured only the discussion as taking place in the physical class, when in fact, some of the class and group discussion had migrated online to sites like Edmodo, a secure social network with many Facebook-like features such as post message, discussion threads. As such, data were gathered at one single point in time to study the nature of students’ posts on Edmodo. Analysis of the posts found that slightly more than half of the posts were indeed extensions of class discussions or collaborative work among peers (group work and peer evaluation) (Fig. 20.4).

Discussion

P21C² was launched as an initiative to engage, excite and empower the Digital Native through 1:1 computing environment using the iPad. The findings of the 3-year study suggest some success at achieving this aim. Certainly, one needs to

interpret these findings very cautiously and the conclusions would benefit from confirmation from replications of the study at other sites and contexts. The present study involves participants who are largely from a middle to upper middle-income and hence may also benefit from a digitally rich environment, even at home. This may limit the generalizability of the findings to other learners with less accessibility to such digital affordances. Also, the data was largely collected by school staff, including the author who was also the driver of the programme. For example, group interviews were conducted by teachers involved in P21C². Though steps were taken to ensure quality inferences from the study, one cannot discount the possibility of confirmation bias. In addition, future studies in this area would do well to heed the advice by Sharples, Arnedillo-Sanchez, Milrad and Vavoula (2009) to also focus on the informal online learning sphere, rather than assume that all learning necessarily resides in formal teacher-orchestrated learning activities sited in a conventional classroom setting.

It is also noted that the findings were more positive with the younger students. Hence in considering the effect on the students, one should perhaps not discount the novelty factor, particularly when the iPad was first introduced to the students when it was new on the market and very sought after. One respondent also alluded as much to this when she said, "I was quite excited in Sec 1, as the iPad was quite novel, but now everyone has one, so it gets boring." This probably accounts for the distraction mentioned in some respondents' qualitative remarks. However, as the students reported, once the novelty wore off, the device became a tool for learning.

The other explanation for the higher engagement levels with the younger students could lie with how the iPad was or rather, was not used by the teachers in the Upper Sec. There is some indication that the iPad was not used as effectively nor pervasively at secondary three with remarks such as "Our Sec 3 teacher did not use the iPad as much" or that "some teachers don't use iPad much except for Keynote". Even then, as reported earlier, the 2013 secondary 3 ratings of their engagement in every area surveyed were significantly higher than their 2011 counterparts. This, along with the significantly higher ratings of the 2013 secondary 2 cohort over the 2012 secondary 2 cohort, suggests that the teachers were getting more skilled in the use of the iPad in their teaching as the years went by.

The positive findings are heartening, especially in light of a large-scale international study that reported that students do not perform better with the use of technology in schools (OECD, 2015). What is evident is that technology alone is not the silver bullet. Ultimately, we need skillful teachers who can capitalize on its affordances to bring about more effective learning, for example as shown in the present study, through designing opportunities for students to collaborate, receive feedback and make their thinking visible. The learners benefited from the ready access to resources and the opportunity to discuss and clarify their understanding. As such, it is very possible that the access to online resources and community gave the extra help needed by the low ability group and the in-depth exploration for the high ability groups. The fact that there was no longer a significant difference by 2013 between the P21C² pioneers and their peers could be due to either the peers also reaping the

benefits of being in the programme themselves for the second year or the iPad being not as pervasively used in the secondary three, due to perhaps pressures of content coverage for high-stakes testing. The tension posed by the conventional paper-and-pen assessment mode was evident in one teacher comment: “If our high stakes national exams remain what they are, the skills and competencies we hope to achieve with technology seem misaligned. The old methods are still deemed the most efficient (and most effective) way of producing results.”

It will take much effort to wean teachers from “the old methods” and instead to embrace the “New Pedagogies” (Fullan & Langworthy, 2014) where technology is not just used at what Puentedura (2014) terms as substitution or augmentation, but at a transformational level to enable “deep learning tasks characterized by exploration, connectedness and broader, real-world purposes” (Fullan & Langworthy, p. 7). One example of transformational use of technology was when a teacher used Video Physics, an app which instantly creates trajectory, position, and velocity graphs from a video of a moving object. Instead of getting students to create graphs using the app, the teacher presented students with various displacement-time graphs and challenged them to hypothesize the movement of the object that could have resulted in the given graphs. Thereafter, students worked in groups to test out their hypothesis by recreating the movement live and using the app to see if the graph generated matched the ones given by the teacher. While not all teachers in the programme were immediately able to use technology so effectively, the study showed that they can get more skilled with continued support and professional development.

Dewey argues that “the only true education comes through the stimulation of the child’s powers by the demands of the social situations in which he finds himself” (1897, p. 77). The social situations that the child is exposed to nowadays are far more complex than Dewey would have imagined. These include the online communities that our young are increasingly immersed in, both in and out of school. In fact, it may no longer make sense to expect that children who have grown accustomed to actively interacting in a digital community to suddenly change to a passive listener in a unilateral, teacher-directed lesson circumscribed by the limitations of a physical classroom. As educators, we need to think of innovative pedagogical approaches for these Digital Natives. This study shows one possible approach: using iPads in service of enabling students to direct their own learning through interacting with online knowledge and communities. The prospect of positive effects on student outcomes that the study has shown also behooves us to explore further and ultimately take action for our Digital Native learners.

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Hui Yong Tay joined the Curriculum, Teaching and Learning (CTL) Academic Group as a lecturer at the end of 2013. In the many years serving in secondary schools prior to joining CTL, she was variously English and Literature teacher, HOD (EL), dean (Curriculum) and vice-principal. Her research interests grew out of her line of work: her MEd thesis looked into role conflict experienced by HODs; her PhD focused on self-regulated learning and authentic assessment, important areas to her as driver of the curriculum in her school. Above all, she is interested in all things that will enhance student's learning experience in school. This led to the present study looking into how technology can be used to enhance student outcomes.

Chapter 21

Preparing Students for a New Global Age: Perspectives from a Pioneer ‘Future School’ in Singapore

Wen Chee Chung, Hwee Joo Yeo, Ai Chin Tan, Jasmine Tey, Melvyn Lim,
and Chiew Weng Hon

Abstract Globally, Singaporean students have performed well. According to the 2012 Programme for International Student Assessment (PISA), Singaporean students ranked second worldwide in Mathematics and third in Science and Reading. These students also excelled in thinking creatively to solve *problems in real-world contexts*. They were ranked first in the 2012 PISA computer-based assessment of Problem Solving. But topping the rankings is no guarantee of success in life and at work. Given that the world of the future is going to be volatile, uncertain, complex and ambiguous, policy makers and school leaders alike have sensed that schools in Singapore need to develop students with the capacity to think, feel, and act with agility (Heng, 2013). In fact, Singapore schools have moved away from an over-emphasis on examination grades to developing students holistically so that they are well prepared for the rigours of life, work and citizenship in the twenty-first century. Over the last 10 years, there has been a marked shift in Singapore toward customized teaching and learning using technology, creativity and greater student engagement. In 2008, the Ministry of Education established five ‘Future Schools’ to serve as a model for how students can be prepared for a future dominated by information and twenty-first-century technology. This paper describes what a pioneer ‘Future School’ in Singapore is doing to prepare its students for a new global age. It offers insights into why the school is integrating the globalized world into the school curriculum, and how it stays at the forefront of educational change and innovation.

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Background

Singaporean students have performed well globally. The latest 2012 Programme for International Student Assessment (PISA) ranked Singaporean students second worldwide in Mathematics and third in Science and Reading. These students have also excelled in thinking creatively to solve *problems in real-world contexts*. They were ranked first in the 2012 PISA computer-based assessment of Problem Solving. Notwithstanding the high standing of Singaporean students in this worldwide study, what skills and attributes are really valued and needed in our young people as workers in the new millennium (Davies, Hayward, & Lukman, 2005)?

Given the rapid social, economic, and technological changes in the world, policy makers and employers globally have often sensed that the knowledge and skills that are taught in schools today may be markedly different from the new workplace by the time students graduate (Barber & Mourshed, 2009; IDA, 2006; OECD, 2010; Wagner, 2008). To cope with such changes, schools in Singapore are rapidly consolidating how and what to teach, and exploring new ways to cultivate what are often called twenty-first century competencies, i.e. creativity, critical thinking, communication and collaborative skills, innovativeness, and adaptability (Heng, 2013; Ng, 2010; Wagner, 2008). A large part of that endeavour has also been focused on integrating the globalized world into the school curriculum.

In 2008, the Ministry of Education (MOE) in Singapore established five 'Schools of the Future' to serve as a model for how students can be prepared for a future dominated by information and twenty-first century technology. Hwa Chong Institution (HCI) is the first publicly-funded Independent School to pioneer the 'Future School' initiative.¹ The project is a joint-initiative by the MOE and the Infocomm Development Authority of Singapore (IDA) to harness Information and Communication Technology (ICT) for teaching and learning. The investment is funded by IDA and the National Research Foundation, Singapore. The national project is conducted in phases, and the plan is to select and develop up to 15 'Future Schools' by 2015. The pioneer 'Future Schools' are expected to lead the way in using new technologies for teaching and learning, and be the pathfinders for the rest of the education community (IDA, 2006).

Purpose of Initiative

It is often argued that the new global economy is increasingly complex, and thus requires educated citizens who are not only creative and adaptable, but who can learn continuously (Drucker, 1999). Given that the world of the future is going to be

¹The school caters to 4,200 students aged 13 to 18 (Grade 7 through to Grade 12). Every year, it prepares about 1,100 students for the Singapore-Cambridge GCE Advanced-Level Examinations at the end of Grade 12.

volatile, uncertain, complex and ambiguous (Heng, 2013), HCI has taken several bold steps to develop students with the capacity to think, feel, behave and act with agility. In an achievement-oriented society such as Singapore, where teachers are ultimately accountable to both the students and the school for producing good results, it is noteworthy that the school has moved away from an over-emphasis on examination grades to developing students holistically so that they are well prepared for the rigours of work and life in the twenty-first century.

What, then, should education be like in the twenty-first century? Luckin (2008) argues that education in this century will be based less around physical spaces (such as schools), and more around the individual learner. In this regard, it is HCI's view that the learning environment and the people with whom students interact (e.g. teachers, scientists, alumni, and peers) are important, and the implications of acknowledging this wider social context for pedagogy are considerable. In fact, with the 'Future School' initiative, HCI is working to provide a collaborative learning environment where new technologies and new pedagogies facilitate different groups of students to work together to solve a research problem or create a product. And digital technologies increasingly underpin these social interactions in and outside the classroom, as they offer the opportunity for personalized learning and the co-construction of knowledge, all within an authentic setting (Harrison, 2008; Luckin, 2008; Selwyn, 2010). In the process, students are able to collaborate, negotiate their learning, and become active producers of knowledge.

Where teachers are concerned, through a trial and error process, classroom pedagogy in HCI is slowly evolving even as the teacher's role develops to encompass mediating the process of ICT-based learning. For example, many HCI teachers have embarked on developing short TED-like video clips for teaching and learning. The *Nearpod* application has also gained popularity among teachers to deliver engaging lesson packages. The software application is currently being evaluated to ascertain its suitability as a centralized platform to house and deliver learning packages. Other web-based applications include *Pigeonhole Live*, which is used to gather student responses in real time during class via different mobile platforms. *Google Apps for Education* was piloted in 2014 as a platform for more effective collaboration, first by the Physics department, and subsequently in 2015 by the 'Global Literacies' taskforce.

The remainder of this chapter is divided into four sections. First, it outlines the key features of HCI's 'Future School' in its different phases over a period of 7 years (2008–2015). Second, the chapter describes a conceptual framework – the HCI Holistic Education Model – that informs classroom pedagogy and guides student engagement. Third, it sketches two recent curricular innovations that the school believes will help students succeed in a constantly changing, well-connected world. The final section addresses (albeit briefly) the salient issue of scalability for schools that may not be as highly resourced or have the same access to funding and other supporting structures. Nonetheless, it is hoped that the sharing can have some relevance for other settings, despite a difference in school resources.

HCI's 'Future School'

For its 'Future School' initiative, HCI has adopted a phased and whole-school approach (see Fig. 21.1). The first phase in 2008 was to work toward a borderless and passion-driven learning institution. Its plan was to set up a Global Academy, offer advanced research programs, and create diverse learning platforms (Hon, 2013). Between 2008 and 2012, an array of learning environments was created to test out new ideas and new pedagogies. In terms of physical setup, the school established ICT-enabled classrooms and learning spaces with flexible furnishings to facilitate movement, school-wide wireless connection, as well as access to online resources.

Where students were concerned, they increasingly had the technological means to determine how they learn, where they learn and with whom they learn (Luckin, 2008). For example, using ICT tools, students collaborated online for project work and peer review. Students also carried out self-directed research projects with peers from different countries in authentic and virtual platforms. One such example is a science research collaboration involving students from the Academy of Science (Virginia, USA) and HCI. This is conducted annually (over a 9-month period) to provide students with the authentic experience of working like real-world scientists involved in international collaborations. The aim is not only to give students a global perspective to science research. It is also to present these students with an opportunity to acquire twenty-first century skills to succeed in a complex, interconnected and technological world (Baker, 2015; Chia & Pritchard, 2014). Yet another example

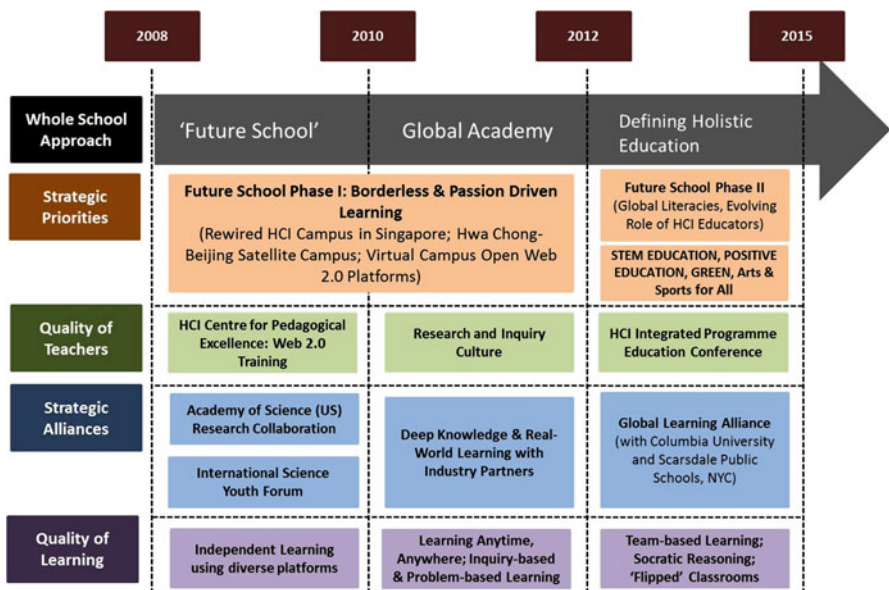


Fig. 21.1 Two phases of the 'Future School' initiative

involves the annual International Science Youth Forum (ISYF). The forum is organized by HCI students for top Science students and educators worldwide to network with their counterparts and build leadership capacities. Between 2009 and 2015, close to 30 Nobel Prize-winning scientists and Fields Medalists have engaged students in HCI, as part of ISYF.

While systems and structures were being built between 2008 and 2010, the school trained its teachers and introduced them to interactive Web 2.0 technologies using different learning platforms. With the setting up of the Hwa Chong Centre for Pedagogical Excellence in 2007 – a first for a Singapore school, teacher training took place not only through day-to-day work life and on-the-job training, but also through formal sessions such as workshops and seminars. Hwa Chong teachers learned not only from experts, but also from their own and others’ experiences through mentoring and role-modeling. Within two years, the teachers were able to conduct lessons using blogs, *wikis*, podcasts, e-portfolios, animations and video production, with some using their mobile devices. This is unsurprising as the teachers were part of only five pioneer ‘Schools of the Future’ in Singapore; and MOE’s selection of these schools was based on their initial successful practice in integrating ICT into the curriculum. Importantly, in Phase 1, HCI managed to foster a school-wide culture of innovation and careful experimentation with ICT, taking advantage of its strong tradition of practitioner research.

It is perhaps noteworthy that senior management in the school generally adopts a “bottom-up initiative, top-down support” approach to ICT integration (Chung, 2013). This is contrasted with a decree or mandate approach that HCI teachers are aware of in other mainstream schools. The downside of such “mandates” often leads to resentment, or at best ad-hoc implementation of an idea. This, of course, is not to suggest that the ‘Future School’ journey was an easy one. While the complexities of ICT integration placed a daunting range of tasks and responsibilities on these teachers, their focus was on problem-solving strategies to overcome these challenges.

In HCI, the introduction of the ‘Future School’ initiative in 2008 came with the expectation that teachers would adopt technology and change their classroom practices to enhance student learning. ‘Future School’ teachers needed to be comfortable with the pervasive use of technology to support students who were already creating knowledge and engaged in independent learning. Over time, as teachers realized they were no longer the expected prime source of information and knowledge in the classroom, they started using ICT to venture into alternative pedagogies such as inquiry-based and problem-based learning (Lim, 2015). With flexible and mobile platforms that promoted learning anytime, the role of the HCI teacher was slowly being transformed – from being a knowledge provider to being a coach and mentor. Today, HCI teachers increasingly play more and more the role of a facilitator rather than teach content. In a technology-rich learning environment, they have a vital role in planning, knowledge co-creation, facilitating, and assessing (Lim, 2015).

The second phase started in 2013 and continued to 2015. Phase 2 is an extension of the earlier ‘Future School’ experiences, and builds on the strengths in the first phase. In Phase 2, the school is focusing on two broad areas. First, it is exploring ways to cultivate the core capacities that are important for the twenty-first century,

as well as to develop a research framework based on those capacities. Second, the school is aiming to investigate teacher effectiveness, and to understand the evolving role of educators. Broadly, the key objectives in the second phase include the following:

1. To understand the concept of a twenty-first century learner, and to apply the **HCI Holistic Education Model** to support self-directed and collaborative learning using technology;
2. To strengthen the school's culture of research and innovation through greater scaling of high-impact **curricular innovations** across levels and subjects, and to share such evidence-based practices with schools in Singapore and beyond.

The next two sections outline the key features of the HCI Holistic Education Model, as well as selected curricular innovations. It offers insights into *why* the school is integrating the globalized world into the school curriculum, and *how* it stays at the forefront of educational change and innovation.

The HCI Holistic Education Model

The 'Future School' initiative is tied closely to the school's mission. And the mission is to nurture leaders for Singapore – leaders not only with a heart to serve the community, but also with the skills and insights to flourish in a global environment. To that end, the aim is to develop students holistically, i.e. morally 德, intellectually 智, physically 体, socially 群, and aesthetically 美, using the Hwa Chong Holistic Education Model. Informed by Howard Gardner's *5 Minds for the Future*, the holistic model places special emphasis on cognitive processes, namely critical thinking, creative thinking, and caring thinking (see Fig. 21.2).

Here, Gardner (2008) introduces a perspective to addressing the question of what skills are required to succeed in the future. According to him, the key to success lies in the operation of the mind, which influences thoughts, feelings, behaviour and actions.

Critical Thinking

The Critical Thinking component of the Hwa Chong Holistic Education Model aims to foster the development of the **Disciplined** and **Synthesizing Minds**. The "Disciplined Mind" refers to the ability to think in ways associated with major scholarly disciplines such as history, math and science, and major professions such as law, medicine, management, and finance (Gardner, 2008). It involves the ability to apply oneself diligently to mastering established corpuses of knowledge, improving steadily, and continuing this quest beyond formal education. HCI's Science Research Program is a good example of a platform for developing the Disciplined

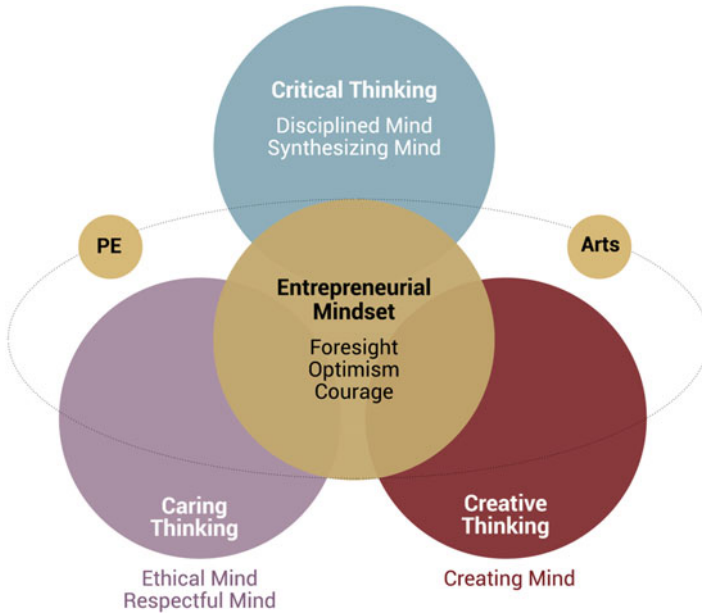


Fig. 21.2 The HCI holistic education model

Mind. Every year, students engage in a real-world research project for close to 9 months which culminates in the presentation of an original research paper in a public forum or national competition.

According to Gardner (2008), the “Synthesizing Mind” takes information from disparate sources, understands and evaluates that information objectively, and packages it cogently and coherently. Subjects in the school that lend themselves to enhancing the Synthesizing Mind include H1 General Paper, H2 Knowledge & Inquiry, English Language, Chinese Language as well as social studies. Students are required to read widely and form their own opinions on critical challenges that affect them, as well as issues of interest.

Creative Thinking & Entrepreneurial Mindset

Creative thinking, according to the model, is akin to being innovative and enterprising. It is aligned to Gardner’s **Creating Mind** where novel ideas and fresh ways of thinking are applied to old problems to break new ground (Gardner, 2008). The Creative Thinking component nurtures the Creating Mind. A unique feature of the Hwa Chong model is the inclusion of the Entrepreneurial Mindset. Individuals with an **Entrepreneurial Mindset** have the courage to take calculated risks and are open to learning from failures. Such attributes are often honed through sports, research

and project work, as well as through more formal platforms such as the school's Integrated Boarding Program (IBP). The IBP is a residential program aimed at fostering leadership excellence in students, with an entrepreneurial focus. Students often undertake extended social projects and learn about leadership through the Harvard Case Study Method. Students in this program are also mentored by members of the Hwa Chong alumni who have started successful companies. Importantly, such entrepreneurial orientations can imagine the world from multiple perspectives and help produce insights and creativity to achieve breakthroughs. Through structured programs and informal settings, these individuals often adopt an open mind and a positive disposition when faced with uncertainties. They look forward to challenges with empathy and optimism.

Caring Thinking

Caring Thinking entails thinking with one's heart. It is aligned to Gardner's **Ethical and Respectful Minds**. Caring thinkers are clear-headed people who rely on their personal and community value system to make sound judgments. In this regard, the school's Core Values of 己立立人, 己达达人 (WIN-WIN) and 饮水思源 (remembering our benefactors) act as basic principles that guide all staff and students in their personal behaviour. These organizational values also inform daily practices such as inter-personal relationships and decision-making processes. Caring thinkers are also clear about their duty to and role in the wider community and society. In the words of Gardner (2008), "Taking an ethical stance, a person thinks of himself as a member of a profession and also how such persons should behave in fulfilling that role; or he thinks of himself as a citizen of a locale, region, or the world and asks how such persons should behave in fulfilling those roles." To that end, HCI requires its students to be committed to community service and global outreach projects, and to show a deep sense of commitment to the environment. The school not only wants its students to be socially responsible, but also to have the courage to stand up for what is right. It further envisions its students collaborating across different ethnic groups, backgrounds and cultures. Ultimately, the school wants its students to be proud of being Singaporeans, and to understand Singapore in relation to the world.

Arts & Sports for All

HCI's philosophy is that holistic education is as much about the body and aesthetic cultivation as it is about the mind. To that end, a "Molecular Structure" is used to illustrate HCI's Holistic Education Model. The Arts-Sports "electrons" provide work-life harmony for students to pursue a healthy lifestyle and have an appreciation for music, culture and the arts. Sport is a vital part of the holistic education the

school aims to provide. Besides building character, sports serve as a platform for students from different backgrounds to interact and socialise in a meaningful way. Like sports, the Institution has adopted for its arts program an integrated cross-disciplinary approach driven by students’ creativity, self-direction, and leadership.

Curricular Innovations

STEM Education

In 2012, HCI introduced a new series of courses to promote the learning of Science, Technology, Engineering and Mathematics (STEM). These courses adopt a practical approach to learning, where design thinking is incorporated to help students think beyond traditional notions of solving problems within the sciences and mathematics. Besides STEM, concepts within the humanities and social sciences are taught so that students learn to solve complex problems holistically. Support is given by the school’s strategic partners from Rolls-Royce, GlaxoSmithKline, 3 M and Intel, as well as by local government agencies such as Singapore’s Economic Development Board, Defence Science Organization, and the Singapore University of Technology and Design. The areas of research interests include mechatronics, biochemistry, energy and conservation science, optics, data analytics, info-communications, and sports science.

STEM education in HCI is situated within the larger context of the Singapore Education Ministry’s initiative to introduce “Applied Learning” into the school curriculum. The aim of applied learning programs is to connect academic knowledge and skills with the real world. Here, the emphasis is on the application of thinking skills, stretching the imagination, and the co-creation of cross-disciplinary knowledge in authentic settings. Within 10 years, it is hoped that HCI graduates will be ready to join the pipeline of well-qualified specialists, ‘technopreneurs’ and policy-makers who will lead Singapore’s next generation of hi-tech growth.

‘Global Literacies’

In an increasingly complex global environment, an important aim of Hwa Chong’s ‘Future School’ is to equip students with twenty-first century capacities – what the school has termed as ‘global literacies’. Here, it is important that it moves away from the traditional conception of “literacy” as merely being able to read, decode and interpret words on a printed page. Instead, the school has broadened “literacies” to encompass the studying and analysis of multimodal texts, body language, semiotics, situations, culture, natural phenomena, scientific experiments, mathematical theorems, etc. It is only by moving from merely “reading the text” to “reading the

world” that its students can learn to engage with and process the intricacies and complexities around them and become true global citizens of the future (Ng, 2013).

In other words, a ‘globally literate’ individual possesses a range of abilities, dispositions and skills required for full participation in this new global age. Given the deluge of information, it is imperative that students possess the ability to judge and evaluate the reliability and validity of different information sources while they are negotiating their way in different spaces and interacting with multiple (including online) communities, ranging from the local to the global. In such an environment, students will not only be recipients but also active participants who search for, synthesize, and disseminate information (Ng, 2013).

For this purpose, a school-wide multidisciplinary ‘Global Literacies’ taskforce was set up in 2012 to spearhead efforts to prepare students for the new workplace. Where cultivating the core twenty-first century capacities is concerned, the school’s strategy is to refine its curriculum across subjects using the Global Literacies Matrix (GLM, see Table 21.1). Using the GLM, the aim is to develop schemes of work, assessment tools and instructional strategies that foster critical, creative and caring thinking. To support this effort, HCI entered a partnership with Teachers College, Columbia University, and Scarsdale Public Schools (New York, USA), to form the Global Learning Alliance in 2012. The goal of the Alliance was to share best learning and teaching practices, as well as develop a common language to nurture critical, creative and caring thinking, while reflecting on the characteristics of a world-class education. Innovative schools from some of the world’s highest-performing nations, including Australia, Canada, China (Shanghai), Finland, Singapore, and the USA, congregated in Singapore for a summit that year to benchmark innovative learning packages.

A year later, HCI entered into another strategic partnership with the National Institute of Education (Singapore), to start a 3-year research project titled “Education for 21st Century Global Capacities”. The cross-border collaborative research aims to examine how global citizenship education is enacted in curricula and pedagogical practices in two ‘Future Schools’ in Westport (Connecticut, USA) and Singapore. The project also involves consulting scholars from Studies in Educational Innovation at Teachers College, Columbia University. For HCI, the aim of the partnership is not only to advance teachers’ understanding of what exemplary work is, but also to strengthen students’ ‘global literacies’ using differentiated learning.

Conclusion

In preparing for the twenty-first century, HCI has chosen to cultivate in students the core capacities that are important for life and work in this new global age. This chapter has described what the school is doing to prepare its students, and why, as a pioneer ‘Future School’, it is integrating the globalized world into the school curriculum. Where Singapore’s MOE is concerned, the ‘Schools of the Future’ initiative is part of the Ministry’s broader effort to push the boundary of teaching and

Table 21.1 Hwa Chong ‘Global Literacies’ Matrix (GLM) for the twenty-first century (Abridged)

3 Cs	Capacities	Description	Keywords	5 + 1 dispositions		
Critical thinking	Comprehends	Lists, summarizes, paraphrases, restates content in your own words	Defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states, comprehends, distinguishes, estimates, explains, extends, generalizes, gives examples, interprets, paraphrases, predicts, rewrites, summarizes, translates	Disciplined mind		
		Shows understanding of main ideas				
		Perceives intention and significance				
		Understands multi-media information (Digital Literacy)				
	Questions	Asks essential questions that enhances understanding			Justifies, rationalizes (why, why not, so what if), 5Ws 1H, examines, clarifies, inquires, challenges, debates	Synthesizing mind
		Explores conceptual/ abstract, philosophical underpinnings				
		Asks questions to address the breadth and depth of problems				
		Interrogates / investigates existing practices / status quo and identifies gaps				

(continued)

Table 21.1 (continued)

3 Cs	Capacities	Description	Keywords	5 + 1 dispositions
Creative thinking	Imagines	Explores environments and manipulate resources	Explores, manipulates, experiments, takes risks, engages, shapes, re-shapes, adapts, manoeuvres, multiple senses, initiates, curiosity, tests ideas, seeks, daring	Creating mind
		Experiments with processes of problem-solving		
		Suspends real world consequences by taking risks and appreciating trial and error		
	Thinks with Agility	Thinks flexibly and divergently	Suggests alternative(s), what if ..., potential, creates, innovates, limited resources but limitless possibilities	Entrepreneurial mindset
		Open-minded and suspends judgment		
		Tolerates ambiguity		
		Engages in multiple literacies		
	Perseveres	Sustains interest and effort	Overcomes adversities, strives, does not give up, persists, focuses	
		Exercises discipline of thought		
		Not giving up in the face of obstacles 自強不息		
Has foresight	Envisions possibilities and anticipates challenges	Envisions, stretches, anticipates, farsighted, daring, awareness, “standing on the shoulders of giants”		

(continued)

Table 21.1 (continued)

3 Cs	Capacities	Description	Keywords	5 + 1 dispositions
Caring thinking	Reflects	Understands self, situation, humanity & environment	Mulls over, understands, pauses, ponders, thinks, relates, considers the implications, relives the experience, contemplates, ponders, introspects, deliberates, ruminates, makes sense of (purpose and context)	Ethical mind
		Arrives at new insights about self, humanity & environment		
	Considers Multiple Perspectives	Considers all viewpoints and possible impact when making decisions	Empathizes, considerate, respectful, embraces differences, social awareness, viewpoints, evaluates, perceives, cost-benefit, practical, multi-dimensional win-win	Respectful mind
		Has cultural intelligence		
Collaborates	Engages in knowledge sharing using multi-modalities in real and virtual communities	Pools knowledge, cooperates, co-produces, brainstorm, aggregates knowledge, taps multiple expertise, differentiates learning, shares, fosters multi-layered learning, communicates		
	Draws on different sets of expertise and collaborators to solve problems			
	Demonstrates ability to work in a team with/towards a shared vision			
	Encourages ownership of work as a group			

Adapted from Choo, Sawch and Villaneuva (2012) and Singapore Ministry of Education’s twenty-first century competencies

learning using technologies. The lessons from these ‘trail-blazer’ schools are to inform the “next wave of adopters and benefit the system as a whole” (Cheah, 2013: 255). As to the question whether the work of HCI is scalable to what is often referred to as “mainstream schools” in Singapore (or even schools globally), MOE’s director of educational technology has this to say:

It is useful to recognise that educational settings differ across classrooms and contexts, and that there is no one-size-fits-all approach in scaling. In fact, while an exciting range of good practices have emerged [in the five pioneer ‘Future Schools’], particularly in the last year or so, it will take time for these practices to permeate the system. Scaling is not about repeating practices in different settings. To ensure that such practices can take deep roots in the school environment, it is necessary for the school to build up capacity to bring about the practices. More importantly, the exact details of the practice will likely evolve and adapt to the context of the school concerned, taking into account the profile of the students, teacher capacity and available resources. All these broadly mean that the school leadership will have to exercise judgement in selecting and developing such practices in the school (Cheah, 2013).

For HCI, its role as a ‘Future School’ includes taking a radical look at school design, and more flexible curriculum and assessment frameworks to encourage curiosity, creativity and passion. While there is now greater emphasis on original research and real-world projects, other aspects of education like risk-taking, communication and collaborative skills, community service and leadership development will continue to be given high priority. Students will be encouraged to develop deep knowledge within major disciplines (e.g. math, science, art, history), possess lifelong learning skills, as well as negotiate their learning. Apart from mastering established corpuses of knowledge, provision will be made for dealing with the unknown. Here, students are expected to go beyond existing knowledge to pose new questions and offer novel solutions.

Most importantly, as students are increasingly responsible for their learning, schools like HCI must continue to provide the ethical framework and guidance for young people to keep their bearing and direction in an evolving global culture. And in a global age where new technologies enable sharing of different cultural perspectives, Hwa Chong students will be required to demonstrate cross-cultural awareness and sensitivity in dealing with others (Gardner, 2008). They must demonstrate ethical thinking and a respect for differences beyond mere tolerance. And HCI teachers of the future will continue to develop students’ moral principles and values. By their word and deed, teachers will engender passion and compassion and hone students’ ability to see connections between diverse issues and ideas, while giving them the space to grow as individuals.

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Chapter 22

Problematizing ‘Global Citizenship’ in an International School

Emily B. Clark and Glenn C. Savage

Abstract Over the past few decades, dramatic social, economic and spatial transformations associated with globalisation have led to new forms of mobility, connectivity and transnationality. In response, new imaginations and practices regarding the aims and purposes of education have emerged. A growing trend in this context is an amplified political and theoretical focus on ‘global citizenship’ as a key education priority. However, despite widespread support for its development and an abundance of policy ideas and educational practices associated with it, wildly different definitions and understandings proliferate in relation to global citizenship. This chapter problematizes the meanings of global citizenship found in an international school located in Thailand, which has strong commitments to promoting the concept. Drawing upon ethnographic research conducted in the school and an emerging body of literature on global citizenship, the paper argues that the concept remains highly contested, not only amongst theorists and policy-makers, but also by those ‘at the chalkface’. This lack of clarity poses significant problems for researchers, policy makers and educators who seek to further develop global citizenship as part of a more global approach to schooling reform.

The world faces global challenges, which require global solutions. These interconnected global challenges call for far-reaching changes in how we think and act for the dignity of fellow human beings. It is not enough for education to produce individuals who can read, write and count. Education must be transformative and bring shared values to life. It must cultivate an active care for the world and for those with whom we share it. (Global Education First Initiative, United Nations, 2012).

In recent decades, globalization has driven the significant reimagining of education policies and practices. Transnational economic, political, and cultural shifts,

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facilitated through increasing physical and virtual connectivity, have stimulated new conceptions of the individual and society, and are transforming the goals and purposes of education (Rizvi & Lingard, 2010; Stewart, 2007; Vertovec, 2001). In this context, it is increasingly argued by policy makers and educators that education systems need to be understood as *transnational spaces*, with goals and outcomes no longer limited to national interests, but instead to broader global concerns (OECD, 2014; Stewart, 2007). In response to these arguments, ‘Global citizenship’ has emerged as a major educational goal for the twenty-first century, particularly in schools, where curriculum and pedagogy are positioned as key sites for fostering the production of ‘cosmopolitan’ global citizens (Duckworth, Levy, & Levy, 2005; Kanan & Baker, 2006). The building of global citizens has become a central aim for many international schools in particular, which assumedly offer an ‘international education’ and are seen as uniquely placed to foster global citizenship. The International Baccalaureate Organization (IBO), for example, positions global citizenship as a central aim of its International Baccalaureate (IB) programmes.

Despite this enhanced focus on global citizenship, there remains significant debate about what exactly the concept *means and looks like* in practice. This uncertainty relates not only to manifestations of the concept in schools, but also in terms of how it is understood and enacted in theory, research and policy. Indeed, it is clear that multiple and contested definitions and modes of practice exist in relation to the concept, as well as a ‘blurring’ between the term and other related concepts such as ‘intercultural understanding’ and ‘cosmopolitanism’. While such contestation is to be expected, given the broad global framing of the term and its historical novelty, uncertainty concerning the concept has the capacity to cause significant confusion for policy makers and educators, who are responsible for putting it into practice. As Ball, Maguire and Braun (2012) note, any education reform initiative is always “configured, contextually mediated and institutionally rendered” (p. 3). Moreover, at the school level, reforms are “intimately shaped and influenced by school-specific factors which act as constraints, pressures and enablers” (p. 19). Global citizenship, therefore, is not only likely to be understood differently in different educational spaces, but is also likely to manifest in multiple and varied practices. This poses problems for how the concept can be understood theoretically and for how it can be imagined and enacted in future reform initiatives.

This chapter seeks to problematize meanings of ‘global citizenship’. It begins with a critical review of theory and policy in an attempt to understand the dominant ways in which the concept is understood and rationalized. Following this, the chapter presents empirical data based on an ethnographic study into how global citizenship is understood by school leaders and teachers in an international school located in Thailand that has strong commitments to promoting the concept. The key argument of the chapter is that the contested nature of global citizenship in theory and policy is mirrored in the ways educators understand, describe, and enact the concept. Not only is there wide definitional variation between educators regarding what global citizenship means and how it might be promoted, there is also marked resistance to the concept amongst some educators. These findings have implications

for how global citizenship is conceptualized in theory, and also for policy makers and educators who seek to enact global citizenship as an educational goal.

Education, Citizenship and Globalization

Education has always played an integral role in the creation of citizens (Balarin, 2011). Since the introduction of state supported education across multiple nations from the early nineteenth century onwards, schooling has become a central mechanism for nation-building and state formation, mediating the complex relationships between individuals and societies (Dewey, 2004; Kong, 2013). Schooling systems, therefore, not only reflect broader social contexts and imperatives, they also assist in creating them (Harber & Mncube, 2011; Yates & Grumet, 2011). As John Dewey argued back in 1923:

... education became a civic function and the civic function was identified with the realization of the ideal of the national state ... To form the citizen, not the 'man', became the aim of education (Dewey, 2012, p. 64).

Globalization, however, has vastly complicated the historically *nation-centric* aims of education systems and citizen building. Earlier conceptions of citizenship education that emphasized civic action within national borders are now increasingly viewed as inadequate for addressing emerging *transnational* realities (see Osler, 2011). As Hughes (2001), suggests: "It is now impractical in the extreme to think that peaceful societies can be built in isolation. The relationship with others is as important beyond national borders as it is within them" (p. 8).

The building of citizens, however, is not the sole driving force behind global citizenship education. For example, a strong emphasis in recent policy iterations has been to frame global citizenship and other cosmopolitan ideas and practices as central to strengthening national productivity in a global economy. This approach is well illustrated in the 2008 Australian "Melbourne Declaration on Educational Goals for Young Australians", a national agreement on educational goals that is signed by all education ministers (federal, state and territory). The Declaration states:

In the 21st century, Australia's capacity to provide a high quality of life for all will depend on the ability to compete in the global economy on knowledge and innovation. Education equips young people with the knowledge, understanding, skills and values to take advantage of opportunity and to face the challenges of this era with confidence ... Global integration and international mobility have increased rapidly in the past decade. As a consequence, new and exciting opportunities for Australians are emerging. This heightens the need to nurture an appreciation of and respect for social, cultural and religious diversity, and a sense of global citizenship. India, China and other Asian nations are growing and their influence on the world is increasing. Australians need to become 'Asia literate', engaging and building strong relationships with Asia. Globalisation and technological change are placing greater demands on education and skill development in Australia and the nature of jobs available to young Australians is changing faster than ever. (MCEETYA 2008, p. 4)

As this excerpt suggests, the need for global citizenship and heightened engagement with Asia is framed not simply as a benevolent social aim, but as central to a broader economic strategy to ensure young people and the nation are well prepared for productive engagement in the ‘global knowledge economy’. Being a global citizen, in this sense, is primarily an economic imperative and insurance strategy against global risk in a world that is becoming increasingly interconnected and competitive.

Of course, in seeking to understand global citizenship, it is important not to treat globalization itself as a *taken-for-granted* concept or as an all-encompassing monolithic condition with clearly fixed and knowable attributes. Indeed, despite the pervasiveness of the term, globalization evades simple definition (Garson, 2012). This is, in large part, because globalization is a highly disjunctive and uneven process. As Appadurai (2002) has argued, globalization can be conceptualized as an artifact of multiple *flows* of information, technology, culture, capital, media, ideas and people occurring with increasing rapidity across space. These global ‘scapes’ mean that social relations and actions now take place in ways that cut unevenly through and across national boundaries and local communities, and which lead to the production of complex transnational networks. Rizvi and Lingard (2010) further this point with regards to education specifically, arguing that despite global interconnectivity rising at unprecedented rates, we are witnessing highly uneven effects in education policy and reform. Globalization, they suggest, can be seen as a double-edged sword: simultaneously operating as a mechanism of social connection and exclusion.

Slippery Concepts: Global Citizenship, Cosmopolitanism, and Global Citizenship Education

The abundance and diversity of literature attempting to define ‘global citizenship’ and related concepts such as ‘cosmopolitanism’ and ‘global citizenship education’ is indicative of the slipperiness of such concepts (see, for example, Chui & Leung, 2014; Garson, 2012; Kleingeld & Brown, 2014; Reysen & Katzarska-Miller, 2013; Roman, 2003; Shultz, 2007). Perhaps one of the only agreed upon aspects in the literature is that there are evident contradictions and inconsistencies in how these terms are understood. Cosmopolitanism, for example, which is widely acknowledged as a foundational concept for global citizenship, has been conceptualized in multiple ways. Beck (2000), for instance, frames cosmopolitanism as both a *process* and an *outcome*. Hannerz (1990) explains that while, “cosmopolitanism is first of all an orientation, a willingness to engage with the Other” (p. 238), it is also “a matter of competence... of both a generalized and a more specialized kind” (p. 238). Hansen (2010), similarly suggests that cosmopolitanism may be treated both “as a proposed solution to contemporary problems generated by globalization and other macro forces” (p. 10) as well “as a way of living, or way of being, that answers to life’s unimagined possibilities and its all too determinant predicaments” (p. 10).

Roudometof (2005) argues that the term, “can be applied to several different research sites, including cities and their cultural milieus, religions, individual attitudes and philosophical or ideological or ethical perspectives” (p. 116).

Regarding global citizenship specifically, Oxley and Morris (2013) identify two types of global citizenship circulating in current discourse – Cosmopolitan and Advocacy – with *eight* different forms included under those categories. These are *Political, Moral, Economic, and Cultural* (‘Cosmopolitan’ types), and *Social, Critical, Environmental, and Spiritual* (‘Advocacy’ types).¹ Arguably the boldest and most contentious of these forms is the notion of *political global citizenship*, which frames cosmopolitanism or global citizenship as a means to create “a polis or polity constructed on a world scale, rather than on the basis of regional, territorially limited states” (Waldron, 2000, pp. 227–228). In literal terms, the feasibility of a ‘global citizen’ (i.e. a member of a singular ‘world-state’) is highly contested (Balarin, 2011; Parekh, 2003). Bates (2012), for instance, states: “Strictly and legally global citizenship is not possible, as citizenship is a concept ineluctably associated with the nation-state” (p. 262). Others similarly assert that even if being a global citizen were practicable, it is not desirable as it “ignores special ties and attachments to one’s community” (Parekh, 2003, p. 12).

Nussbaum (1996), however, argues that “to be a citizen of the world one does not need to give up local identifications” (p. 9) (see also Alviar-Martin, 2010; Gunesch, 2004). Instead, in line with the Stoics’ philosophy, Nussbaum suggests that an individual’s civic identity may be thought of as a series of concentric circles, first surrounding the self, then immediate family, neighbours and local community, countrymen, and the final (and broadest) circle encompassing humanity as a whole. Nussbaum favours the term ‘citizen of the world’ to ‘global citizenship’, suggesting individuals who are able to connect broader global concerns to individual concerns, and vice versa, move closer to such an ideal. Nussbaum suggests this global disposition towards citizenship may be achieved by individuals who prioritize broader commitments to the ‘world community’ over local and partisan loyalties, thus encouraging a more global sense of one’s place and responsibilities in the world. Nussbaum is promoting, therefore, a kind of ‘cosmopolitan ethic’, which encourages, as Appiah (2006) suggests, recognition of certain “obligations to others, obligations that stretch beyond those to whom we are related by the ties of kith and kind” (p. xv).

In education, the notion of instilling young people with this kind of ‘global disposition’ has been central to articulations of global citizenship in theory and policy. Indeed, a pervasive theme amongst education policy-makers and researchers is the importance of education as a mechanism “for shaping cosmopolitan attitudes as well as institutions” (Rizvi, 2008, p. 102). This kind of approach to global citizenship has become a major agenda item for governments and schools around the world and is central to how ‘global citizenship education’ is understood. In broad terms, ‘global citizenship education’ refers to a set of curricula and pedagogical ideas and

¹For a full explanation of each of these forms of global citizenship, including the relationship of each form to leading theorists, see Table 2 in Oxley and Morris (2013).

practices that are principally designed to foster the building of global citizens and cosmopolitan young people. As highlighted by Oxley and Morris (2013), however, the term “is subject to a wide range of interpretations in the diverse contexts in which it is appropriated and promoted”, and, as such, both ‘global citizenship’ and ‘global citizenship education’ tend to be “used ambiguously and understood differently both within and across contexts” (pp. 301–302).

The idea of global citizenship education has emerged with particular gusto among international schools. Originating due to the dramatic increase in Western expatriates who ostensibly desired their children to receive a Western education (Blaney, 2000; Heyward, 2002; Kong, 2013), the types and characteristics of schools now subsumed within the ‘international school’ label has broadened considerably (Bates, 2012; Grimshaw & Sears, 2008; Heyward, 2002). As Drake (2011) notes, “the debate on the nature of international schools has engaged the minds of many educators for upwards of 30 years without, it has to be said, having made a great deal of progress” (p. 142).

Still, while specific definitions in the literature differ, there seems to be a common consensus on certain factors that are present in contemporary international schools. For instance, they may have curricula independent of the host nation, provide instruction in a language other than that of the host nation, or they may have a student population that is multinational, culturally diverse, and, for the most part, globally mobile (Bagnall, 2012; Davy, 2011; Hayden & Thompson, 2001; Langford, 1998; Leach, 1969; Matthews, 1988). Many international schools have also taken up cosmopolitan ideals in some depth, and make explicit (or implicit) commitments to the promotion of global citizenship in school mission statements or via core curricula, extra-curricula or pedagogical commitments (see, for example, International School of Brussels; Nexus International School; United World Colleges).

International schools may offer curricula based upon a particular national system, or they may choose to adopt an international curriculum such as the Cambridge International General Certificate of Secondary Education (IGCSE) or the International Baccalaureate (IB), or even a combination. Many schools that adopt the IB, of which there are currently 4,277 (IBO, 2015), reflect a dedication to global citizenship and its related constructs, and are frequently cited as exemplars in terms of educating for global citizenship (Alviar-Martin, 2010; Duckworth, Levy, & Levy, 2005; Gigliotti-Labay, 2010). Historically, the International Baccalaureate Organization (IBO) was founded to offer students a credential that would allow for entry into universities around the world, and that was also independent from any particular national education system. The IB has evolved, however, into a framework that is now widely acknowledged not only for its academic rigour, but also for its focus on global and cosmopolitan themes. This is evident in the IB’s Mission Statement:

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the organization works with schools, governments and international organizations to develop challenging programmes of international

education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right. (*IBO Mission Statement, Source: IBO Website*)

Of course, statements like this are necessarily broad in focus and purpose, and do not shed any light on what such global commitments might mean when translated into more specific educational aims and practices. This broadness of definition is reflected in other aspects of the IB, such as the Learner Profile, which describes a set of ten “learner attributes” designed to produce learners who are academically well prepared and ‘internationally-minded’, but which also maintains a high level of generality. Coupled with enduring tensions in theory and policy over the many and varied meanings of global citizenship, how such a contested concept may be translated into practice remains in doubt.

Understanding Global Citizenship in an International School

In light of the slippery and contested nature of global citizenship in theory and policy, the question begs: *How do school leaders and educators understand the concept?* More specifically, and for the purposes of this chapter: *How do teachers working in an international school that offers the IB interpret broader imperatives concerning the teaching of global citizenship?*

To explore these questions, we now turn to an analysis of insights generated from a one-year ethnographic study into how global citizenship is understood and enacted in an international school located in northern Thailand. While the study analyzed both *ideas and practices* relating to global citizenship in the school, this chapter focuses specifically on the former, by exploring how educators *understand, describe, and rationalize* global citizenship in education.

Methodologically, our analysis draws upon a series of interviews, observations and document analyses conducted by the lead author at Lakeview School² between 2014 and 2015.³ The school is a prestigious and high-fee paying day and boarding

²To maintain the anonymity of the school and its participants, we have chosen not to reveal specific details about the school’s location or other details that would lead to it being identified. A pseudonym is used for the school.

³The study, upon which this article is based, employed purposeful sampling techniques in order to obtain information-rich cases (Patton, 2002). Purposeful sampling allows the researcher to “select a sample from which the most can be learned” (Merriam, 1998, p. 61) and in which participants are selected “precisely because of their special experience and competence” (Chein, 1981, p. 440). Naturally, sampling decisions were also made with regard to practical constraints inherent in a project of this size. The interview data included in this chapter was generated from interviews with staff members at the school including five classroom teachers, two of whom occupied leadership roles at the school, and a school counsellor who also occupied a position of leadership within the school. The participants varied widely in nationality, socioeconomic status, and age. In addition to interviews, observations were conducted throughout the research project in classrooms of three participating teachers.

school, with approximately 450 enrolled students, and 70 academic staff across the 4 IB programmes. The school was selected for research because it is an international school that offers the full suite of IB programmes⁴ and has a strong emphasis on ‘global citizenship’ in both its promotional materials and curricula foci.⁵ For example, the school’s Mission Statement states that the school challenges students to act as “principled global citizens” who reflect the compassion and knowledge required to work together for “a sustainable future” (Lakeview Website, 2015)

The school also has a highly developed “Visiting Schools Programme” (VSP), which each year caters to thousands of visiting school students from around the world. The school’s VSP is marketed as having an explicit commitment to building ‘global citizens’. All VSP team leaders, for example, wear VSP t-shirts with ‘Global Citizens’ emblazoned across the front. In many cases, visiting schools integrate their trip with the “Creativity, Action, Service” element of the IB curriculum framework, which has a strong service-learning focus and provides multiple opportunities to *educate for* global citizenship.

Demographically, students at Lakeview represent middle to high socioeconomic status backgrounds, heralding from over 50 nationalities. Consistent streams of visiting students engaged in the VSP buttress this diversity. VSP students stay on-site at the school within purpose-built facilities that are integrated into the boarding accommodation. Staff members at the school also herald from multiple nations, with the majority of school leaders and teachers from England, Australia, Canada and the USA. Teaching aides, support staff, maintenance workers, gardeners and catering staff are typically drawn from the local Thai community. Lakeview is a rich site, therefore, for investigating the convergence of multiple nationalities and cultural perspectives, and how these factors contribute to the ways ‘global citizenship’ is understood.

In conducting the research, a number of key findings emerged about how global citizenship is understood by educators at the school. In the sections to follow, we draw attention to *three* dominant themes to emerge:

Varying Conceptions and Pockets of Resistance

The challenge of defining ‘global citizenship’ within theory and policy was strongly mirrored at Lakeview School, with educators expressing varied understandings of the concept. As one teacher succinctly put it, “it’s a tricky one... you’re dealing with

⁴As suggested in the previous section, given the IB’s prominence within international schools and its explicit commitments to promoting ‘international mindedness’ (IBO, 2015), we consider international schools that run the full suite of IB programmes as rich sites for exploring manifestations of global citizenship.

⁵The authors do recognize, however, that the ‘elite nature’ of the school necessarily limits the extent to which the findings may be generalized to other educational contexts.

a very amorphous type of an idea and everybody has a different definition about what it is.”

The Head of Lakeview School demonstrated a conception of global citizenship reminiscent of definitions by authors such as Appiah (2006), which prioritize individual dispositions and obligations to others, suggesting:

It’s disposition. And that disposition is based upon, *‘I care for myself, I care for others, I do care, and I’m connected’*. So, therefore, with those connections I need to make sure that what *I* do doesn’t damage what *they* do down the other end of that connection, and I want that connection to be two ways.

Similar views resonated amongst other school leaders, but were expressed in more straightforward and practical terms. The Head of the Primary Years Programme (PYP), for example, said:

I think it really is just helping kids to learn to accept others ... it’s going back to the old, *‘if you don’t have anything nice to say, don’t say it’*. And just because they’re different doesn’t mean ... you know.

The Head of the Diploma Programme (DP) described the term as something linked to the heightened levels of global mobility experienced by students, suggesting global citizenship was “an experience” or “condition” that mobility produced, which *de-anchored* individuals from the national contexts in which they were officially citizens and gave them a different way of understanding the world. Global citizenship, therefore, was not just a disposition, but was something born necessarily out of physical mobility. In making this point, she reflected as much upon her experiences as those of her students:

I’m probably one of the rare international school teachers who has lived that same type of international life as the majority of the kids... I moved around every year of my life switching schools all of the time. So I have a personal connection to that global context ... I think that when I work with other international teachers, I find they often lack that understanding because they, they are so ingrained within their own national situation or national experience that they had, that when they come into an international school initially, they struggle to separate their own personal national identity from that of what they are doing in their classrooms as well, to a certain extent. They know they’re teaching international kids but still they’re using the context of their own understanding of the world to bring it into the classroom as well.

Although much has been written about global citizenship and its association with global mobility, class and elite social groups (e.g. Balarin, 2011; Roudometof, 2005; Smart, 1971; Vandrick, 2011), the majority of educators at Lakeview School rejected this conceptualization of global citizenship as necessarily linked to physical mobility. As the Head of School said, travel might be “very good for [displaying pictures on] Instagram, and for Facebook, but it doesn’t actually take you any closer to actually becoming a global citizen.” Others said:

Why do people say that somebody who’s never been out of their country is totally not a global citizen? They could have read as much and discussed and researched countries as much, they might not have been able to actually go and see them but they’re still interested in the world. – Lakeview Teacher

There's people making those connections and coming to the realization that you're not exceptionally special and there are people around the world just like you. And that's, that's global citizenship... you don't even have to leave your room. So you don't need to fly first class, you don't need to stay in five star hotels, *that's* elitism. – Director of Boarding

Comments like these raise important questions about whether transnational mobility (in a physical sense) is a necessary condition in the production of 'global citizens', or whether one can be *instilled* with the disposition of a global citizen while being anchored in a specific locality (a process that may involve various 'virtual mobilities' being fostered, particularly through technology and social media). While the comments of the Head of the DP indicate that without global mobility students are unable to achieve the global disposition necessary to look beyond their national roots, comments from other participants suggest that this is not the case.

The relationship between physical mobility and the disposition of global citizenship point was furthered explored by the Head of the School, who sought to draw a distinction between 'internationalism' and 'global citizenship':

The globally mobile are largely at the stage of internationalism rather than at the stage of global citizenship. Global citizen, you don't need to leave this office to be a global citizen, you don't even have to have left Melbourne to be a global citizen. You can be a wonderful global citizen sitting in a barrio, or a neighbourhood in Melbourne.

This comment echoes the work of Roudometof (2005) on cosmopolitanism, transnationalism, and 'glocalization', which suggests physical transnational mobility is not a prerequisite for cosmopolitanism or for participation and power in transnational contexts. What *is* required, he suggests, is an "open attitude welcoming the new experiences" (p. 127), as opposed to one that seeks "to limit the extent to which transnational social spaces penetrate their cultural milieu" (p. 127). While Roudometof is specifically referring to cosmopolitanism here rather than global citizenship, the comments from participants above suggest that his argument may be extended to include both constructs.

While the educators above typically viewed global citizenship in positive terms and endorsed its continued integration into schools, others were positioned very differently, reflecting considerable resistance to, if not outright dislike of, global citizenship. For instance, the Director of Boarding asserted, "it's not a good way to describe people", and suggested that the term had developed into an education 'buzz word' that lacked real substance and meaning when put into practice in schools:

Whether they need to have a title for it. I don't think you do. I think that unfortunately we *always* seem to want to title things or tag them and why? Why? ... I *don't* get a good feeling being referred to as a global citizen... it really is a buzz-word that people have picked up. And it doesn't even say, I just don't know. How you can ever describe someone as a 'global citizen'?

The Head of the Junior School made similar comments, saying, "all these words have made it much, much bigger than it really is", and suggesting the concept had been blown out of proportion in education policy and curriculum. She also said the so-called attributes that sought to describe global citizenship were not necessarily *global*, but instead were "just good things you need to do". In other words, she did

not see the *disposition* usually described as a marker of global citizenship as any different from what it means to be a good person.

These pockets of resistance speak powerfully to the work of Shultz (2007), who suggests that in light of the many and varied definitions and conceptions of global citizenship, the term could potentially be rendered meaningless in practice. Luke (2004) suggests that in an “environment of proliferating curricular and administrative bids for time,” staff may develop “change fatigue” (p. 1428). Indeed, one Lakeview teacher described the culture at the school as being one of “fad diets” where many different initiatives are introduced but with little corresponding follow through, and, therefore, with little incentive for staff to commit. Educating for global citizenship, therefore, not only suffers from variations in understandings, but also runs the risk of adding to the disenfranchisement of educators who view the reforms or initiatives associated with it as fads that lack substantive meaning and purpose when enacted in schools.

Competing Orientations Towards the Concept

Educators at Lakeview also reflected different *orientations* towards the concept of global citizenship. Weber (2011), for example, argues that global citizenship education is characterized by *two competing discourses*: one framed in relation to a social justice paradigm (emphasising greater *fairness*) and the other framed as a means to prepare students for participation in a global market (emphasizing greater *competition*). Educators at Lakeview reflected aspects of both orientations when discussing global citizenship.

In line with the school’s Mission Statement, for example, some educators foregrounded understandings of global citizenship that aligned with ‘internationalist’ orientations, which emphasize the importance of global citizenship from a moral and democratic standpoint (e.g. Cambridge, 2003; Crossley & Watson 2003; Simandiraki, 2006). For instance, in discussing the key characteristics of a global citizen, the Head of School said:

You can no longer, if you’re a global citizen, you can’t shut your mouth and you can’t shut your eyes. You can use your cell phone to actually capture video and then tweet it out and then to hold governments accountable.

In making this comment, the Head of School was referring to the various moral responsibilities individuals now have in an interconnected world in which advances in technologies and social media make it possible to share information and affect the democratic process in new ways. The ‘global citizen’, therefore, can play an activist role through exposing inequalities and injustices on the global stage and, in turn, holding national governments to account. This kind of social media-driven global citizenship is exemplified by the 2011 Arab Spring uprising, which is widely accepted to have been fuelled by media and political activism channeled through Twitter, Facebook, Blackberry Messenger, and online blogs.

Educators at Lakeview, however, also reflected distinctly ‘market-driven’ orientations towards global citizenship (see Matthews, 1988). One teacher, for example, argued that facilitating global citizenship “is more important” for international schools that offer international curricula, as such schools, “will have a higher percentage of students actually move abroad and work abroad.” This teacher drew a contrast between what he imagined as a typical international school student, as distinct from a student who might be more likely to stay anchored to a particular local context, arguing: “the skillset they [international school students] are going to have to have in dealing with other cultures is radically different than kids who are going to live and die in Perth.” This comment clearly oversimplifies the aspirations and future mobilities of students in different localities and school systems, and draws a false and arguably elitist distinction in doing so. However, the underlying point being made by this teacher is revealing insofar as it suggests global citizenship is primarily important for students in international schools because it is a means to increase their likelihood of success in a transnational economy. He added, for example:

The ability to understand and interact with people from other cultures is essential to their success in so many things ... whatever job they may go into, they're going to be talking to people manufacturing in a different culture, or marketing firms that come from a different continent.

The international school student, in this sense, is one strongly aligned with the kind of economic approach to global citizenship that is increasingly prevalent in policy, which frames the concept as an insurance strategy against future economic risk by imbuing young people with a set of *self-capitalizing attributes* that better place them to compete and win in the race of global capitalism.

The fact that distinct orientations exist simultaneously at Lakeview is no surprise. The work of Gigliotti-Labay (2010) and Snowball (2008), for example, suggests this is the case more often than not. The coexistence of orientations, however, does have the capacity to produce tensions in terms of how the concept of global citizenship is put into practice. For example, classroom observations at Lakeview suggest students were frequently encouraged, as one teacher put it, to “understand the interconnectedness of global issues”, and to critically examine their own beliefs and develop empathic awareness. For example, in a DP Geography lesson investigating development, students were asked to consider how they would feel if they were unable to attend school anymore, and then what they may achieve given their position of relative privilege. Activities of this nature are clearly oriented towards educating young people in ways that encourage the kind of cosmopolitanism or ‘world citizenship’ discussed by Nussbaum (2002, p. 293). However, one teacher suggested that these kinds of educational experiences were often subject to criticism by parents, who may not feel that time spent on such activities is as important as that spent on more economically-driven pursuits, such as skilling young people for the economy, or focusing on academic subjects. He said, for example, that in a high-fee school like Lakeview, the focus “always comes back to the clients ... and the parents want their kids in elite universities, so you’re trying to balance up competing

interests ... it’s all about the end product.” This echoes research from Lai, Shum and Zhang (2014), which suggests that parents view elements of the IB, such as developing international mindedness through “attributes in the IB Learner Profile” as “a pleasing but unexpected bonus”; an element ‘which they did not regard as the core of the education they were seeking for their children’ (p. 88).

Global Citizenship as Relevant to Humanities and Inquiry-Based Learning

A strong theme to emerge at Lakeview amongst educators working in the Middle Years Programme (MYP) and the DP was that global citizenship and related concepts are best facilitated and nourished through humanities-based subjects, such as History and Geography. As one teacher said:

You know, in the higher level Geography class, we talk about global interactions and ... that just is *aching* to be talked about citizenship and how, you know, we are reliant on people we don’t even know and countries we’ve never been in ... it’s just *organic* from the content, from the subject.

The same teacher suggested that facilitating global citizenship education in other subject disciplines would be more difficult:

I think you’d be much, it’d be much more difficult to be an English teacher ... I don’t know how Math and Science, I can’t see how they can bring it in.

While many educators would disagree with this conceptualization and see rich avenues for engaging with global citizenship across disciplines, these comments reflected a prevalent theme at Lakeview with regards to which subjects and teachers were responsible for the task of global citizenship education.

Other school leaders and classroom teachers suggested that there was scope for global citizenship to be embedded across all disciplines, however, made it clear that this was not occurring in practice. As one teacher said when reflecting on the extent to which global citizenship was a focus in the humanities, “it doesn’t need to be only the people who do humanities, but it’s just *evolved* to become that.”

The DP Coordinator also supported the idea that global citizenship had evolved into a humanities concern at Lakeview, suggesting the school offered young people a lack of alternative avenues within other subjects to explore global issues. The DP coordinator said the integration of global themes into the DP was “a struggle” and admitted that the only substantive engagement young people had with such themes was in the “Theory of Knowledge” and “Creativity, Action, Service” components of the curriculum. This supports research conducted by Rizvi et al. (2014), which found the structure and academic demands of the DP were often barriers to engaging with global themes such as ‘intercultural understanding’ in the Learner Profile. Rizvi and colleagues suggest a tension exists between the overloaded curricula requirements of the DP and the notion of engaging young people in moral and

ethical debates about global issues. Rizvi and colleagues also found that despite many international schools boldly promoting *on paper* commitments to global citizenship and related concepts in the DP, the reality is often very different. They also suggest there is a distinct lack of teacher training and professional development in order to better position teachers to engage young people in meaningful learning experiences.

The problem of professional development was strongly echoed by Lakeview's DP coordinator, who said, bluntly, "there is *no training* ... it doesn't exist." Moreover, no professional development or training opportunities regarding global citizenship education were on the horizon at Lakeview, giving an indication of where it sits as a priority for the school.

In contrast to the MYP and DP, Lakeview educators engaged in the PYP reflected more sustained engagements with global citizenship and related concepts, and were also more positive about its potential for being integrated across the curriculum. For example, several teachers made comments to suggest that because the PYP at Lakeview lacked the more rigid subject-based learning structure that Lakeview adopted in the MYP and DP, it allowed teachers more flexibility to engage young people in *transdisciplinary* learning experiences that could involve a focus on global citizenship and related themes. Importantly, however, teachers described such transdisciplinary experiences as most effective when put into practice through *inquiry based projects*. The Head of Junior School, for example, spoke in detail about the inquiry-based "concept driven curriculum" in the PYP, which was described as an ideal avenue through which global citizenship education could be promoted:

If you look at our program of inquiry ... all grade levels [within the PYP] will have something where culture comes in quite heavily. So for example our EY1s [Early Years Grade 1 Students] start with an 'All about me' as 3 year olds do. And it's age appropriate. Part of it is looking at who's in your family. Who lives in your house? ... But they understood then that, 'oh hang on, not only do you look different to me but your family's different' and it was also, for these little ones, finding out what their culture is and what their celebrations are, and being able to articulate that (Head of Junior School, 2014)

Linked to this, the Head of Junior School also spoke about ways the Learner Profile was harnessed to engage young people with concepts such as intercultural understanding and global citizenship, giving the example of an 'awards system' recently introduced in the PYP, designed to recognise students who demonstrate attributes of the learner profile linked to these concepts, such as acting in ways that showed respect for students from different backgrounds.

Examples like these suggest the approach to global citizenship from PYP educators at Lakeview is less about linking the concept to specific subject content, but instead is focused on engaging students in forms of self-inquiry and reflection that ostensibly position them (from an early age) to consider the implications of globalisation and cultural difference. These findings are consistent with research from Skelton et al. (2002), and Van Vooren and Lindsey (2012), which suggests the transdisciplinary and inquiry-based structure of the IB, in particular the PYP, and its focus on developing students' awareness of "how commonalities operate within different cultures in their own community and internationally" (Van Vooren & Lindsey,

2012, p. 31) is an important step in nurturing students’ cultural proficiency, international-mindedness, and the motivation to “take action as engaged citizens” (p. 25).

Global Citizenship, a Contested But Rich Field of Possibility

In this chapter we have sought to problematize ‘global citizenship’ by exploring its various meanings in education policy and theory, and through examining the ways educators working in an international school understand the concept. Perhaps unsurprisingly, our empirical insights echoed the varied, complex and contested meanings of the concept in policy and theory. School leaders and teachers at Lakeview not only reflected very different views about the concept, but also had varying orientations towards it and expressed distinct views about where it is ‘best placed’ in the curriculum. Some also demonstrated resistance and scepticism towards the term, casting doubt over its worth.

The variation at Lakeview, and in broader literature and policy, highlights what Davies (2006) and Shultz (2007) suggest may be a key *crisis issue* for global citizenship in education: that is, it has been discussed and researched to the point of abstraction, and is thus perceived by practitioners as having little real-world utility. Put differently, the term has become so all encompassing, but concurrently so diffuse, that it risks meaning *everything and nothing* at the same time. While some level of abstraction is inevitable when seeking to capture big ideas in theory and policy, and may arguably be generative insofar as it may allow for flexible interpretations by stakeholders, drifting too far from commonality and specificity runs the risk of de-anchoring concepts like global citizenship from normative meanings. This absence of normative meanings then poses problems for stakeholders who seek to *enact* global citizenship in schools, as it can often be unclear as to how the concept can be put into practice. At Lakeview, for instance, the perceived abstraction of the term prevented the adoption of a framework that could be utilised to meaningfully embed and assess global citizenship and its associated concepts within the curriculum. And as suggested by Wright and Lee (2014), when there is little formal assessment of global citizenship, both staff and students struggle to treat it as a priority.

Our findings strongly support research from Mannion and colleagues (2011) who argue that although recent policies focused on global citizenship encourage schools to embed ‘global dimensions’ within and across subjects, there remains a notable silence as to how this may be *practically* translated into classrooms. This lack of clarity about how to enact global citizenship is intensified in environments like Lakeview where there is a significant lack of support and professional development for teachers to help them further embed the concept in their classrooms (see DeJaeghere & Cao, 2009; Duckworth, Levy, & Levy, 2005; Gigliotti-Labay, 2010). This scarcity of training offered to teachers at Lakeview reflects the widely held view that teacher education in general is noticeably devoid of cosmopolitan themes (Luke, 2004; McNiff, 2013; Reid & Sriprakash, 2012), exacerbating the problems

associated with an already problematic, yet important, educational goal. Indeed, conversations with Lakeview educators not only suggest professional development is non-existent with regards to global citizenship, but also that the school lacks any kind of systematic approach to developing it at the whole-school level, despite strongly marketing commitments to this *on-trend* concept. The lack of agreement on the term ‘global citizenship’ amongst Lakeview educators, paired with the lack of any ongoing professional development – especially in light of the fact that Lakeview is an *elite* school whose mission *explicitly* prioritizes global citizenship and which is incredibly *well resourced* – suggests that schools lacking explicit commitments to the concept, or schools that have fewer resources, could possibly reflect further confusion or disengagement in relation to global citizenship education. It also points to inherent difficulties that all schools might face in seeking to ‘deepen’ global citizenship beyond the surface level of school marketing.

As the social and economic influences of globalisation continue to intensify, there is likely to be an increased emphasis on global citizenship and related concepts in education policy and practice. This is not only in international curricula and programs like the IB, but also within national and sub-national policy initiatives. It is clear, however, that global citizenship faces conceptual and practical challenges moving forward. Far from being a normative concept, global citizenship is kaleidoscopic in nature, with a range of multi-faceted meanings and diversity of enactments in schools. Far from seeing this diversity of meanings and enactments as a reason to abandon the concept, however, we see the contemporary moment as presenting rich opportunities for stoking further dialogue about how global citizenship can be meaningfully embedded in schools. Gaining further clarity about what the concept means and looks like, however, is likely to make educating for global citizenship a more manageable task for educators. For example, our research suggests that the absence of an operational definition of global citizenship at Lakeview prevents it being meaningfully translated into the curriculum, and also that the absence of a common language within the school is a barrier to the enactment of global citizenship education initiatives.

Now, more than ever, there is need for education to foster the traits, attitudes, behaviours, and competencies associated with global citizenship and cosmopolitanism. Global citizenship might be highly contested, but it presents a rich and exciting field of possibility for education policymakers, school leaders and teachers.

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Chapter 23

Being Open to the Other: K-12 Teachers' Multimodal Reflections on Hong Kong Curricula

Zheng Zhang and Rachel Heydon

Abstract Against the backdrops of decolonization and globalization, Hong Kong education has witnessed intense local-global interactions in the last decades. In this chapter, we use this context to contribute specific insights on how education systems and schools from diverse points on the globe can prepare students to meet the challenges of globalization in the twenty-first century. Specifically, we relate pertinent findings from a study that recruited K-12 in-service teachers from Hong Kong to explore their understandings of how the subject-specific curricular documents outlining what was supposed to happen (i.e., programmatic curriculum) compared to what actually happened in the teachers' classrooms (i.e., classroom curriculum). Teachers were invited to create multimodal artifacts (e.g., written texts, paintings, videos, dramas, and presentations) that, when analyzed in the study through postcolonial and cosmopolitan lenses, expressed the following findings: programmatic curricula were viewed as heavily influenced by "Western" theories and ideologies; despite being open to the Other, the teachers thought that some of these theories and ideologies could not be implemented in the classroom; in their teaching, teachers confronted themselves and the Other to negotiate their implementation of the curriculum, imagining a syncretic curriculum made up of the strengths of the local and global.

Contexts & Objectives

Hong Kong is a fascinating case for exploring issues of globalization, education, and encounters with the Other given that the territory and its education system have undergone substantial changes in the last decades, especially after Hong Kong's handover to Mainland China in 1997. The research literature chronicles the various curricular reforms that have been undertaken in Hong Kong before and after

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independence from Britain (e.g., Bacchus, 2006; Kanu, 2003; Yuen, Law, Lee, & Lee, 2010). Morris and Adamson (2010), for instance, delineate curriculum reforms in Hong Kong from pre-handover and after-handover (to China). Between 1945 and 1984, the curricular emphasis was on training “diligent, dexterous, punctual and obedient” (p. 23) workers for the industrial and manufacturing economy in Hong Kong. Being wary of the influences of the Communist and Kuomintang parties, the British colonial government controlled schools and “depoliticize[d] the content of the curriculum” (p. 21). As a result, Morris and Adamson argue that by the mid-1980s students left school with a weak sense of national identity and were taught a Chinese cultural identity that was associated with a pre-modern China and not the China of the day. After 1984 when the handover was confirmed, drastic curricular changes took place to try to ensure that students were well prepared as citizens who were supportive of the “one country, two systems” principle. The subject of Putonghua (Mandarin Chinese) was no longer a peripheral curricular component but central. Also, due to Hong Kong’s economic roles in the new era of changes as a financial, business, and tourism center that provides “intellectual services” (p. 23), now the curricular expectations for various subjects espoused nine generic skills¹ to respond to the “vision and overall aims of education for the 21st Century” (Education Bureau, 2001, p. 2).

The changes in Hong Kong, while at once unique, are also part of larger global trends. Across the earth, in the wake of decolonization, education scholars warn of new forms of imperialism, conformity, and assimilation that can prevail in curriculum reforms under the guise of capitalism, globalization, and modernization (e.g., Kanu, 2003). We have also noted in a comparative analysis of Hong Kong and Canadian K-12 curricula that all of the *intended curricula* (i.e., what is planned in terms of aims, content, activities, and sequence [Eisner, 2002]) shared similar ideologies and discourses (e.g., Anderson-Levitt, Paine, & Rizvi, 2008). Mediating any intended curriculum, however, is the *classroom curricula* (i.e., what actually takes place in schools and classrooms [Westbury, 2003]). Responding to changing curricular landscapes across the globe that are the result of struggles between decolonization and globalization, various critically-oriented curriculum scholars have appealed for endeavors to nurture a new “collective narrative” (Popkewitz, 2000, p. 168) that is “dissociated from the old collective identities” (p. 170). Reconceptualist scholars have even invited postcolonial inquiries that might decenter power relations in educational research and reconstruct participants’ agency in knowledge construction (e.g., Iannacci & Whitty, 2009; Viruru & Cannella, 2001). In this study, we embraced such invitations and worked within the context of the curriculum courses to implement a multimodal method designed to engage teachers in a collective narrative that might produce understanding of how the “foreign-ness” (Kanu, 2003, p. 72) of curricula has been mediated in the twenty-first century Hong Kong. The investigation employed the making, sharing, and critically analyzing of arti-

¹Nine generic skills encompass IT skills, problem solving skills, communication skills (in three languages of Cantonese, Putonghua, and English), numeracy skills, critical thinking, study skills, creativity, collaboration skills, and self-management skills.

facts within the context of curricular study, to afford K-12 teachers opportunities to make meaning of the constituents and effects of intended curricula – how they get played out in the actualities of classrooms; how they relate to each other; and how they pose challenges to teachers. Herein we explore the questions: *How do Hong Kong K-12 in-service teachers express the multiple traditions that are encoded in Hong Kong K-12 curricula? How do these teachers use multimodal tools to re-configure the factors that have mediated the classroom curriculum based on their day-in-and-day-out interactions? What are the implications for re-imagining curricula to educate a diverse Hong Kong population for the twenty-first century capacities?*

Theoretical Framework: Postcolonialism and Cosmopolitanism

The study used postcolonial constructs to illuminate teachers' re-configuration of the hybrid K-12 curricula and factors that have mediated the Hong Kong authorities' curricular visions of educating for the twenty-first century (Education Bureau, 2001). It also adopted cosmopolitan sensibilities to help unravel Hong Kong in-service teachers' multimodal re-imagination of spaces that could capitalize on local and global accomplishments in educational contact zones of the East and the West.

Postcolonial Constructs Post-colonial concepts such as *third space* and *hybridity* (Bhabha, 1994) convey an *in-betweenness* which is applicable to this study that explored “the integration of competing knowledges and Discourses” (Moje et al., 2004, p. 39). Bhabha's *place of hybridity* connotes the construction of a political entity that is “*neither the one nor the other*” (p. 37) (italics in original). We embraced this post-colonial sensitivity to interpret the interactions, resistance, and negotiations in schooling spaces like Hong Kong that celebrate its heritage in connecting the geographic East and West. The postcolonial notion of *third space* maps a space where groups of people who have geographically and historically been separated from one another come into contact (Somerville, 2007). This metaphor helped shape our attempts to disrupt the dualism of colonizer/colonized and East/West and unfolded the “taken-for-grantedness” of many of our observations of local schooling in Hong Kong (Haug et al., 1987, p. 36).

As Rizvi (2005) contends, inherited with their “deconstructive and libatory” (n.p.) impulses, post-colonial perspectives can serve as powerful theoretical lenses to view globalization and education. Rizvi identifies that these perspectives attend to cultural dominations and impositions of hegemonic structures. When schooling privileges certain forms of knowledge and discourses over others, teachers and students may experience competing knowledges and discourses that could bring forth the “splitting” (Bhabha, 1994, p. 115) of discourse, identity, and consciousness. Celebrating an agenda of hope in education research (Lingard & Gale, 2007), we share a vision of third space as a “productive hybrid cultural space” (Moje et al.,

p. 43) where new forms of knowledge, discourses, and identities come into being through struggles. This is exactly what the study wished to produce with its multimodal method.

Cosmopolitanism The expression of *cosmopolitan*, meaning *citizen of the cosmos*, can be traced back to the fourth century BC (Appiah, 2006). Responding to the new social conditions in the twenty-first century, Beck (2002) foregrounds the key feature of cosmopolitanism as an “awareness of a global sphere of responsibility, the acknowledgement of the otherness of others and non-violence” (p. 36). Seguing into educational cosmopolitanism, Hansen (2008) accentuates the significance of the local sociocultural and geopolitical origins of human life. In particular, cosmopolitanism positions educators and learners as having autonomy, agency, and creativity in reconstructing “emerging spaces for new cultural and social configurations reflective of the intensifying intermingling of people, ideas, and activities the world over” (p. 294). Cosmopolitanism is an educational orientation that emphasizes “careful, creative, and reflective study of one’s own and others’ traditions” (Jupp, 2013, p. 2). More specifically, it is a “fusion of humanism and liberalism” that sustains “moral and cultural uniqueness” (Hansen, 2008, p. 294). The cosmopolitan outlook offers “a critical asset” (p. 290) to examine contemporary educational challenges and compare local and global distinctiveness. It also provides a “fruitful” language for “building upon human accomplishments in art, ethics, politics, education, and other fields of endeavor, and extending them both locally and globally” (p. 290). A cosmopolitan sensibility can assist educators in coping with tensions that accompany contemporary global and local changes, for example, by attempting to creatively reconstruct local cultural values (e.g., through active engagement with new and familiar ideas, “methods of hospitality”, “fair-minded responsiveness to political conflict” [p. 292]) rather than abandoning them under “the ceaseless pressure of globalization” (p. 289). The cosmopolitan idea of education in particular spotlights the “participatory ethos” (p. 301) that propels learners and educators to communicate with others and traditions, seek mutual understanding, respect tolerance, and exercise critical reflections upon injustice at the local or global levels. Again, these were all affordances of the multimodal method used in the study.

The constructs of postcolonialism and cosmopolitanism are compatible as both foreground a critical stance. Both conceptual lenses attend to the power relations encoded in the local-global encounters and search for co-construction of curricular imaginaries for democratic global communities in the twenty-first century.

Research Design

We conducted this exploratory case study (Streb, 2009) to contribute timely insights into in-service teachers’ perceptions of syncretic curriculum made up of Western and non-Western traditions. The case study consisted of two parts: the implementation of a pedagogical strategy (multimodal method) within undergraduate and

graduate curriculum courses; and the study of the implementation's processes, products, and implications for K-12 education in the contact zone.

Within the courses, in-service teachers were invited to collaboratively create multimodal artifacts (e.g., drawing, collage, drama, and clay artifacts) to represent their understandings of the intended and classroom curricula. Specifically, participants were asked to: (1) form their own groups and collectively decide on one subject-area intended curriculum that they were familiar with (e.g., mathematics); (2) discuss and use their preferred modes to represent the curricular traditions embedded in the selected intended curriculum; (3) critically analyze how the social and historical situatedness of Hong Kong mediated the classroom curricula in schools; and (4) creatively represent their challenges in addressing such mediated and hybrid classroom curricula in their lived experience. Throughout the coursework, the teachers were exposed to multiple traditions of curriculum-making from around the world and provided opportunities to reflect upon the interconnectedness of Chinese and Western theorizations on curriculum, for example, Confucianism and curriculum making (e.g., Deng, 2011), American curriculum ideologies (e.g., Eisner, 2002) and post-modern perspectives on curriculum (e.g., Doll, 1993). Ontologically, the use of the multimodal method was intended to foreground the "subjective and multiple" (Creswell, 2007, p. 17) educational realities in local Hong Kong schools as constructed by the teacher participants' insider perspectives. It was intended to assist in teachers' "unfinished work" to promote understanding of their "representations of education as a project of learning to live with others" (Britzman, 2007, p. 3). In the discourse of curriculum internationalization, this was a collective inquiry of "a group of people, a community that begins to imagine and feel things together" (Kanu, 2003, p. 76). The multimodal method sought to engage the teachers as *educational connoisseurs* (i.e., persons who have capacities and opportunities to practice the art of appreciating, experiencing, and perceiving the qualitative complexities, nuances, and subtleties of educational practices) (Eisner, 1976, 1991) and *educational critics* (i.e., persons who can articulate what is significant in a text, an educational practice, and/or a teaching performance and enable others' "empathic participation" [Eisner, 2004, p. 200] in "what the critic claims is there" [p. 199]). As Eisner contends, various tools of representation that are not primarily linguistic (e.g., film and video) can be used for educational evaluation practices to "make vivid the quality of life that goes on in schools and in classrooms" (p. 200); for instance, teachers employing their critical abilities to reveal what is taught implicitly and explicitly, covertly and overtly.

To study the processes, products, and implications of the pedagogical strategy, the study employed Kress's (2009) micro-analysis approach. This approach afforded an unpacking of the participants' processes and products. The micro-analysis required consideration of the following: (1) the materiality of the texts that the teacher-participants created (e.g. mode, colour, and texture); (2) the affordances of the modes that were used to create the texts (e.g., how certain semiotic tools made vivid particular kinds of meaning; for instance poetry can enable meanings that are "inexpressible" in mathematics [Eisner, 2002, p. 80]); (3) the framing devices used in the texts (i.e., the resources that were used to give each artifact unity and

coherence to represent an idea/ideas, for example spatial gap or temporal pause such as white space, band in images, silence in speech, and punctuation marks), and the effects of transduction (i.e., how moving an idea across modes can lead to “syn-aesthetic potentials” (Kress, 1997, pp. 26–27) in creative reconstruction of curriculum, pedagogical, and assessment practices). The micro-analysis was triangulated with oral or written presentations that the participants gave about their artifacts in the classes which were meant to further illuminate the meanings of their artifacts and the “discursive environments” that helped shape them (Gubrium & Holstein, 2003, p. 44). Participants were given the choice to use Cantonese or English in these presentations and narratives.² Email correspondence with participants was used if further clarification of the artifacts was needed for trustworthy analysis.

Thirty-two teachers participated in the study. Thirty of them were in-service teachers (19 teachers in secondary schools, 9 primary, and 2 kindergarten), and 2 participants identified themselves respectively as a policy maker and a language therapist. Teacher participants taught a wide range of courses in various K-12 subject areas: Chinese (Cantonese and Putonghua), English, Math, Science, Liberal Studies, Science and Technology, and Visual Arts. Eighteen of the participants were enrolled as part-time students in two cohorts of Master of Education programs and 14 in two cohorts of teacher certificate programs.³ All the participants took Zhang’s courses on curriculum decision-making and design.

Findings & Discussion

The findings of the study relate that the intended K-12 curricula in Hong Kong share similar educational traditions with those of the geographic West (e.g., English curriculum of Ontario, Canada [Ontario Ministry of Education, 2007]). The participants’ multimodal artifacts revealed that these traditions had a “powerful cultural allure” (Anderson-Levitt et al., 2008, p. 356) and were exemplified in various Hong Kong K-12 programmatic curricula.

Convergent Curriculum Ideologies in Intended Curricula and Challenges in Classroom Curricula

The artifacts took radically different forms, but communicated similar themes of a disjuncture between North American ideologies of education and what were understood by the participants as the realities of education in Hong Kong. The participants expressed desires for ideologies that could not be met in the everyday world

²The excerpts we use in this chapter from the participants presentations or written explanations were originally in English unless marked as “translated from Cantonese.”

³These were in-service teachers who graduated with Bachelor degrees and were partially funded by the government to obtain their teacher’s certificates.

of Hong Kong. They also identified tensions in the intended and classroom curricula, with the first being dominated by particular North American ideologies and the second being mediated by particular local values and practices. The teachers' coursework included Eisner's (2002) six curriculum ideologies that he considers as prevailing in the United States: Religious Orthodoxy, Rational Humanism, Progressivism, Critical Theory, Reconceptualism, and Cognitive Pluralism.⁴ The participants all drew upon these ideologies within their artifacts to explicate their views and experiences.

Exemplifying the tensions in the intended and classroom curricula, was an artifact created by one group of Liberal Studies teachers. These teachers orchestrated clay sculpturing, drawing, and writing (see Fig. 23.1) to depict their metaphor of "Peaceful War" to flesh out their classroom curriculum. As they explained in their written narrative:

The created artifact is based on a Chinese game called "太平天下" (Peaceful War). It represents a battlefield, with bloodshed (the red dots on the artifact). There are four puppets, each representing one ideology. The blue one is a unisex champion representing Rational Humanism. The champion has an assistant and a gun to represent that Rational Humanism dominates in the classroom Liberal Studies curriculum. You can see that Progressivism clay is dead, illustrating it is not that influential in the classroom curriculum. The white one is holding a white flag, representing that Critical Theory is giving up. The yellow white and red puppets are smaller than the blue one, representing that they are not as influential as Rational Humanism.

The teachers contended that the intended Liberal Studies curriculum reflected Rational Humanism and emphasized the import of training students' logic and reasoning and exposing them to canonical texts. The teachers expressed that the intended curriculum also accentuated inquiry-based learning and was directed towards developing students' whole being (e.g., academic, emotional, and social beings) instead of the academic being alone. The participants expressed that the intended Liberal Studies curriculum celebrated students' multiple intelligences

⁴Religious Orthodoxy argues that curriculum objectives should be primarily defined by God's message. Curriculum emphases are therefore on literacy abilities to understand the scriptures and how to actualize learned beliefs in daily life (Eisner, 2002). Rational Humanism supports the idea that the universe is orderly and, therefore, understandable and controllable through rational methods (e.g., Eisner, 2002; Habermas, 1969). Thereby, the Rational Humanism ideology espouses a pedagogy that focuses on reflection and insight through exposure to the best works of human beings. Its purpose is to develop learners' abilities to exercise reason. If framed by the Progressivism ideology, curriculum content will no longer be seen as "static, fixed" information to be transmitted (Eisner, 2002, p. 69), but a process of creation involving teachers' input and their understanding of the "whole child" (Eisner, 2002, p. 71) (i.e., children as both social and emotional beings and academic and intellectual beings). Theorists and educators adopting the Critical Theory ideology condemn curriculum as "a perpetuator of domination of the many by the few" (Schubert, 2008, p. 404) and disturb the hidden agendas that underpin curriculum and schooling. Scholars in the lineage of Reconceptualization espouse a theoretical and practical interest in "understanding curriculum" as creative intellectual texts drawing on phenomenological, political, and theological discourses (Pinar, Reynolds, Slattery, & Taubman, 2008, p. 187) (*italics in original*). Cognitive Pluralism underscores human being's distinctive capacities to manipulate various types of symbols to make meaning. Curriculum focus therefore lies in proffering students learning opportunities to access and think in a wide range of symbolic tools (Eisner, 2002).

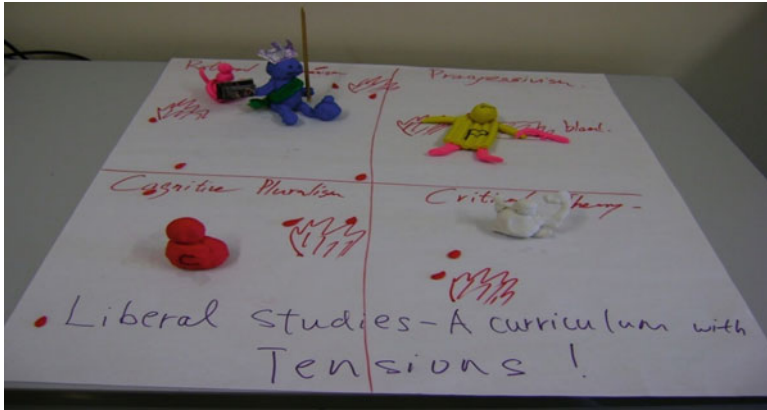


Fig. 23.1 Peaceful war: liberal studies – a curriculum with tensions

(e.g., Gardner & Hatch, 1989) and advocated students' use of multiple forms of symbolic resources to represent their inquiry findings. Thus, they also identified the features of Cognitive Pluralism. Noticing that critical thinking was lauded as a key generic skill in the subject of Liberal Studies, the participants highlighted the specific curricular expectations for students to critically analyze controversial issues in the contemporary world such as social injustice, identity, poverty, and socio-political participation.

Despite these diverse ideological influences to the intended curriculum, the war metaphor and the sculptural inclusions in the artifact communicate the tensions and challenges that the teachers say they had encountered in actualizing the intended curricular ideologies in local public schools.

A group of math teachers took the same ideologies and dramatized them relative to mathematics curricula. They saw that many of these ideologies were included in the intended mathematics curriculum in Hong Kong in various ways. As can be seen in Fig. 23.2,⁵ in evaluating their usefulness in the classroom curriculum, the teachers mounted a farcical “Miss Hong Kong Pageant”— a beauty pageant that began in Hong Kong in 1973 and has been popular ever since.

The Figure suggests how the participants represented four beauties of American curriculum ideologies that they saw as encoded in the intended secondary school math curriculum (e.g., female candidates from left to right: Miss Critical Theory, Miss Cognitive Pluralism, Miss Rational Humanism, and Miss Progressivism). All of these “foreign” ideological beauties took the stage to state their respective strengths. For instance, Miss Rational Humanism asserted,

Rote learning basic math formulas and knowledge is vital for learners to build high-level mathematical intelligence. Math teachers' major role therefore is to transmit math knowledge so that learners know how to follow suit and solve math problems. Practice makes perfect. After reinforcement of information through repetitive exercises and tests, learners will undoubtedly find the right answers and achieve high in public exams. That's why I'm the fittest ideology for Hong Kong math classes. (translated from Cantonese).

⁵We altered the faces in the photos to protect the participants' privacy.



Fig. 23.2 Miss Hong Kong pageant of curriculum ideologies

Toward the end of the “competition” after all the contestants introduced their appeals to the local context, the male show host declared,

Miss Critical Theory sounds like a reasonably appealing ideology, but in real life only very few outstanding students can apply critical thinking skills in math learning. Sorry, you are out. Miss Cognitive Pluralism requires so many learning activities in class, but teachers have very limited time within a tightly-scheduled curriculum. Sorry to Miss Cognitive Pluralism too. Miss Progressivism, you talked about making connections between the social and intellectual, emotional and academic, but the real-life focus is more on high-level mathematical, logical thinking. I’m sorry. Therefore, our winner of Miss Hong Kong Pageant is Miss Rational Humanism. She is the best fit for Hong Kong math classrooms and the local assessments. (translated from Cantonese)

The teachers explained in their oral narratives that the reason for the preference of Rational Humanism in math classrooms was that the performance-based discourse prevailed in the Hong Kong public school context and reconstructed the pedagogical discourses of math classes to be intensively lecture-based and exercise-oriented.

Taking a similar tone in their artifact, a group of participants in the teacher certificate programme conveyed through drawing, collage, and model-making (see Fig. 23.3), a mix of Cognitive Pluralism and Rational Humanism in Hong Kong secondary school math curriculum. In their presentation, they introduced their artifact as “an ironical fusion in math curriculum”.

The intended curriculum encouraged this group of math teachers to draw on multiple symbolic resources to leverage students’ multiple intelligences and strengths. To communicate this, as seen in Fig. 23.3, the teachers crafted a three-

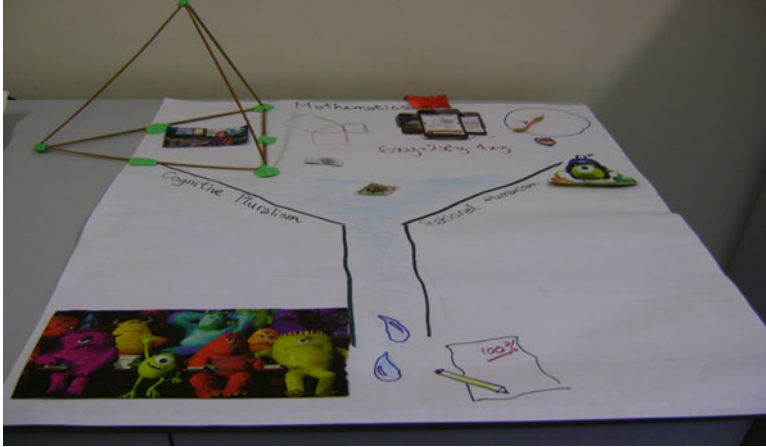


Fig. 23.3 An ironical fusion in math curriculum

dimensional bamboo prism and cut and pasted images of cellphones and calculators from magazines to represent real-life symbolic tools that the intended math curriculum expected teachers to use in math classes. They drew a funnel that was open on the top, representing the broad expectations of the intended curriculum that fused the ideologies of Cognitive Pluralism and Rational Humanism. Depicting the classroom curriculum, they narrowed the bottom of the funnel so that it could only guide a few drops of water into a small opening. The teachers expressed that washback from the examination culture created a classroom curriculum that privileged mono-mode pen-to-paper examinations and they had to narrow their pedagogical scope to written exercises and tests. Eventually, only a few students with intelligences that were celebrated by the mainstream examination culture (e.g., logical, linguistic, and mathematical) would win the “game”. In the oral presentation, the teachers referred to the photograph from the film *Monsters University* on the bottom left of the Figure and communicated that it was their hope as math educators that students of “alternative talents could also succeed and be happy just like what was depicted in the film” (translated from Cantonese).

Likewise, the examination culture in Hong Kong mediated the acceptance of North American ideologies in the classrooms of other subjects. Though, for example, a group of English teachers claimed that critical thinking was advocated in the secondary school English curricula, they also found that the emphasis of critical thinking in Hong Kong’s language education remained different from curriculum expectations from other regions or countries. When they compared the Hong Kong English curriculum (The CDC and HKEAA, 2007) with the Ontario, Canada English curriculum (Ontario Ministry of Education, 2007), they identified that critical thinking embedded in the Ontario curriculum was focused on inviting students to question the reliability of the sources and interrogate the biases that were encoded in texts as pertaining to race, gender, and class, and invoking students’ social responsibilities for social justice and equity. However, the teachers confessed that critical

analysis remained at the text level in the English teaching and learning realities in Hong Kong. The focus of English as a foreign language teaching was more geared to preparing students for their public examinations.

In sum, most of the teacher participants' artifacts revealed a "technically rationalized school culture" (Eisner, 2004, p. 201) and the teachers argued that statistical measurements in their situated schooling contexts justified the prevalence of the Rational Humanism ideology in their respective classroom curricula. The teachers all expressed being challenged by attempting to live out the ideologies in intended curricula with the realities of particular features of education in Hong Kong (e.g., standardized tests) which mediated their classroom curricula. Further, all the participants were able to collectively analyze and explore these tensions through their multimodal artifacts with an eye to attempting to mediate these effects in their actual classrooms.

Attention to the Local and Global in Intended Curricula and Challenges in Classroom Curricula

In the collective inquiry, most of the participants embraced their encounters with the global, be it global issues, global awareness, or "advanced Western"⁶ approaches of teaching. They also called for attention towards the challenges that they identified and as just described as those taught in the contact zone.

The same group of Liberal Studies teachers, for instance, in their examination of the intended curriculum found tensions. They identified that students were expected to analyze broad issues based on their families, Hong Kong, China, and the world. In their presentation, they concurred that such analyses "at the local, regional, and international levels" were interdisciplinary and students were expected to "apply knowledge that they learn from other subjects, such as psychology, humanity, geography or science". When implementing the expectations of addressing the local and global, the teachers encountered challenges and tried to encode them in their artifact of "Fishing for a needle in the ocean". Figure 23.4 provides a sense of how the teachers used their bodies in relation to materials such as modeling clay, paper, markers, twine, and sticks to represent their knowledge of curricula.

Specifically, this group created fishing rods to depict how they understood teachers and students applying learned knowledge and skills in the sea. They made dolphins, octopi, and other animals out of clay to represent six major modules in the intended Liberal Studies curriculum (i.e., Personal Development & Interpersonal Relationships, Hong Kong Today, Modern China, Globalization, Public Health, and Energy Technology & the Environment). While embracing the intention of the

⁶The term "advanced Western" was originally used by most teacher participants. Some participants expressed in informal communications within class that their professional training and teaching practices in Hong Kong had conveyed that Western traditions of education were more advanced than the Chinese or Hong Kong counterparts.



Fig. 23.4 Fishing for a needle in the ocean: challenges in liberal studies classroom curriculum

intended curriculum to make interdisciplinary, local and global connections, the group stated that such a broad scope posted a major challenge in their classroom curricula. Teachers who had expertise in one or two areas had to systematically learn other areas of which they had little knowledge. They had to constantly follow the “hot issues” in Hong Kong, Mainland China, and around the globe. In so doing, the teachers expressed feeling insecure because they did not know on “what issues the HKEAA⁷ will test the students”. When presenting their artifact, the teachers orchestrated body movements, clay art, drawing, artifactual objects of fishing rods, and oral descriptions. In the last picture in Fig. 23.4, the teachers each held a fishing rod and enacted how they were confused in the classroom curriculum and how they saw their students as also being confused:

One of the challenges in teaching Liberal Studies curriculum is that the scope is too broad, and just like the artifact here that there are so many sea animals in the ocean, so students and teachers have difficulty in mastering the massive body of knowledge. So, we can see that there are so many disciplines covered in the curriculum and students are quite confused, just like this ... **(presenters pausing intentionally and starting to tangle up their fishing rods)** What students find is a mess, just like what is happening now **(audience laughing)**.

Another group of Liberal Studies teachers created a tableau to reveal the same challenge that they encountered in operationalizing the cooperative learning approach as prescribed in the intended Liberal Studies curriculum. They agreed that the prescribed cooperative learning strategy is a well-grounded “Western” pedagogical strategy, through which learners can, as they said, “hold hands together and build up knowledge”. However, in what they took to be the real Liberal Studies classrooms, they found cooperative learning impossible because, they expressed in their presentation, “learners need to learn a lot of things and they just cannot digest by themselves”.

The group created a tableau as is shown in Fig. 23.5 where they made a living representation through their bodies to communicate a “negative image” where students are strangling each other, “distracting” each other, “hindering” others’ learning, and “wasting” time when asked to collaboratively learn the massive curricular content.

⁷HKEAA refers to the Hong Kong Examinations and Assessment Authority that administer standardized public examinations in Hong Kong.

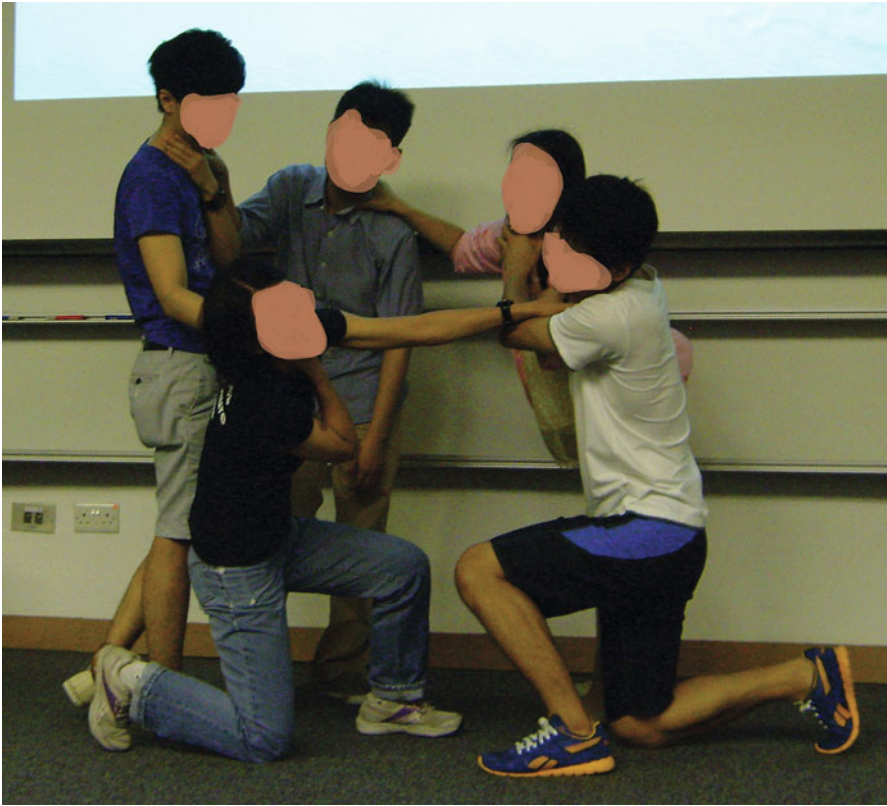


Fig. 23.5 Strangling instead of cooperating

Also grappling with what they identified as Western approaches to pedagogy, a group of secondary school math teachers shared their intentions to teach math in engaging ways like their “Western” counterparts do. They first depicted what they took to be embarrassing scenarios encountered in Hong Kong: “We often have people coming up to us saying, ‘So you teach mathematics? You know what? I used to hate mathematics in school.’” Then they demonstrated the challenges that they have encountered in actualizing the secondary school math curriculum in Hong Kong public schools (See Fig. 23.6). In their presentation they stated,

You know all the math teachers really like to teach some geometry stuff with arts or some interactions. For example, teaching geometry, one of the topics people usually hate (the presenter pointed at the mathematical symbols on top of the hand-drawn blue crack as seen in the first part of Fig. 23.6), we would love to go out and leave the classroom to tap learners’ multiple intelligences. To go and measure the height of some high buildings, for example, a 6-floor-tall, roughly 20 meters, how can we measure it? Of course geometry can do that. The problem is: to do that exercise with a class of 40 students, it will roughly take 3 hours where the course was only assigned 15 hours for us to teach the topic. It is simply impossible. We would like to tap all these things along with interaction, fancy stuff, even cross-discipline, doing some experiments along with sciences, but it is not possible (the

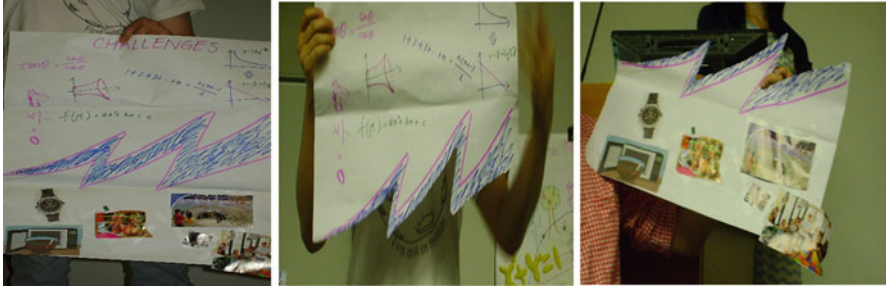


Fig. 23.6 Ideal and reality torn apart

presenter pointed at the pictures on the bottom of the first part of Fig. 23.6 that represented “fancy” ideas of teaching geometry). What is going to happen is (an intentional pause and silence) IT’S GOING TO BE TORN APART (the presenter raised his voice after pausing and tore the poster apart along the blue crack as seen in the second and third parts of Fig. 23.6; some audience members exclaimed in surprise when the poster was torn apart).

The artifact created by this group of teachers assembled drawing, photo collage, writing, oral explanation, movement, and in particular mathematical symbols in various forms. The crack and tearing apart movement represented the tensions between math teachers’ preferred ways of teaching and their real-life challenges of covering massive curricular content within limited time. The artifact suggests a symbolic struggle in math education, that is, the struggle between written mathematical symbols and those encoded with these math teachers’ awareness of “qualities of voice, manner, movement, and visual environment” in educational practices (Eisner, 1991, p. 68).

Through the multimodal method, the teachers expressed their willingness to address local and global issues and integrate them with what they called “advanced Western” pedagogical strategies in their classroom curricula. However, the teachers also communicated that their control of teaching/learning pace, lecturing-based practices, class size, and site selection in practice was fairly bounded by the curricular and standardized test expectations upon them to cover all prescribed content to better prepare students for the secondary school public exams.

Other Mediating Actors and Deficit Views of the Local

Besides the performance-based education, symbolic struggles, and structural constraints (e.g., large class size), the in-service teachers reported impacts of other aspects of their teaching and learning situations that mediated foreignness in the intended curricula at the school and classroom levels. The localization was generally depicted by them as deficient, particularly the deficit views of the local pedagogical approaches and teachers’ impotency in shaping curricula.

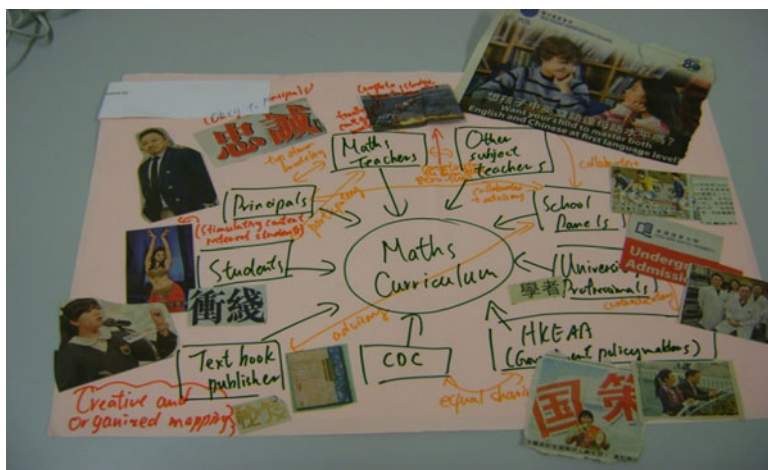


Fig. 23.7 Networked actors that shaped the secondary school math curriculum

An example of the complexities of curriculum in Hong Kong that the teachers identified, was demonstrated in a collage created by another group of math teachers (See Fig. 23.7).

In this artifact, the teachers identified as dominant the influences of neoliberalism (i.e., free market ideology) in school curriculum, explaining the central role that commercial publishers played in curriculum, given that they competed for spaces to provide local Hong Kong schools with “customer-tailored” textbooks and materials. Teachers’ educational practices were seen by the group as shaped by these textbooks and related publishers. The teachers also shared that the Education Bureau in Hong Kong encouraged school-based curriculum development – another educational construct imported from the geographic West (i.e., Australia) wherein curricula are developed at the school level to suit a diversity of student needs and school cultures (e.g., Kennedy, 2010). However, according to these teachers, in Hong Kong, both top-down and participatory decision-makings were evident. Respect for, and loyalty, to principals as authorities also prevailed in some of the teachers’ working contexts.

Within the artifacts, teachers were portrayed by most of the participants as powerless when confronted with tensions between the local and global. Few artifacts foregrounded teachers’ agency in creatively reconstructing local and global traditions. Otherness in the intended curricula (e.g., the ideologies of Cognitive Pluralism and Progressivism), though embraced by the teachers, was abandoned in classroom curricula under the pressure of powerful local forces such as standardization, performance-based discourse, and structural constraints. For example, based on their presentations, the collage in Fig. 23.7 attempted to represent that subject-specific requirements of university programs were influencing what was taught in secondary school math classrooms. The teachers argued that students and parents refused to invest in mathematics knowledge that was of minor importance to stu-



Fig. 23.8 The portrait of English language learners in Hong Kong English classes

dents' future tertiary education in local universities. Teachers hence emphasized in the classroom curricula what was obviously connected to university requirements in mathematics. Likewise, one group of English teachers communicated that the combined powers of these elements of their teaching and learning contexts shaped their students' attitudes towards local, global, or hybrid educational approaches, which further mediated teachers' educational practices in classrooms (See Fig. 23.8).

To illustrate this, the teachers created the tableau shown in Fig. 23.8. The tableau was meant to provide portraits of disengaged English language learners in Hong Kong English classes. Viewers can see, for instance, an actor holding a sign that repeats the word "boring", another actor feigns being asleep standing up, and yet another actor plays with her cell phone in lieu of paying attention to what is going on in the "class". The teachers described their intention with the tableau thusly,

In reality, most students are only attracted to smart phones instead of books, they don't like reading at all. Most senior form students want to get a good mark in the public exam, so they have to like English poems and language arts. They want to learn vocabularies and sentence structures that can help them in the exam, and there are a lot of weak students who don't see the point of participating in various class activities. They would rather be passive, sit there and copy what the teacher writes on the board. When they are asked to do a brief discussion, they will even speak in Cantonese [instead of English, the language of instruction].

The teachers shared that their students were used to lectures about vocabulary and grammar as the students deemed such knowledge vital in accomplishing their goal of getting high marks in public exams. They saw their students as having little interest in interactive and participatory learning which the teachers responded to by switching back to what they termed “traditional” and “duck-feeding” approaches. The teachers equated what they meant by “traditional” as local. Often contrasting “traditional” with “advanced” and “Western”, the teachers connoted a deficit view of what they characterized as the local.

Discussion and Significance of Study for Educating for Twenty-First Century Global Capacities

In this chapter we focus on the case of K-12 teachers collaboratively exploring curricula of Hong Kong through a multimodal method. With its recent colonial history and socio-political, and economic positioning that places it in the eye of globalization, Hong Kong and its education system make a telling case of the contact zone where the local and global meet. The teachers in the study were the negotiators of diverse ideologies and pedagogies. Findings of the inquiry suggest that foreign ideologies were seen by the teachers as encoded within the Hong Kong intended curricula across subject areas. While the teachers expressed that much associated with some of these ideologies was desirable to them, they also saw the enactment of these ideals in the classroom curriculum as problematic and difficult, due to features of the “unique twist(s)” (Anderson-Levitt et al., 2008, p. 353) of the local context.

Similar to a prior study we conducted that revealed the affordance of multimodal methods in providing opportunities to access participants' situated “realities” from a more emic perspective (Zhang & Heydon, 2014), this study gestures toward the potentialities of such methods. Countering the oftentimes objectified and marginalized images of research participants as well as in-service teachers, the multimodal method unearthed and dwelt in teacher participants' lived experience and “funds of knowledge” (González, Moll, & Amanti, 2005) (e.g., their linguistic, epistemic, and pedagogical resources). This method has the potential to expand qualitative educational inquiry and teacher education by inviting participants to express multimodal and indigenous ways of knowing that are not reliant on language alone.

Following this study is next needed a deep consideration of the pedagogical context in which multimodal methods are instantiated. The current study, for example, yielded the identification of the teachers' problematic deficit-oriented views of the local, particularly their own traditional teaching approaches. Few of the participants' artifacts embraced the local wisdom of teaching and learning; teachers instead expressed it as a pity that they had to abandon the “Western” ideas in the face of teaching for standardized tests and large classes. Discovering these views of the local raises the importance of critically-oriented teacher professional learning and the conduct of research that may boost both in- and pre-service teachers' “engage-

ment in multiple [curricular] traditions” (Jupp, 2013, p. 14). Such teacher professional training may also raise critical awareness of the “ethical applications” of local and global strengths in educational actions (Luke, 2003, p. 21). Seeing educators as “agentive beings” (Hansen, 2008, p. 301) in curriculum making, we look to future field-based inquiries that might promote “productive hybrid cultural space” (Moje et al., 2004, p. 43) and engage teachers in critical reflection upon the wisdom of local and global legacies in education. Together, researchers and teachers might collectively explore alternatives to capitalize on educational accomplishments in the local and the global.

Still, the method was illuminating and is potential-filled. Xu and Connelly (2009) contend that “It is necessary to know what teachers already know when teacher education begins in order to understand the narrative context shaping a teacher’s learning” (p. 222). Using the multimodal method to engage teacher participants in qualitative research as educational connoisseurs and critics created opportunities to expand their professional learning and create opportunities for knowledge production. These methods brought into view public teachers’ private “perception and representation” (Eisner, 2004, p. 202) such that they could interrogate them. The study allowed us as well as the teachers to bring to light our assumptions about “how we come to know” and how schooling can be “studied and described” (p. 202). The participants’ multimodal artifacts further served as “tools of reflexivity, mediating the process of developing a cosmopolitan imagination” (Hull & Stornaiuous, 2014, p. 21) of syncretic curriculum made up of local and global wisdom. The method seems to have the potential to advance understanding of the opportunities and challenges of integrating local and global knowledge and practices in educating for the twenty-first century.

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Chapter 24

A New Wave of Learning in Finland: Get Started with Innovation!

Tiina Korhonen and Jari Lavonen

Abstract This chapter describes the grass-roots nature of the Innokas Network and explores how networking can support teachers in adopting strategies for teaching twenty-first century competencies. The context for this study is the Innokas Network, a Finnish school development network. The goal of Innokas Network is to initiate educational reform for the learning of twenty-first century competencies as a new wave of learning arising from widespread innovation on the grass-roots level. The key question driving activities in Innokas Network is how we can teach and support the learning of twenty-first century competencies in practice. Innokas Network is focused on answering this question through the Innovation Education approach, within the framework provided by the Innovative School model (ISC). To study teachers' experience with such networking, thoughts and ideas for supporting teachers in teaching of twenty-first century competencies were collected from Innokas Network teachers during the 2013–2014 school years. The results indicate that teachers experienced the Innovation Education approach practiced in the network, when implemented through ISC principles such as educational innovations, peer-to-peer learning, teamwork, and partnerships, as helpful in teaching twenty-first century competencies. In addition, teachers mentioned the motivational effect provided by taking part in nationwide network activity as well as the enabling effect of the limited but well-coordinated support provided by the network.

Roots of the Network

As a small country of 5.5 million inhabitants with no natural gas or oil reserves, Finland has for a long time recognized education as the country's most important natural resource. The current Finnish education system, with universal basic education in the three national languages (Finnish, Swedish, and Sami), as well as a focus on professional teachers, was built through ongoing educational reform since the

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1940s (Ministry for Foreign Affairs of Finland, 2014; Ministry of Education and Culture, 2014; Sahlberg, 2011).

The general values and aims of Finnish basic education are described in the Finnish National Core Curriculum for Basic Education (NCCBE) document, published by the National Board of Education (2014). Key underlying values in Finnish education are human rights, equality, democracy, natural diversity, preservation of environmental viability, endorsement of multiculturalism, and individualism (in terms of responsibility and as part of a community). The values originate from classical and modern Western humanism. In the schools, the values are incorporated into subject matter as well as everyday activities. The core curriculum includes general, subject-specific, and cross-curricular aims and encourages the school principal, teachers, and students to engage in continuous development of school operations and in teaching and learning processes that are based on feedback and evaluation.

The Finnish educational system is decentralized; local education authorities are responsible for the provision and quality of educational services. Instead of imposing a detailed national curriculum, the national curriculum framework forms the value basis for the entire educational system. An important part of this system is the preparation of local curricula at the municipality and school levels.

The NCCBE recently underwent its most recent review, with participants from various stakeholders addressing current and future national and global challenges and devising methods for responding to these challenges in the education system. The challenges include trends in the Finnish economy due to globalization, such as the relocation of not only production but also high-tech professional work to lower-cost countries, and the recent downturn in the once-dominant Finnish telecommunications industry. In addition, the Finnish demography is more diverse than before, with more languages and ethnic minorities, the largest of which are Russian, Estonian, and Somali.

The key contemporary theme in education reform is to find ways to help today's children acquire twenty-first century competencies they will need in their work and free time. These include creative and critical thinking, problem solving and inquiry skills, as well as everyday skills to navigate an increasingly technology-based society, to work in multicultural teams that cross national borders, and to innovate; to come up with novel solutions and inventions that provide students with a competitive advantage in the global market (European Union, 2006; Niemi, 2014; Organization for Economic Co-operation and Development [OECD], 2013a, 2013b).

The recent policy review is not the first review to address twenty-first century competencies. In the previous review in 2004, the NCCBE was amended with new cross-discipline topics on entrepreneurship ("Participating Citizenship and Entrepreneurship") and technology ("Human and Technology"). To address the need to implement the new NCCBE topics in the City of Espoo, a small group of elementary-level education professionals (five primary school teachers and one official from the local school administration) started on their own initiative brainstorming ways to incorporate the new skills into practical schoolwork. The group's work

quickly gravitated toward a set of central working ideas, which today would be considered the core of what is now known as Innovation Education, an educational approach developed through practical network activities and associated research. These ideas were implemented as hands-on, practical projects in which students learn by creating their own innovations. What started as a small endeavor in one school has grown in 10 years into a large-scale, country-wide network of innovative schools and communities.

Early insights arising from the initiative include the realization that programming, or “coding,” is a key part of twenty-first century literacy and that the increasingly available robotics technology offers a practical, hands-on tool for learning the principles of coding and for expressing new, imaginative technological innovations. In a programming activity, students employ critical and creative types of thinking and engage in problem solving. Somewhat surprisingly, robots proved to be the key to engage girls, who normally would distance themselves more from coding and technology, resulting in displays of amazing robotic dancing performances showcasing their creativity.

In 2007, in order to share these learnings and best practices with other teachers in a peer-to-peer manner, the group applied for and was granted local support in the City of Espoo as a “learning center” named “Innokas.” The learning center started arranging trainings for other teachers in Espoo and established an innovation lab space in a school. The Finnish name *Innokas* translates into “eager” or “pumped-up” in English and is also a word play with *inno* (innovation) and *kas* for *kasvatus* (education).

Soon after, Innokas networked extensively with practicing teachers in other parts of Finland, including both Finnish and Swedish speakers who were interested in school development. Innokas also established a co-operation with the Department of Teacher Education at the University of Helsinki, with the aim of performing pragmatic, design-based research (DBR) on the best ways to support the learning of twenty-first century competencies, with professional teachers as both educational innovators and active researchers (Korhonen, Lavonen, Kukkonen, Sormunen, & Juuti, 2014).

Enabled by a grant from the National Board of Education in 2011, Innokas set up the national Innokas Network with 36 primary schools coordinated by three volunteer area coordinators, with volunteer participation by practicing professional teachers in participating schools. The network was built into its current size in three phases; the third phase in 2015–2016 included 400 schools and 10 area coordinators. Using the volunteer workforce, the Innokas Network has arranged 40 to 50 professional training courses each year for teachers as well as five national-level Innovation Education events in 2012–2016 with participation by more than 4000 primary school students, teachers, parents, and administrative and industry stakeholders interested in the teaching of twenty-first century competencies. Innokas Network members actively perform practical research on the learning of twenty-first century competencies in collaboration with the University of Helsinki and Stanford University and are contributing to national-level discussion, including the recent review of the NCCBE. The Innokas Network has also started an international collaboration with similar initiatives worldwide. Schools in Australia, the United

States, Canada, China, and Finland have participated in the initial activities in the Global Innokas Network.

In this chapter, we describe the grass-roots nature of the Innokas Network and its practical and research activities, which are based on the ISC model, a model for a learning environment supporting the development of methods for learning twenty-first century competencies. In addition, we present an analysis of how Innokas Network participants have experienced the network's activities based on a self-evaluation by participating teachers.

Enabling the Learning of Twenty-First Century Competencies

Innovation Education

The Innovation Education approach is defined as the combination of the cross-disciplinary Finnish traditions in science, technology, engineering, arts, and mathematics (STEAM), crafts, and other school subjects with the methods of digital fabrication, hands-on learning, and technology education. Innovation education is closely related to “maker culture,” an approach for learning through doing in a social environment. Maker culture is based on informal, fun, typically peer-led, and networked learning through the creation of novel applications of technology, using methods that combine traditionally separate domains, such as various types of artwork with versatile working methods such as wood, metal, and textile work and digital methods like videography and computer programming (Kangas, Seitamaa-Hakkarainen, & Hakkarainen, 2013; Viilo, Seitamaa-Hakkarainen, & Hakkarainen, 2011).

In addition to encompassing the core principles of maker culture, Innovation Education expands them with school-based pedagogical approaches rooted in the long tradition of Finnish crafts teaching. Students are guided and encouraged to use creative planning processes, to learn thinking skills, and to engage in teamwork and projects that transcend traditional boundaries between school subjects. Teachers engage in learning discussions with students on the nature of innovation and inventions and on whether each individual student could also become an inventor. In the discussions, the students also identify technological innovations that are in use in contemporary society, the changes these innovations have brought and are still bringing to society, and the opportunities for using technological innovations in the future. Students are encouraged to envision, design, and implement new innovations in a process that spans school subjects, makes use of ubiquitous technology, and applies the knowledge and skills students have learned in new areas (Autio & Lavonen, 2004, 2005; Lavonen & Autio, 2003; Lavonen, Autio, & Meisalo, 2004; Lavonen, Korhonen, Kukkonen, & Sormunen, 2014).

Table 24.1 Learning Innovations and Operational Innovations

Learning Innovations	Operational Innovations
Innovations created by students and teachers Use creative planning processes Learn thinking skills Engage in teamwork and projects that cross traditional boundaries between school subjects Makes use of ubiquitous technology and applies the knowledge and skills students have learned in new areas	Innovations on the learning environment aimed at supporting the learning of twenty-first century competencies Can be created by all actors in the school and include new ways to use ICT in the school’s organizational and pedagogical approach
Examples	Examples
Dancing robot, smart clothes	Team teaching, break clubs organized by students, student tutor model

Educational Innovations

The key concept in the implementation of the Innokas Network is the use of *educational innovation* in the school to enable the learning and teaching of twenty-first century competencies. According to Rogers (2003), an innovation is an object, idea, or practice that appears new to an individual or to a group, for educational innovations, to a group of teachers, students, or other school actors. An innovation may also be an idea that is known to the group, but which the group has not yet accepted or rejected. As entirely new ideas are rare, we also consider the modification of an existing idea an innovation. In the Innokas Network, we focus specifically on innovations concerning novel ways to use information and communication technology (ICT) to support learning and teaching of twenty-first century competencies.

In Innokas Network, educational innovation can manifest as *Learning Innovations*, which are innovations created by students and by teachers working alongside students with the purpose of learning twenty-first century competencies, and as *Operational Innovations*, which are innovations on the learning environment aimed at supporting the learning of twenty-first century competencies. In Innokas Network, Operational Innovations can be created by all stakeholders in the school and include new ways to use ICT in the school’s organizational and pedagogical approach. Table 24.1 lists key attributes and examples of Learning Innovations and Operational Innovations.

Participants as Innovators

The key assumption driving the implementation of the Innokas Network is that the participation by teachers, students, school leaders, parents, and other partners in generating and implementing ideas will support their commitment to: (a) original innovations and (b) adoption of innovations to suit learning contexts. This assumption is supported by research, which indicates that user involvement in innovation implementation and reinvention increases the likelihood of continued use and further development of the innovation (Rogers, 2003). In the Innokas Network, the adoption of innovations has been supported through active collaboration by the participants in common DBR projects.

Innovative School

During the creation of the Innokas Network, we faced several ICT challenges when we started innovating in order to cultivate twenty-first century competencies. There were issues with the availability of ICT equipment and network connectivity and with the suitability of work spaces and learning materials. In addition, teachers who were not accustomed to using technology in their work were afraid of the new approach. At the same time, there was a need to find solutions to day-to-day challenges, such as the need to simultaneously support personalized learning and larger group sizes, the need to manage the school's operations effectively, and the need to collaborate with parents.

Although these challenges felt overwhelming at times, we were encouraged to learn that we could come up with Operational Innovations that addressed these challenges. As an example, when thinking about a possible way to use ICT to teach twenty-first century competencies, a group of teachers realized that there were not enough ICT tools in the school to implement their planned learning activity and that they needed to innovate on new ways to organize school work on the grade level through team teaching.

We soon realized that while many such challenges can be addressed with Operational Innovations, supporting this approach requires a new, holistic look at how the school works. Through collaborative research and development work, we developed a model that describes the key factors that need to be place in a school to support the learning of twenty-first century competencies and the creation of educational innovations. The *Innovative School model (ISC)*, illustrated in Fig. 24.1, consists of four interdependent main factors: students' learning and learning environments, teachers' professionalism, leadership, and partnerships (Korhonen et al., 2014).

A key guiding principle in the model is the comprehensive and versatile use of ICT in learning and teaching, in schools' daily operational processes, and as an enabler for educational innovation aimed at school development. In addition to

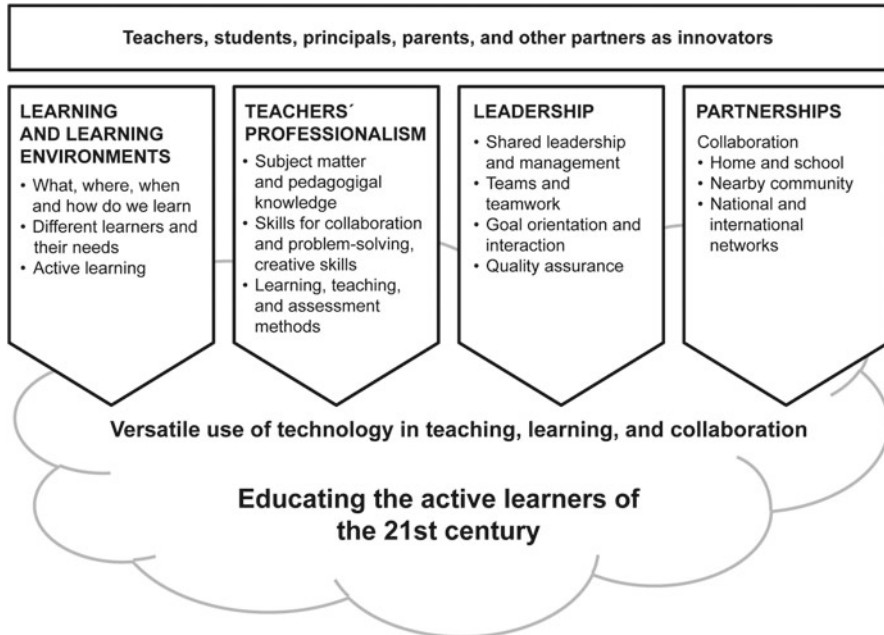


Fig. 24.1 The Innovative School model

teachers and the school management team, key actors in the ISC model include the school’s students and other personnel, as well as individuals in the school’s internal and external partnership networks. The external partnership networks include parents, local community organizations, and companies, as well as national and international networks. The ISC model emphasizes the role of all of these actors as innovators and encourages them to collaborate in planning, implementing, and further developing the school’s activities. These development activities are ongoing, iterative, and cyclic, are based on assessment, and are aligned with the latest technological and societal developments.

The *learning and learning environment* factors in the ISC model focus on the development of students’ twenty-first century competencies. In the twenty-first century, individuals need to be able to think critically and creatively, make use of a wide range of tools in creativity and interaction, engage, and interact in heterogeneous groups, as well as act autonomously and take responsibility for managing their own lives (Trilling & Fadel, 2009). Due to the students’ diverse backgrounds, choosing teaching and learning methods that support the learning of twenty-first century competencies is not straightforward. It is important to utilize a variety of teaching methods to engage students in meaningful learning. Meaningful learning is grounded in activity and intention, reflection and self-evaluation, collaboration and interaction, construction, contextualization, and cumulative learning (Donovan & Branford, 2005). In the ISC model, meaningful learning is targeted through the cross-disciplinary approach provided by Innovation Education.

To enable the Innovation Education approach, a school implementing the ISC model also simultaneously develops the other key factors: *teachers' professionalism, leadership, and partnerships*. School actors review the school's activities and ways of working holistically and then improve the approaches by cultivating them through Operational Innovations. These innovations include ways to best utilize existing, limited resources such as teachers and ICT equipment to support students in learning twenty-first century competencies. For example, teachers can work as a team to rethink the teaching arrangements on a grade level. By first combining their resources, (for example by creating a combined group of 70 third graders and three teachers instead of three separate classes), the teachers can come up with new, flexible groupings of students based on the students' needs, the availability of teachers and ICT resources, as well as the requirements of the learning task.

The leaders of the school play a key role in encouraging teachers and other school personnel to start rethinking the school's operations and to support and guide the personnel in creating operational innovations. In their new role as leaders of change, the school principal and other leaders can employ shared leadership and team organization principles. To support these activities, the leaders also design and deploy new methods and structures for sharing expertise within the school (Lavonen et al., 2014).

A relatively untapped potential to support new ways to learn twenty-first century competencies is provided by the school's partnership networks. Local partnership networks include parents as well as local community actors, such as daycare centers and public libraries (Korhonen & Lavonen, 2014; Kukkonen & Lavonen, 2014a). Other partnerships include nationwide collaboration in the Innokas Network as well as participation in global collaboration networks. The use of ICT, including the use of collaboration tools and web conferencing, is a key enabler for interactions with the partners.

Innokas Network

Purpose of the Initiative

The Innokas Network aims to initiate educational reform for the learning of twenty-first century competencies as a new wave of learning arising from widespread innovation on the grass-roots level. The purpose of the Innokas Network is to act as an enabler for this by developing, testing and sharing best practices on Innovation Education, by arranging targeted support resources, by performing research, and arranging professional development programs for teachers within the framework of the ISC model.

Develop and Share Teaching and Learning Practice on Twenty-First Century Competencies The key open question driving all activities in the Innokas Network is how we can teach and support the learning of twenty-first century competencies

in practice. Based on its grass-roots origin as a development group for technology-based innovation in the school, the Innokas Network is focused on answers to this question that involve the application of technology and Innovation Education methods. The Innokas Network aims to develop best practices for Innovation Education in collaboration with teachers and students, widely test the practices within the network, and share the best practices with schools in Finland as well as globally through the Global Innokas Network.

Provide Targeted Support Resources In the Finnish education system, the responsibility for arranging primary education lies with individual municipalities that have strong autonomy. Aligning with this model, the Innokas Network aims to educate the communal decision-makers on the importance of Innovation Education and to guide them to find the most effective ways to support Innovation Education within their organization. With direct national-level funding, the network aims to provide enabling support that helps as many schools as possible to take part in the network.

Arrange and Support Professional Development Programs The Finnish basic education system is based on the notion of professional teachers; all qualified in-service teachers hold university-level degrees. As a result, professional teachers and school-level leaders are allowed considerable autonomy in their classroom and school, respectively, with very little guidance from the education authorities (Krzywacki, Lavonen, & Juuti, 2014).

In this professional environment, the success of any education reform is highly dependent on teachers and school principals being informed about the reform, agreeing with the goals of the reform, and having the knowledge and skills to confidently implement the reform at the grass-roots level. To facilitate the success of the new wave of learning, Innokas Network aims to provide professional development programs on Innovation Education, on related school organization, and on design-based research (DBR) based educational research to both in-service teachers and student teachers.

Perform Research To guide informed decision-making on education policy reform, the Innokas Network aims to contribute towards building a body of research on the teaching and learning of twenty-first century competencies. The research topics include Innovation Education practices and the use of technology in schools. The research on technology use is not limited to learning technology but includes the use of technology to facilitate the creation of Operational Innovations in the school's organization, including the use of technology for breaking the traditional boundaries between home, school, and other community actors.

Educational research has been criticized for its alleged lack of impact on educational practice. As an example, the versatile use of ICT in education has not been adopted by teachers in Finland and in many other countries (European Commission, 2013; OECD, 2006). To perform research that is more applicable to practice,

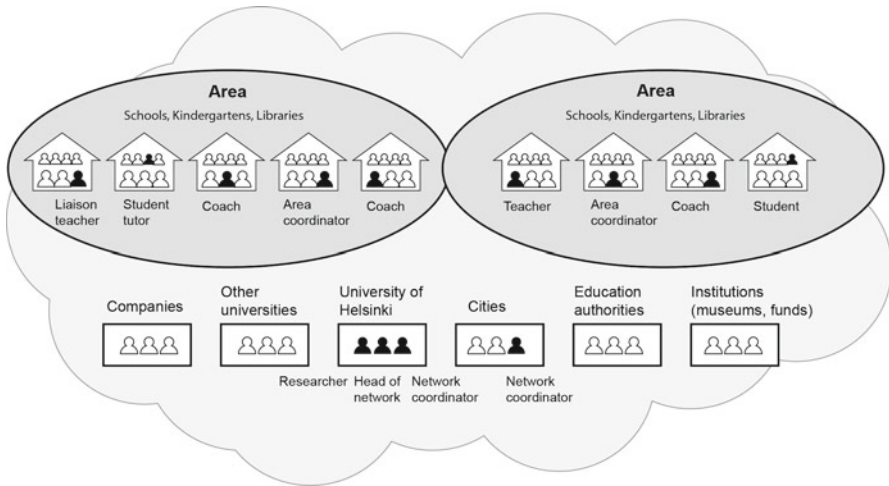


Fig. 24.2 Structure and key stakeholders of the Innokas Network

researchers in the Innokas Network employ DBR, an iterative research approach that emphasizes the participation of all school actors as innovators. In educational DBR, teachers take on new roles as educational researchers (Korhonen & Lavonen, 2014; Kukkonen & Lavonen, 2014b; Sormunen, Lavonen, & Juuti, 2014).

Key Stakeholders

Between 2011 and 2016, more than 50,000 persons participated in Innokas Network activities. The participants included students and teachers in Innovation Education activities in schools as part of normal schoolwork and as an extracurricular activity and teachers in professional development programs. In addition, the participants include parents, school administrators, public library personnel, university students and teachers as well as company representatives attending Innokas Network events. These stakeholders, and their roles in the Innokas Network, are illustrated in Fig. 24.2.

Participating Schools The majority of Innokas Network activities are carried out in 400 participating schools located in various regions of Finland. Each participating school nominates one to three volunteer Innokas *liaison teachers* who take responsibility for coordinating activities in the school. These liaison teachers share best practices from other Innokas Network schools within their own school, support their colleagues in the creation of innovations, share their activities on the Innokas Network's blog and encourage the school's personnel and external partners to engage with the Innokas Network. The network remains open and welcomes new participants.

Teachers The role of professional teachers is key in the Innokas Network. Individual teachers implement Innovation Education principles in projects, tasks, and extracurricular activities within their own classrooms and in novel team organizations spanning the grade and the whole school. In this work, the teachers receive guidance, support, and encouragement from the Innokas Network. Teachers can apply Innovation Education principles not only in STEAM subjects but also in the planning and implementation of all schoolwork (Lavonen et al., 2014).

Students In the Innokas Network, students are seen not only as receivers but also as active participants in Innovation Education and in planning and running school work. In participating schools, students regularly take up a student tutor role, guiding their peers in working with their innovations and introducing their teachers to new technology (Kukkonen & Lavonen, 2014b).

School Leaders As Finnish schools have wide autonomy in day-to-day operations, principals and other school leaders play a key role in Innokas Network schools. School leaders do not need to endorse Innokas Network, but when they assume a positive and encouraging attitude toward improving the school's operational culture, teachers feel that there is room for their innovations for improving the school's operation to enable the learning of twenty-first century competencies. To help school leaders understand the opportunities for their school, Innokas Network makes an effort to keep them informed about the network's activities.

Parents and Other Partners The Innokas Network encourages parents to participate in the network and develops and tests ways for parents to collaborate with the school on the use of technology to support students' learning and growth. In addition to parents, other community stakeholders, such as public kindergartens, libraries, and museums, collaborate with the network in order to extend the school's learning environment for Innovation Education outside traditional organizational borders, enabling boundless learning (Niemi, Multisilta, & Löfström, 2014).

The Innokas Network also collaborates closely with companies, including companies that provide technology-based educational solutions that can be tested in Innokas Network schools, and companies that see the development of twenty-first century competencies as a key challenge in future society and want to address this challenge in their community engagement activities.

Researchers and University/School Partnerships Research activities in the Innokas Network are carried out in close collaboration with researchers at the University of Helsinki. Research in the Innokas Network is not limited to full-time researchers; teachers are informed about the potential benefits of educational research activities and are encouraged to employ DBR principles for school development, thus becoming researchers themselves. Several Innokas Network teachers have taken further steps into research and are working on theses.

Coordinators and Coaches As a grass-roots, volunteer-based initiative, the Innokas Network runs a very lean and flexible organization without an unnecessary hierarchy that can slow down collaboration. The overall network is coordinated by the University of Helsinki in collaboration with the City of Espoo. Local activities are currently divided into ten geographic areas (Espoo, Turku, Tampere, Lappeenranta, Kuopio, Jyväskylä, Larsmo, Kontiolahti, Oulu, and Rovaniemi), each under the responsibility of an area coordinator. Area coordinators act as lead innovators in their area, sharing information, arranging local events, coaching teachers, and further developing the network. As one of the areas is located in a predominantly Swedish-speaking area of Finland, the area coordinator, a Swedish-speaker himself, arranges all activities in his area in Swedish.

In addition to the area coordinators, there are 25 active coaches in the Innokas Network who coach teachers in their own school, as well as in regional and national activities in collaboration with the area coordinators. It is important to note that the area coordinators and coaches take up their respective roles in addition to their ongoing work as practicing teachers. As the coordinators and coaches are intimately familiar with the day-to-day challenges in schools, the overall coordination and coaching approach remains very pragmatic and down-to-earth. This method resonates well with the professional teachers who participate in the network.

The Innokas Network has assigned resources to support the area coordinators' and coaches' efforts when needed, for example, by enabling the hiring of substitute teachers to cover the coordinator's short absences or by compensating the coordinators or coaches for their additional work. Until recently, the main coordinator role has been a secondary role as well, for a school vice principal. As the network is spread out across a geographically large country, the coordinators and coaches collaborate primarily through chat, email, and virtual meetings, with face-to-face meetings arranged twice a year.

Practical Activities

As robotics and programming are new to Finnish schools, tools for supporting them may not rank high on the list of an individual school's budgeting priorities. To enable Innovation Education activities in participating schools, the Innokas Network has provided schools with key enablers for Innovation Education based on robotics and programming, including Lego MindStorms Robotics kits and training and consultation for teachers on the use of robotics in Innovation Education. Teachers have also participated in Innokas Network training sessions on the use of ICT tools for creating Operational Innovations. In addition, regional coordinators have organized regional activities within their own region. This regionally relevant support has been crucial to getting the schools started.

From 2012 to 2016, the Innokas Network has organized an annual national *Innokas Technology Event* for schools. In addition to various student and teacher

workshops on Innovation Education and the use of ICT for learning twenty-first century competencies, each event has hosted the RoboCup Junior Finnish National championship competition, where student teams from Innokas Network schools, accompanied by the robot innovations they created in Innovation Education, participate in five events (sumo wrestling, dance/theater, soccer, rescue, and freestyle). The location of this national event is intentionally rotated among regional areas (2012, Joensuu, eastern Finland; 2013, Espoo, southern Finland; 2014, Oulu, northern Finland; 2015, Joensuu, eastern Finland; 2016 Helsinki, southern Finland) in order to achieve more local visibility and to encourage more schools in the area to participate in Innokas Network. The national events are made possible by the countless volunteer hours put in by network teachers and student teachers at the local university and the generous support of companies participating in Innokas Network.

In fall 2013, Finland participated for the first time in the European Union (EU) Robotics Week activities. Since then, the network has issued a yearly Robotics Week/Code Week video challenge to Finnish schools and daycare centers. More than 8,000 participants took up the challenge in the first year, implementing their own activities under the Robotics Week and reporting on the activities on the Innokas Network blog. To reward those who participated in the challenge, Innokas Network arranged a drawing for three Lego Robotics kits and associated training for the participating schools and centers.

To inform as many people as possible about the Innokas Network and Innovation Education, the network informs the media about its activities and participates in national and international education-related conferences and events, with teachers, students, and researchers from the network presenting their activities. The Innokas Network also provides information on the network web site, blog, and Twitter and Facebook accounts. On the blog, participants share stories, pictures, and videos about their Innovation Education projects as well as ideas, tips, and best practices on Innovation Education with other participants in the network and with all other interested parties. As the blog is bilingual, with Swedish speaking schools posting in their first language, both Finnish and Swedish speakers are introduced to the bilingual nature of Finland (students start learning the other national language in the seventh grade).

Innokas Network participants are encouraged to share their ideas and suggestions for the further development of the network. An annual feedback and suggestions survey for the participants provides guidance for the next year's activities.

Participants' Experiences

To learn how Innokas Network participants have experienced the network's activities, we analyzed two annual surveys (2013 and 2014) of the teachers who participate in the network. The survey data was collected using a web-based form, and the teachers' experience was analyzed within the ISC framework using deductive content analysis (Elo & Kyngäs, 2008).

Based on the survey answers (from 127 teachers divided between all geographic areas of the network), the participating teachers felt that the Innovation Education approach used in the network helped them teach twenty-first century competencies when teaching is implemented following the ISC principles of Innovation Education *with Educational Innovations, Operational Innovations, peer-to-peer learning, teamwork and partnerships*. In addition, the teachers mentioned the *motivational effect* provided by participating in nationwide network activity as well as the *enabling effect* of limited but well-coordinated support provided by the network.

Innovation Education

Robotics kits, with their associated programming tools, are well suited for supporting the learning of twenty-first century competencies. These tools are adaptable for both younger and older students and, by facilitating the implementation of students' innovations in technology use, support the development of thinking, collaboration, and teamwork skills. In contrast to solely computer-based environments for teaching programming skills that may seem abstract and less motivating, students who see the robotic innovations they have built responding to changes in their programming are often overwhelmed with enthusiasm and have no trouble learning the essential concepts of computer programming. Through Innovation Education, students learn not only to use technology but also to understand the essence of the ubiquitous technology surrounding them, which leads them to use the technology to create new things instead of fearing the unknown technology.

During the brainstorming, design, building, and practical testing of innovations, Innovation Education exposes students to pedagogical approaches such as crafts, research orientation, experimental learning, and playful learning, which all motivate them in learning twenty-first century competencies. Teacher 21 stated:

Lego robot kits are brilliant as teaching tools in all grades in primary school [grades 1–9] and in the lower secondary school [grades 10–13]. With the kits, we can practice programming through playful learning. At the same time, we work in a team together and learn about technology. Students are interested in programming when they can actually build something that responds to their programming. They see what happens as a result of their programming and how the result changes with changes in programming.

Operational Innovations

A key success factor for Innokas Network has been that every participant can engage with and be an innovator in the network. Aligning with the ISC model, each school has approached network activity from its own point of view. Each actor in the network plans and implements Innokas Network activities in their various learning

environments based on the actor's own local conditions, needs, and capabilities. There is no single correct way to implement Innokas Network activity. On the contrary, part of the network's success has been the variety of adaptations and different types of local activity. For example, some schools may choose to implement Innokas Network activities under one school subject while others may run the activities in projects spanning multiple subjects, as optional parts of the school curriculum, or as an extracurricular club activity run by teachers or student tutors. In addition, schools may incorporate Innokas Network activity as part of existing school activity such as theme weeks, drama, or presentation projects or as part of the planning for annual school events and festivities. Although the implementation of the activity varies from school to school, schools are expected to share their experiences with others, allowing other schools to ask if the same thing would also work in their school or, better yet, how they could adapt the activity for their own use. Teacher 48 said: *"We have activity in the classrooms on all grades (in upper grades [6–9] as part of each subject), as a voluntary activity, as extra work, in projects, in school festivities, and in clubs after school and during breaks [Finnish school days have 15-min breaks every hour]."* Teacher 25 commented: *"In the upper grades, we have used the materials and expertise from the technology lab in handicrafts [wood- and metalwork] classes."* Teacher 52 said: *"In our school, the focus is in our technology-oriented class. The teacher of that class is allocated extra hours that have enabled practically all lower grades [1–6] to get to know technology in multiple ways."* Teacher 9 observed: *"During the last year, we have run two clubs for fourth graders and two optional subjects for sixth graders. The clubs' innovations have been presented during school festivities."*

Peer-to-Peer Learning

A key practice in Innokas Network is that students and teachers are encouraged to assume new roles as peers, freeing them from the constraints of their traditional relationship where the teacher is expected to have all the answers. In the Innokas Network, a teacher does not need to be a robotics or programming expert in order to start Innovation Education activities; teachers just need to think how they can explore the area together with their students and discover the expertise they may already have in their classroom. Teachers can assume a role as the guide and facilitator of the activity, while empowering students to teach other students as well as the adults in the school. This full engagement of students, peer-to-peer learning, and the students' innovation as a key part in improving the teaching and learning of twenty-first century competencies in the school aligns with the principles of the Innovative School model. Teacher 22 stated:

Our school has an active technology club [for students], where we have built Lego robots, programmed games using Scratch, and discussed contemporary technology, especially mobile technology. We have also done some exploration into augmented reality. Some of the club members have guided their class in a robotics workshop.

Teacher 74 said, “*We have run a [robotics] club for grades 4–6 every Thursday between 2 p.m. and 3:30 p.m. for the whole school year. In addition, the fifth-grader robotics club members have run a ‘siesta club’ [break club] for all students in grades 1–2.*” Teacher 36 observed, “*During the Robot Week, Grade 6 students acted as assistant teachers for the whole school. All teachers and students got to work with Lego [robot kits] on four stations for a whole day.*”

The peer-to-peer learning approach has also been utilized in training activities organized by Innokas Network. Many of the participating schools have nominated student tutors who work as a team with the school’s teachers, guiding other students and teachers in Innovation Education. These teams of teachers and student tutors have also guided participants in Innokas Network trainings and in other events. Teacher 34: “*One thing that was especially successful was the common workshop between students and teachers, we want more of those.*”

Teamwork

In addition to the peer-to-peer learning approach, a key strength in Innokas Network is the emphasis on teamwork, with two teachers or a teacher and a teaching assistant working as a team that guides a learning activity. By having more than one adult present, the preparation of the activity (brainstorming and gathering and preparing the tools and materials), as well as the guiding of student work, becomes much easier. As they can discuss their concerns and ideas with their adult colleague, teachers find it safer to engage in a new type of activity or to start working with tools that are completely new to them. The benefits of teacher teamwork have already been recognized in the training of new student teachers, with Finnish university students working as a team to conduct their teaching practice. University teacher 1 stated:

Our student teachers take a robotics course as part of their technology education studies. They practice teacher work on grades 5–6 as well as in optional eighth-grade electronics classes. The student teachers plan and guide a 12-hour robotics course for students as pair work.

Partnerships

The Innokas Network has benefited from its partnerships on various levels. It is essential that parents can take part in the network’s activities and can learn that they also can support their children in the learning of twenty-first century competencies by encouraging their children to continue innovating outside the school setting. Parents also play an important role in supporting Innokas Network events as additional adults guiding the students and, in some schools, as leaders of extracurricular technology clubs. Teacher 12 said: “*In our area, a Lego robotics club is run by parents.*”

Teacher 18 said: *“We participated in the regional robotics event in Kontiolahti [in eastern Finland] in December 2013 and in the Finnish [RoboCup Junior] nationals in Oulu [in northern Finland] in May. The clubs and the competition trip were organized by parents.”*

By expanding the learning environment beyond the traditional school boundaries and by utilizing the students’ expertise outside the school setting, we can motivate students in learning twenty-first century competencies as well as encourage the whole community to take an interest in these skills. A key type of partnership is collaboration within the local community, for example, with the daycare center and local public libraries. Utilizing a peer-to-peer approach, Innokas Network students can guide Innovation Education activities in a daycare center or in an event arranged in a public library. Teacher 30 stated:

In our school, during the Robot Week, we ran an introductory workshop on programming and artificial intelligence for the students of the school and the daycare center/kindergarten [some of Finnish school buildings are integrated with a daycare center for 5- to 6-year-old children]. The workshop was attended by a total of 300 people, including members of the local press. I have also run an introduction [to the] Innokas [Network] and robotics programming for the other teachers in our school.

Teacher 49 said: *“We took part in the public library day of the Robot Week under the guidance of an Innokas Network teacher and the local library personnel.”*

Motivation

A key success factor in Innokas Network, accomplished by implementing the network’s working principles, is the motivation, excitement, and desire to make practical things happen. Throughout the network, teachers and students not only find peer-to-peer support for their challenges but also get excited by practical examples of what others have done in Innovation Education. Teacher 41 said: *“Collaboration with other schools is surely motivating students, and at least my own students got even deeper into the initiative when they saw what other schools had done and started immediately brainstorming their own robots.”* It is noteworthy that Innovation Education can also engage students who are normally not very interested in school work or in learning twenty-first century competencies. Participating in the network has also provided motivating experiences for teachers. Teacher 15 said: *“A good thing about working in a classroom is that also the students who are less technology-oriented get exposed to robots—and get excited by them.”* Teacher 62 said: *“An interesting initiative that has got the students excited. I hope we manage to spread the excitement to all the teachers in the school.”* Not only students and teachers but also teachers and parents are motivated. Teacher 19 observed, *“It has been magnificent to notice all that joy and get positive feedback from students, teachers and parents! We have managed to get many children motivated with the robots!”* Teacher 37 wrote: *“Thank you! We’ve received lots of thanks from parents and students. I hope we can continue the [network] activity and that we can offer students these skills of the future.”*

Coordination A special success factor in Innokas Network is the grass-roots approach to network coordination, implemented through Innokas Network liaison teachers in schools and through teachers working as local area coordinators. With the strong collaboration among the coordination team, Innokas Network has managed to provide limited but well-organized support that has enabled more schools to participate and allowed the creation of locally relevant training that has supported the participating schools. Teacher 31 stated:

A very good initiative. Let's arrange a couple of days of initiation training again in the fall to get new teachers on board. The role of the [area] coordinator school is important. The major event in the spring was good, and you provided the funds that made it possible for us to join. We will absolutely continue to be part of the network.

Discussion

Based on our experiences in the Innokas Network, we suggest that Innovation Education supports the teaching and learning of twenty-first century competencies. By freeing teachers from the perceived need to have more expertise on technology than their students, by empowering students for peer-to-peer learning, and by motivating students who would normally not be interested in learning twenty-first century competencies, Innovation Education provides a flexible approach for new learning challenges.

The key concept that makes Innovation Education work is educational innovation. By extending this principle outside the students' Learning Innovations to Operational Innovations involving the whole school, the school can find solutions to tough organizational issues involving the use of ICT in learning as well as issues between students; it can also find new ways of taking cultural differences into account in the school. In essence, educational innovation is a new way to think and work in the school.

To enable educational innovation in a school, a holistic approach that supports innovative practices must be developed and established. The ISC model describes such an approach, emphasizing the participation of all school actors in school development, new ways of working such as team teaching, support from school leadership, the establishment of knowledge-sharing structures as well as the importance of partnering with parents and other actors outside the school as key factors that enable the emergence of educational innovation. The ISC model is based on sharing responsibility and empowering teachers and students. Thus, the school leaders' attitude is key in establishing an environment that encourages educational innovation. This enables the application of Innovation Education in the school, providing a practical approach for solving the challenge of teaching and learning twenty-first century competencies.

Our experience in Innokas Network suggests that a grass-roots approach to school development is beneficial but presents its own challenges. For those participating in the network, the grass-roots approach is highly motivating as the initiative is something started by their colleagues and not decided on some obscure level in the higher echelons of the school administration. As the network coordinators are

practicing teachers, the planned activities are well suited for implementation as part of practical schoolwork, and the overall approach in the activities provides support for practicing teachers through practical solutions such as teacher teamwork and peer-to-peer teaching.

A key challenge with this approach is to get all teachers and schools to participate in a new activity. Many teachers and schools may still be content with current practices or accustomed to waiting for somebody else to come and say what they should do. A part of this challenge is funding the new activity. Securing 4–6 years of uninterrupted funding to expand the network to a much larger portion of Finnish schools is challenging. An initiative aiming to solve the teaching of future competency is easily overwhelmed by other priorities at the local level, and continued funding should be secured at the national level.

As a grass-roots approach, Innokas Network has worked through difficulties to establish true collaboration between the various stakeholders in students' learning of twenty-first century competencies. To really work, collaboration must be mutually beneficial and must recognize all parties as experts who have a say in the planned activities and in the direction of the network. A network initiative such as the Innokas Network must have the audacity to push through organizational boundaries and engage schools, parents, school administration, other community actors, universities, and companies in real collaboration.

The most effective method for implementing Innovation Education or similar approaches may vary based on the national-level educational setup and tradition. In the Finnish tradition, based on independent, professional teachers who may advance to leadership positions as school principals and school administrators, the key to implementing Innovation Education is to expand the teachers' professional expertise. For in-service teachers, this is achieved through professional development programs (PDPs) designed for Innovation Education and the ISC approach. Teachers often feel that the school administration pressures them into using some new technology, and many PDPs are arranged to train teachers on the specific technology. What we propose is that PDPs should start from an approach that sees teachers as innovators. Instead of forcing a technology on them, teachers should learn to become innovators, choosing the tools they need to support their and their students' innovations. After being offered the spark to get their fires burning, the teachers can incorporate a more research-based approach and become educational innovators for a new wave of learning.

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ERRATUM

Chapter 5 Signature Pedagogies in Global Competence Education: Understanding Quality Teaching Practice

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The below mentioned quotes were kept as footnote in the previous volume. Now it has been placed as Epigraph in the chapter opening page.

“What I thought, since all the movies that I saw, is that they would be more poor, that they [e-pals in South Africa] would not have a city, that their homes would be made out of dried up mud... I was really surprised because they looked nothing like that... they have a lot of the things that we do, they have video games and a city... I was really surprised.... 'cause they have good teeth, real clothes, full hair. [Working with our South African e-Pals] is cool because we can talk with people from different continents... We can see how people on the other side of the world live, and what they do, not at all as I imagined it...”

Richard, Grade 4 New York

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Caroline Chan is a seconded senior education officer from the Ministry of Education, Singapore and currently, a teaching fellow at the English Language Literature Academic Group, National Institute of Education/ Nanyang Technological University. She teaches pre-service PGDE/ Secondary and BA / Primary English Language teachers. Her interests and research are in the areas of policy interpretation and impact on curriculum development and customization in Language teaching and learning and early literacy development. Her doctoral analyzed the 2004/2005 Teach Less, Learn More policy in Singapore and its impact on local schools, teachers and pupils. She has served as vice-principal in secondary schools and her other publication related to developing visual literacy in Language classrooms is co-written with, Suzanne Choo, entitled *Reel World Learning: Integrating media in the English Language Classroom* (McGraw Hill). This new publication, *Reading in the twenty-first Century: Understanding Multimodal Texts & Developing Multiliteracy Skills* (McGraw Hill) further explores the development of visual literacy skills through the practice of reading multimodal texts via differing theoretical platforms.

Melvin Chan is Research Scientist at the Centre for Research in Pedagogy and Practice. He was the lead researcher for two of the largest-scale projects ever funded by the National Institute of Education (Singapore): the Core 1 Life Pathways Project (2004–2009) and Core 2 Pedagogy and Assessment (2010–2014). Continuing this important study, Dr. Chan is currently Principal Investigator of the Core 3 quantitative research project (2016-). His research interests focus on pedagogy and assessment, learning theories and the use of multilevel and structural equation modelling techniques to analyse educational data.

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Emily B. Clark is a classroom teacher of English, Psychology, and Humanities in the Western suburbs of Melbourne. Having completed a Bachelor of Arts majoring in Psychology with the University of Melbourne, Emily went on to complete her Honours in Psychology with Bond University, before returning to the University of Melbourne to complete her Master of Teaching. Emily's research interests center on global education, international education, educational policy, and equity in education.

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Ian Davies is based at the Department of Education, University of York where he is Deputy Head of Department, Director of the Graduate School of Education and Director of the Centre for Research on Education and Social Justice. He is the author of numerous books (published by Routledge, Continuum, Sage and others) and many articles in academic journals most of which explore issues related to teaching and learning about contemporary society (with a particular focus on citizenship education). He lectures and undertakes research extensively in international contexts and has been successful in attracting funding from a wide range of government and non-government agencies in the UK and elsewhere. He has been a Fellow of the Japan Society for the Promotion of Science, is a Visiting Professor at the Hong Kong Institute of Education, and has worked for the Council of Europe as an expert on education for democratic citizenship. He teaches and supervises undergraduate, MA and PhD students and beginning teachers.

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Randi Dickson taught middle and high school English and writing for 20 years before completing her Ed.D. at Columbia's Teachers College in 1999. She served as co-director of English Education programs at Queens College/CUNY from 1999 to 2011, where she taught courses in research, methods, the teaching of writing, and Young Adult literature. Recently she has worked as a Visiting Associate Professor at Teachers College, teaching research courses in the Masters and Doctoral Programs. Dr. Dickson was elected to the Executive Committee of CEE (Conference on English Education of NCTE) and served for 6 years, two of them as Recording Secretary. She was also Associate Editor of *English Education Journal* for 4 years and has published in *English Journal*, *English Education*, *Voices in the Middle* and collaborated on *On Narrative Inquiry: Approaches to Language and Literacy*. Dr. Dickson has served as a consultant in curriculum and professional development for The Ross School and The Center for Professional Development at Teachers College, as well as Think Global School, where she planned curriculum and did workshops for students and teachers in Ecuador and Argentina as well as planning place based curriculum for Germany and Thailand. She also was selected by the Lhoman Educational Society as a volunteer to plan and teach a 2-week teacher training to bring more progressive methods to teachers in Bhutan.

Kate Ferguson-Patrick is the community outreach officer for the Global Education Research and Teaching (GERT) team, where she coordinates professional development programs for teachers in schools and oversees the website for the team. After 15 years of classroom teaching experience, both in the UK and Australia, Kate joined the University of Newcastle as a school/university liaison teacher and later became a permanent member of the academic staff. She is the Media Editor for the Open Access journal, the *Journal of International Social Studies*. Kate has recently completed a long term study of Cooperative Learning with early career teachers explicating the links between cooperative learning and democracy and has developed professional development programs for early career teachers to assist them in implementing cooperative strategies and democratic processes using action research in busy and ever increasingly accountable primary classrooms. Her research, particularly in this area of globally valuable strategies to build cohesive classrooms, has resulted in 4 book chapters, 7 peer reviewed journal articles, 11 peer reviewed conference papers and 2 teaching books. Kate led a school teaching professional development initiative as an academic mentor in the Australian Government Quality Teaching Project in 2005 working with teachers on school needs based projects around building quality teaching and primary Maths. Kate worked with international experts on developing democracy focused classrooms when she was a visiting scholar at the University of Umea (Sweden) in 2011. She is about to begin work on Cooperative learning in European contexts with Dr Wendy Jolliffe at The University of Hull. Her most recent research publication is a chapter "Where's the

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Koeli Moitra Goel holds a doctoral degree in Communications and Media from the University of Illinois at Urbana-Champaign, and is engaged in post-doctoral research at the Institute of Communications Research, UIUC. She does interdisciplinary work in communications and media; globalization in postcolonial societies; transnational cultural studies with orientation towards South Asia – India, Nepal and Bangladesh; global studies in education (elite school culture); museum studies; and gender relations in global perspectives. Koeli has published her research in various academic journals. Her current work draws from her experience in critical interpretive & qualitative research, critical ethnography, and content/discourse analysis to focus on the following areas of interest: identity and representation; urbanization and migration in the twenty-first-century; gendered world of global new media, neoliberal restructuring of the nation-state and individual sphere.

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Jacqueline Kirk is a professional teacher, an enthusiastic learner, and an Associate Professor in the Department of Leadership and Educational Administration at Brandon University. Her study of Educational Administration is driven by an intense obsession with understanding what brings people together to create positive change within organizations. Her background in the field of education includes experiences in both rural and urban schools and in both public and private school systems. Her primary and secondary teaching opportunities include a variety of positions ranging from Kindergarten, to middle school language arts, to senior high school computer science. Before pursuing her Ph.D. in Educational Administration she worked as a high school principal and as an educational consultant assisting schools with capacity building and technology integration. Jackie is passionate about helping students to explore their boundaries and to develop a greater understanding of their personal identities using the content as a medium.

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She holds a Master's degree in Education and is currently working on her doctoral thesis on the use of Information and Communications Technology (ICT) in home and school collaboration at the University of Helsinki. Her research work, including the Innovative School framework, has been published in peer-reviewed publications and research textbooks. In her academic work she collaborates with several international partners, including Fablab@Schools at Stanford University.

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handbooks and international book series as well as journal articles. His research interests include system studies in education, sociology of education, classroom pedagogy, curriculum innovation and whole school reform, educational philosophy, discourse analysis and comparative education. He has significant research experience with large-scale classroom observations, pedagogical research, curriculum innovation and whole school reform, development of classroom coding schemes, mixed methods research, qualitative research, teacher professional development and analyses of classroom data.

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Melvyn Lim is the Dean of Corporate Services at Hwa Chong Institution (HCI). Prior to joining HCI, he was a planning officer with the Planning Division, Education Policy Branch, at Singapore's Ministry of Education. He holds a Bachelor of Arts in Economics and Philosophy, and an Honors degree in Philosophy from the National University of Singapore (NUS), a Master of Arts degree by research which he obtained on an NUS scholarship, a Master's in Applied Linguistics (NUS), a Post-graduate Diploma in Education (Distinction) from the National Institute of Education, and a Doctor of Education degree from the Western Australia Graduate School of Education.

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Erica McWilliam is an internationally recognised scholar in the field of pedagogy with a particular focus on preparing young people for ‘over the horizon’ futures. In her numerous publications and presentations to educational leaders, teachers, parents and students, she elaborates on the challenges faced by all those who are seeking to ensure that our young people will live, learn and earn well in this demanding century. In particular, she stresses the importance of providing ‘low threat, high challenge’ learning environments that assist young people to welcome error and the instructive complications of unfamiliarity and complexity. She has directed the Creative Workforce 2.0 Research Program in the Australian Research Council Centre of Excellence for Creative Industries and Innovation, and has also performed professorial duties as an educational researcher at the National Institute of Education in Singapore. Erica is a Fellow of the Australian Council of Education, an Honorary

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Professor Reid is Vice President of the Sociology of Education Research Committee, International Sociology Association and Editor of the series Education Dialogues with/in the Global South for Palgrave Macmillan. Her international profile has led to invitations to assess research in Australia, Canada and South Africa as well as coordinating a cohort of Arabic speaking and international postgraduate students.

Ruth Reynolds has extensive classroom teaching and tertiary teaching experience, developing whole campus programs in her administrative role as Assistant Dean Teacher Education, and forging community linkage programs with the education community. She is editor of the *Open Access Journal of International Social Studies*, *the journal of the International Assembly of the National Council of the Social Studies* (US). She is team leader of the Global Education Research and Teaching group (GERT) at the University of Newcastle, a group which focuses on teaching for global citizenship in teacher education programs; and on researching the success of their various initiatives. Additionally she is past President of Social Educators Association of Australia, past national conference convenor for SEAA, committee member of History Educators Network of Australia, and member of the editorial committee for the journal, *The Social Educator*. In 2010, as a result of conducting cross cultural research into intercultural understandings in young children she was awarded an International Understanding Award by the National Council for the Social Studies in USA. In 2013 she was awarded an Australian Award for University teaching with a citation for Outstanding Contributions to Student Learning for contribution to the Humanities and Social Sciences area of the curriculum. She was a guest editor for *Educational Sciences* (Basel) with a special edition on Global Citizenship in 2012. Her most recent publication with Professor Monika Vinterek from Sweden is a comparative study of children's geographic knowledge published in *International Research in Geographical and Environmental Education*.

Rachel G. Salas is an Assistant Professor of Literacy Studies in Literacy, Language and Culture at the University of Nevada, Reno. She teaches undergraduate and graduate courses in literacy and ESL methods. Her research focuses on the academic literacy needs of English Language Learners (ELLs) and the preparation of teachers to work with, and meet the needs of an increasingly culturally and linguistically diverse student population. In addition, she addresses issues of race, culture and language in the classroom, in academic environments and in children's literature. She has more than twenty years of experience working with high poverty, Hispanic, and culturally and linguistically diverse learners and their parents.

Brenda Nyandiko Sanya is a Ph.D. candidate and Cultures of Law in Global Contexts fellow at the University of Illinois, Urbana-Champaign. Broadly, her research explores educative practices, formal and informal structures as spaces where identities, rights, and documentation are contested, produced, and reproduced, and circulated in and through global landscapes. Currently, Sanya's research is focused on African immigration to the U.S. She uses theories from the fields of Black, postcolonial, and queer studies to generate a conversation about the social boundaries of immigration documentation and rights and the institutional use of discourses associated with educational achievement. Sanya's work has been published in *Policy Futures in Education* and, her recent work on education and black diasporas, transnational feminism, mobility and technology in Kenya, and archiving African feminist histories have been published in *Feminist Africa*, *Left History*, *Transnational Social Review*, and in *Mobilized Identities: Mediated Subjectivities and Cultural Crisis in the Neoliberal Era* (Common Ground, 2014).

Glenn C. Savage is a Senior Lecturer in Education Policy in the Melbourne Graduate School of Education at the University of Melbourne. His research focuses on education policy, politics and governance at national and global levels, with a specific interest in federalism, intergovernmental relations, and policies relating to curriculum, equity and standards-based reform. Dr Savage currently holds an Australian Research Council Discovery Early Career Researcher Award (DECRA) titled "National schooling reform and the reshaping of Australian federalism" (2016–2018).

Deb Sawch is an independent education consultant who supports school leaders, designers, and educators in their efforts to cultivate whole school approaches to education that align more authentically and effectively with teaching and learning in the twenty-first century. She designs school and system-wide research to provide real-time, content-based feedback on teacher practice and student learning across a range of global capacities. Her work is based on research she has conducted in schools in Shanghai, Singapore, Finland, Australia, Canada and the US to help guide teachers and school leaders toward innovative curriculum design, instruction, assessments and whole school transformation. Dr. Sawch serves as research/PD advisor to the Transcend group, a non-profit school design organization. She co-designed and currently teaches Global Inquiry-Based Teaching and Learning to in-service teachers as part of the Global Competence Certificate Program at Teachers College, Columbia University in cooperation with World Savvy and the Asia Society. She received her doctorate in Education at Teachers College, Columbia University where she also co-founded Studies in Educational Innovation and the Global Learning Alliance. She has published in *English Journal*, *Education Leadership*, and presented papers at the American Educational Research Association, New Directions in the Humanities Conference, and the Conference of the Comparative and International Education Society. She chairs the Teach for America-CT Advisory Board.

Rosemary Smith is a UK-based educator. Teaching initially in further education, largely in programs for marginalized young people and adults, she now offers literacy and language support in a secondary school. She also teaches US-Cuban relations at the University of Nottingham.

Her PhD thesis *The Lost Generation?: Education and the Search for the New Cuban Citizen Identity*, based on significant primary research in Cuba, analysed the role of education (both in school and through the emergent youth projects of the early 2000s) in the formation of the political and social citizen identities of today's young Cubans. Her first book, *Education, Citizenship and Cuban Identity*, is to be published in 2016 by Palgrave Macmillan.

Ai Chin Tan is the Dean of Research Studies at Hwa Chong Institution. In a long and illustrious teaching career, she has held many departmental and pastoral headship posts in the school, including Head of Science, Head of Pastoral Care & Career Guidance, and Director of Research Studies. She also pioneered several key initiatives that put HCI at the forefront of educational change and innovation. These include setting up the Hwa Chong Centre for Talent Development (school-industry collaboration), HCI Science Research Centre (a first for a Singapore School), Hwa Chong Science and Mathematics Talent Program (College), the International Science Youth Forum involving Nobel Prize-winning scientists, as well as conceptualizing the Faculty System (a student care and development program). She holds a Bachelor of Science (Hons) in Chemistry from the National University of Singapore.

Sean Tan is a Senior Research Specialist at the Singapore Ministry of Education. His current work focuses on international benchmarking and research studies, including the Teaching and Learning International Survey (TALIS), Programme for International Student Assessment (PISA), Programme for the International Assessment of Adult Competencies (PIAAC), and Assessment and Teaching of 21st Century Skills (ATC21S). He is currently Singapore's National Project Manager for TALIS and National Data Manager for PISA. Sean obtained his Bachelor's degree in Chemistry from the University of Cambridge and has a Masters in Educational Research, Measurement and Evaluation from Boston College. He has taught A-level Chemistry and served in the school management team prior to joining the Ministry.

Hui Yong Tay joined the Curriculum, Teaching and Learning (CTL) Academic Group as a lecturer at the end of 2013. In the many years serving in secondary schools prior to joining CTL, she was variously English and Literature teacher, Head of Department (HOD), Dean (Curriculum) and Vice-principal. Her research interests grew out of her line of work: her MEd thesis looked into role conflict experienced by HODs; her PhD focused on self-regulated learning and authentic assessment, important areas to her as driver of the curriculum in her school. Above all, she is interested in all things that will enhance student's learning experience in school. This led to the present study looking into how technology can be used to enhance student outcomes.

Jasmine Tey is the Director for the Hwa Chong Centre for Pedagogical Excellence (CPE). As CPE director, she is responsible for the learning and development of all staff in Hwa Chong Institution (HCI). This includes planning and implementing learning and development programs. Prior to her current role, she was actively involved in the Gifted Education Program in HCI since 1994. Her main research interest is in Mathematics education.

Alison Villanueva is originally from Toronto, Canada and specializes in global research and system-wide transformative change through professional development. She is co-founder of the Global Learning Alliance (GLA) an international consortium of university and school partnerships committed to twenty-first century education. She has published in journals and presented at numerous conferences that include the American Educational Research Association, Comparative & International Education Society Conference, and the Literacy Research on research she conducted in schools in Shanghai, Singapore, Finland, Australia, Canada and the US. During her time at Columbia University, Alison Villanueva co-founded and co-directed Studies in Educational Innovation, a center devoted to innovative education practices. In her role as adjunct assistant professor she also taught several courses in research methods, literacy education, inclusive education and global competence in both the department of Arts and Humanities and Curriculum and Teaching. Prior to her time in New York City, Alison taught in the Peel District School Board, the second largest school district in Ontario, Canada. Alison Villanueva served as an elementary school Principal with the Danbury Public Schools in Connecticut and currently serves as Director of Humanities at Ridgefield Public Schools. Her writing interests include: global literacies, digital/multiliteracies, inclusive/diversity education, teaching and learning in the twenty-first century and transformative systemic change. Alison Villanueva earned her Ph.D. from Teachers College, Columbia University; M.Phil from Columbia University; M.A. in Teaching and Learning: Literacy Education from New York University; and Honors. B.A. in English Literature from York University. She lives with her husband and three children in Connecticut.

Ruth Vinz is the Endowed Morse Professor of Teacher Education and Professor of English Education at Teachers College, Columbia University. Her teaching experience includes 23 years of high school teaching before coming to Teachers College. It is this extensive teaching experience that continues to inform her research and practices in the field of literacy education. Vinz's research focuses on how English teachers' curricula, instructional and assessment practices impact students' literacy learning – specifically pertaining to reading and writing instruction. She is the author of 13 books for educators, *Inside Out*, *Recasting the Text*, *Learning the Landscapes* and *Writing Qualitative Research*. Her book, *Composing A Teaching Life*, received the Richard Meade award for outstanding research published in English education. Additionally, she is co-author on the Houghton Mifflin Daybook series of reading literature/writing textbooks for 6th-12th graders. In 2002 Dr. Vinz founded The Center for the Professional Education of Teachers (CPET), an incubator

for new ideas in professional education, a hub of active research and in-the-schools research and initiatives. The Center has supported more than 75 doctoral students with fellowships, and Vinz has sponsored more than 125 dissertations, many on topics related to the work of the Center. Professor Vinz oversees multiple initiatives at Teachers College that provide professional development for teachers and direct services to students. Student Press Initiative works with teachers to deepen their knowledge about effective writing instruction and assessment. Secondary Literacy Initiative provides on-site coaches for literacy instruction and Global Learning Alliance serves members in seven countries (Finland, China, Singapore, Canada, Australia, Mexico, and the U.S.A.).

Hwee Joo Yeo graduated from the National University of Singapore with 2nd Upper Honors (History) before completing her Postgraduate Diploma in Education with a Distinction in Teaching Practicum. In 2002, she obtained her Master of Education degree. She was conferred the Doctor of Education degree in 2009. A deputy principal of Studies at Hwa Chong Institution (HCI), she has for the past 27 years, contributed her services in different capacities – as a senior History teacher (1990–1993), Head of Department for Humanities (1993–2000), as well as the Dean of Studies (2001–2010). She was a key driver of HCI's Integrated Curriculum and pioneered the Hwa Chong-Beijing Satellite Campus in 2007. She has authored several books, including a MOE-approved History text. Her current focus is on promoting Reading and Reasoning as a strategic priority in the school.

Zheng Zhang is assistant professor, Faculty of Education, Western University, London, Ontario, Canada where she teaches graduate courses on curriculum studies and literacy education. Her research interests are inter-disciplinary in nature which includes curriculum studies of transnational education, literacy and biliteracy curriculum, internationalization of curriculum, English academic writing, multimodal literacy, cross-border teacher education undergirded by new media literacies, and multiliteracies pedagogy in culturally and linguistically diverse backgrounds. These primary research areas have addressed pertinent educational challenges in the era of changes with increasing cultural and linguistic diversity, rapid global connectivity, and fast-paced technological changes. She has also made special efforts to innovate methodological tools for research on literacy curriculum and teacher education. Her publications have appeared in international journals, including *Journal of Curriculum Studies*, *Teaching and Teacher Education*, and *Action Research*.