Gretchen Geng · Pamela Smith ·
Paul Black · Yoshi Budd · Leigh Disney
Editors

Reflective Practice in Teaching

Pre-service Teachers and the Lens of Life Experience

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Part I
Background to the Book

Chapter 1
Learning from Reflective Pre-service Teachers: Introduction to the Book

Gretchen Geng, Pamela Smith, Paul Black, Yoshi Budd and Leigh Disney

Abstract This chapter introduces the background to this book, with a focus on the use of reflective practice in teaching, and teacher educators' learning from reflective pieces written by pre-service teachers. This chapter then describes the structure of the book, which consists of six parts. Parts I to V include 33 pre-service teachers' own narrative stories as well as the five editors' reflections on these pre-service teachers' pieces. In the final chapter, the five editors reflect on the content and development of this volume.

Introduction

Reflective teachers are those who are aware of the reasons behind the decisions they make and the consequences of those decisions. There are many issues within classrooms and schools and the wider educational context that teachers need to continually reflect on and sometimes as a result of reflection change their thinking and practice or question practices and innovations … Learning the skills of critical reflection can help them make sense of the situations they face and helping them learn these skills during their course of study can set them on a path to become reflective teachers in their future careers . This is a

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long process, the benefits of which will help them become more effective teachers, develop positive relationships and deliver better learning outcomes for the students they will teach. (Smith et al. 2017, p. 25)

Following on from *The challenge of teaching* (Geng et al. 2017), this book uses reflective practice to connect the pre-service teachers' personal background with their placement experience around a self-selected topic. It also includes teacher educators' personal reflections on the pre-service teachers' reports on these issues of concern.

Dewey (1933, p. 7) described "reflection" or "reflective thinking" as "active, persistent, and careful consideration of any belief or supposed form of knowledge in light of grounds that support it and future conclusions to which it tends". Killen (2009) identified teaching reflection as a deliberate attempt to understand or evaluate the success or otherwise of teaching and learning experiences in order to shape future action or "reflection in action or on the run" (p. 103). Based upon this, teachers employ "self-study" or "self-evaluative reflection" on the level of reflecting on individual lessons they teach (Smith et al. 2017).

Reflective practice can provide important insights into the ways in which personal beliefs and life experiences act as a lens or filter for framing and understanding past experiences. In this book, we study how the reflective methods of pre-service teachers relate to their life experience and facilitate a deeper understanding of their own practices in different educational settings. Like our earlier book *The challenge of teaching* (Geng et al. 2017), this book provides a public forum for pre-service teachers' voices to be heard in order to bring to light the diverse, complex and challenging issues they are faced with during their practicum experiences.

The purpose of this book is to help produce reflective teachers, not academic researchers. Thus, even though the student chapters cannot represent their authors' thinking as experienced teachers, they do encourage them as well as other pre-service teachers to reflect on aspects of their practicum experiences and look into particular issues more deeply. Furthermore, we hope to instil a deeper appreciation of the diversity and complexity of pre-service teachers' classroom experiences. The ways in which pre-service teachers have, to various degrees, explored their values and beliefs and drawn on their past experiences also offer an important opportunity to examine the relationship between reflective practice and pedagogical concerns.

Bullough (2015, p. 158) commented that

… research should be conducted on the ways in which prospective teachers' backgrounds and identifications (e.g. race, ethnicity, gender, socio-economic background, etc.) may connect to and inform the ways in which prospective teachers define teaching … teachers may be used as texts by and through which to challenge and push students' understanding and ideas.

This book has a strong focus on the ways in which pre-service teachers develop and articulate their professional knowledge by presenting pre-service teachers' reflections on contemporary issues that engaged them during their own teaching practicums. Palmer (2008, p. 15) stated in "The heart of a teacher",

knowing my students and my subject depends heavily on self-knowledge. When I do not know myself, I cannot know who my students are. I will see them through a glass darkly, in the shadows of my unexamined life—and when I cannot see them clearly I cannot teach

them well. When I do not know myself, I cannot know my subject—not at the deepest levels of embodied, personal meaning. I will know it only abstractly, from a distance, a congeries of concepts as far removed from the world as I am from personal truth.

Our book presents multiple levels of reflective practice as we editors, as authors, engage in reflective practice alongside our pre-service teachers. On one level, pre-service teachers share excerpts from their reflective journals, provide some personal background information and finally explain their professional response to the issues to enable the reader to glean a sense of a unique personal and professional identity. On another level, we editors reflect on our own pedagogical experiences which shape our reading of issues raised by pre-service teachers. We believe that we, as teacher educators and pre-service teachers alike, establish networks of personal, professional and cultural narratives that establish diverse ways of ordering and understanding our teaching practices and experiences. Consequently, our aim is to integrate the autobiographical characteristics of self-narrative from the perspective of pre-service teachers and teacher educators to further extend reflection on cultural and pedagogical assumptions that shape understandings of educational practices and experiences (Coia and Taylor 2017).

Reflective Practice in Teaching

Reflective practice is commonly used in teaching practicum programmes to bring to light routine interpretive activities that signify the beliefs and cultural assumptions of the knower. Australian society is not monolithic but made up of a richly diverse population of varying languages and cultures. Teaching is a dynamic process that must take into account not only the multicultural nature of the world in which we live, but also the powerful influence of new digital technologies that change the way we interact with the world and with each other. Vygotsky (1997) suggested that the role of the teacher is to facilitate student learning through carefully structured social interactions and scaffolded teaching and learning activities. However, as both students and teachers must navigate a rapidly changing and increasingly complex environment, it is also crucial that teachers do not make assumptions about their students' background knowledge and experiences.

Vygotsky (1998) described the dialectic of person and practice as a process of personal identity and practice. Pre-service teachers develop their own professional teacher identities over time as they draw on their own experiences as learners to navigate, understand and manage classroom situations. Consequently, teaching practices include engagement of pre-service teachers themselves in knowledge learning and this may require them to adjust their ways of thinking and behaving in the classroom. Stetsenkom and Arievitch (2004) explain that the learning journey of pre-service teachers is a period of self-transformation from a university student to a professional teacher. Edwards (2010) and Roth (2006) explain how histories, values and purposes

lead to transformation. It is dissonance that leads one to question these histories, hence the importance of critical incidents and reflective practice.

In this chapter, we focus on the self-transformation through reflective practice. By reflective practice, pre-service teachers' identities can be changed, especially when they are entering new classrooms and experience incidents that cause them to question their assumptions about teaching priorities and approaches. In 1999, Beach argued that "transitions are consequential when they are consciously reflected on, often struggled with, and the eventual outcomes changes one's sense of self and social positioning" (p. 114). In each of the following chapters, the authors have identified moments of uncertainty, of struggle, and a search for a resolution.

In our previous book, *The challenge of teaching* (Geng et al. 2017), the importance of developing reflective skills has been discussed in detail with rich stories from pre-service teachers themselves. Through reading the content of reflective practice stories by pre-service teachers, the teacher educators also look into the contemporary issues experienced by pre-service teachers while they are undertaking their teaching practicum. Reflective practice is not only for pre-service teachers but is part of a professional mindset. Through self-reflection, established teachers and teacher educators can also assure the quality of their teaching and identify gaps in their understanding.

Reflective Practice in Research

In the chapter, "The Importance of 'SELF'", in our previous book, Fry (2017) emphasised the abilities of "knowing the self" or "self-study" as a starting point for the private world of the individual to enable teachers to interact with the external world with further goals to develop their strong interpersonal behaviours and build effective working partnerships with their peers, students and families. Fry used geocentricism and ethnocentrism to assist his way of understanding of the world and his own behaviours during social exchanges.

With the understanding of "the importance of self" in mind, we can see there is at best a hairline distinction between reflective practice in teaching and its use in research, especially to the extent that the former is not reflection in the abstract, but based on observation and on discussion with students, teachers and/or parents. Action research is basically just a more systematic approach to virtually the same thing, typically involving cycles of questioning, gathering data, reflecting on the results and deciding on courses of action with the aim of improving one's practice (e.g. Ferrance 2000, p. 2).

Given that aim, it is understandable why action research must at least partially research the researchers themselves. At the same time, some researchers undertake research on themselves for more general purposes and using more general research frameworks. As one example, even in the early days of undertaking diary studies on language learning, researchers found ways of studying their own learning diaries in

ways that could be defended as legitimate research practice (e.g. Bailey and Ochsner 1983).

As another example, ethnographic research has long taken as a basic principle that the influence of the researcher on all stages, from the research design to the final analysis, cannot be avoided, but instead must be made explicit (e.g. Draper 2015, p. 38). It has furthermore been concerned with developing an "emic" perspective, that is how the insider sees, experiences, understands and expresses their "reality" (p. 38), and in fact ethnographic researchers are often members of the "culture" they are researching (p. 39). From here, it is a short step to researchers also researching themselves, through approaches that have become known as auto-ethnography that "have challenged accepted views about silent authorship, where the researcher's voice is not included in the presentation of findings" (Denshire 2013; Holt 2003, p. 2). These might thus be considered more sophisticated bases for reflective practice.

About This Book

The heart of this book consists of 33 stories narrated by pre-service teachers, each presenting a glimpse of the writer's life experience and their potential as a classroom practitioner. Each of these stories discusses an aspect of pre-service teachers' classroom perspectives about educational practice. Following this introduction, the issues they write about have been categorised into five sections or "parts", each with an introduction by one of the editors, as described below. In each section, we suggest that you read through the editor's introductory chapter first and then continue on to the chapters written by pre-service teachers.

Part I includes seven student chapters (by Linda Hamilton, Terri Miller, Agniezka Medrecki, Jeremy Hunt, Brooke Trudgen, Alison Bosnakis and Mikaila Mangohig) that focus on preparing students for learning. The topics range from behaviour management to classroom layout, reading fluency, using visuals among special needs students, authentic assessment design and visual literacy, and homework design. This part is introduced by a chapter written by the editor Pamela Smith, with further discussion based upon her deep reflection in her teaching profession and teaching and learning experience in teacher training programmes.

Part II is introduced by the editor Paul Black and contains five student chapters (by Brodie Curtis, Caitlin Taylor, Kirsten Ifould, Zerina Haziabdic and Leah McNeilly). This section explores issues of how to engage students in their learning. These issues cover how to motivate students to learn, using personal music devices and music education, developing mindful learners, how to overcome high school students' negative attitudes towards language learning, and how to promote positive teacher–student relationships in secondary schools.

Part III focuses on the use of information and communication technologies (ICT) in teaching and learning, foregrounding the importance of incorporating ICT into classroom practice. This section has six student chapters (by Petros Gerakios, Anna Bascomb, Laura Checkley, Dominic May, Matthew Froese and Emily Ford), all of

which deal with how to implement new ICTs in teaching and learning. The editor Gretchen Geng begins this section by providing a reflective piece on her own experience of using and teaching ICTs in teacher training courses.

Part IV contains seven student chapters (by Jeremy Appleton, Hannah Young, Fiona Curtis, Nadia Lelli, Rachel Platte, Claire Gitzel and Meaghan Jones) dealing with the topic of well-being and the learning environment. The content of these chapters covers the issues of how to promote student well-being by developing empathy, the impact of mobile devices on young adults' sleep patterns, the importance of the physical classroom environment, the effect of arts pedagogies on primary boys' emotional intelligence, the implementation of yoga and the national school chaplaincy programme. This section includes a chapter written by the editor Leigh Disney, focused on an incident of self-study within his teaching experience, allowing him to understand the importance of well-being within early childhood settings.

Part V has eight student chapters (by Demi Cubillo, Rebecca Wood, Elizabeth McGuire, Blake Watherston, Casey Ellis, Jack Burton, Jing Weng and Kathryn Hamilton), all dealing with education and societal issues, generally covering gaming, NAPLAN negativity, examinations, culturally relevant content, gender and engagement in physical education, and sunscreen in early childhood settings. The editor Yoshi Budd begins this section by exploring the complex relationship between education and society.

These student stories are narrations, tending to be informal and colloquial, and the editors have tried to avoid excessive interference with the voices of their authors. At the same time, in a final part (VI) and chapter, the editors present their own collective reflections relating to these contributions and related matters.

Conclusion

This book presents 33 genuine and extraordinarily honest stories written by experienced and successful pre-service teachers. These strikingly interesting and authentic pieces of work present a range of different themes reflecting contemporary issues in teaching practicum in educational settings today.

We will use this book to promote reflection on the ways in which one's own values, beliefs and life experiences can influence one's professional practice. In many respects, this book also provides a mentoring framework for other pre-service teachers through the sharing of a broad range of issues encountered by pre-service teachers, providing multiple examples of the complexity of classroom practice, and demonstrating the importance of reflective practice. As such, the book is a medium through which fourth-year pre-service teachers and new graduates have shared their valuable experiences and insights into educational dilemmas.

To end this chapter, we would like to share a quote from one of our graduates who contributed to our earlier volume (Geng et al. 2017).

Even though my teaching career is only a short time, I am very happy because during the period I have learned a lot of teaching skills by attending some training in Australia. I am also grateful that I can have a chance to study in the university that made me become who I am today by providing a range of teaching strategies and skills that are very useful for me to use in my teaching practice in Timor (personal communication from Carmen Gomes do Rosário).

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Part II
Preparing Students for Learning

Chapter 2
Reflection on Preparing Students for Learning

Pamela Smith

Abstract This chapter explores the complex nature of the instructional side of teaching, how to best prepare students for learning and get the best outcomes. Teachers bring their own experience of being a learner and their own values to teaching, and they are also confronted with many pedagogical theories about how children learn and how to get the best outcomes. This is reflected in the issues highlighted in the following pre-service teacher chapters. The author in discussing these issues is led to reflect on her own experiences as a learner and a teacher of many years standing. The skill of teaching content and managing the learning outcomes for all students in a classroom setting will be an ongoing challenge for these pre-service teachers and will require ongoing reflection as they strive for the best learning outcomes for a diverse range of student needs.

"So why all the fuss about the DI programme?" writes Jeremy Hunt in Chap. 6 of this book as he tackles the issue of explicit teaching, more specifically the programme Direct Instruction (DI) which has been adopted and implemented by the Department of Education in the Northern Territory as a way of tackling the literacy crisis in remote Aboriginal schools. When I read this question, it reminded me of the many times over my long teaching career I had been led to question why there was yet another new theory about how students learn and about how to get the best learning outcomes.

One day as I sat at my desk at my university workplace, I pondered this question for the umpteenth time and in a moment of stream of consciousness thinking I wrote the following list of pedagogical ideas I had been exposed to as a teacher over my long teaching career: discovery learning, open plan classrooms, student-initiated learning, multi-age classes, group work, activity-based learning, process writing, inventive spelling and whole-language approach, to name a few!!

Reflection can make you realise that you do have educational knowledge and insights gleaned from experience that will help you better understand teaching and learning challenges (Killen 2009). My own journey in critical reflection started with

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a desire to be an effective teacher. My reflections would be the intuitive daily thinking about something that might have worked well or not worked well and how I could do things better. In the early days of my career, I would not even have thought of this as reflective thinking. As I gained more experience and engaged in professional reading, I began to understand the importance of reflection and recognised my own practice of reflective thinking. I also began to broaden my reflection on more than just my day-to-day experiences to the broader issues of educational reform that at times seemed to threaten my sense of autonomy as a teacher. I had to try to process and balance new educational thinking with what my experience had taught me. I was not a blind follower of change. We as teachers, I felt, were often taken by surprise with little background information given for the benefits of a new programme, resource or pedagogical approach. These changes seem to happen like a wave coming from somewhere unknown but carrying compliant teachers with it. Later again in my teaching career and my career as a university lecturer training pre-service teachers, my critical reflection evolved to consider other broader issues around education, values and ethics.

As I reflect on the following student chapters, I see that these pre-service teachers as they join the teaching force will still be struggling with issues around how to cater for a diverse range of students and which pedagogical approaches to classroom teaching will give the best outcomes. In teacher education, we have to prepare pre-service teachers with the skills and knowledge needed to be effective teachers, but also, just as importantly, the ability to be reflective practitioners.

Teachers rely on the personal convictions they have developed from their values, their own educational experience and their experience as teachers over time. They like to feel that they are perfecting what feels right to them in terms of engaging and meeting outcomes for their students. This means they might question the pedagogical theories of the moment.

In the following chapters, we see pre-service teachers reflecting on issues that have affected or challenged them during the course of their teaching degree, and particularly their practicum experiences—issues around creating classroom communities that enable effective learning to take place. Here, these issues have been grouped under the theme of "Preparing Students for Learning".

The skill of teaching content and managing the learning outcomes for all students in a classroom setting is an ongoing challenge for both the neophyte teacher and the experienced practitioner and one that benefits from continual reflection and renewal. What teachers teach (the curriculum) and how they teach it (pedagogy) are central to the value of every lesson. But of course other elements of teaching matter too.

The student papers that form the following chapters have been grouped to reflect the relationship of each issue to preparing students for learning. The sequence of issues follows my own long experience as a classroom teacher. From my experience, teachers tend to start each school term thinking about how they will set up or rearrange their classroom for maximum learning and engagement. This classroom organisation is very much linked to managing behaviour so that effective teaching can take place. The various challenges of differentiating the teaching and learning to cater for the differing abilities and needs of learners become a matter for reflection

and preparation as does the issue of the importance of visual aids as an emotional as well as academic support in the learning process. Integral to all this is the important issue of assessment—how best to assess the learning outcomes of students. The final chapter in this section addresses the issue of homework and parental engagement in and support of the learning programme.

Classroom organisation affects the physical elements of the classroom, making it a more productive environment for its users. Linda Hamilton reflects on this issue in Chap. 3 "How Does Classroom Layout Affect Student Engagement?" She remembers her own primary schooling experience, where structure and discipline were important and the wooden desks were set up in neat rows. This reminds me of my own schooling and early teaching experience, where students sat in desks facing the board so they could easily copy from it and where the blackboard and chalk were the main tools of trade.

Linda reflects on what she has found in her practicum experiences—modern furniture design that lends itself to group seating formations. Linda sees a tension here, as with the flexibility in classroom set up, students may talk more and distract each other, and these low-level behavioural issues need to be managed. Professor Robert Sommer (1977, p. 174) had this to say about choosing a classroom layout:

> The teacher's educational philosophy will be reflected in the layout of the classroom. The teacher should be able to justify the arrangement of desks and chairs on the basis of certain educational goals. There is no ideal classroom layout for all activities.

As Linda concluded in her paper, there were times during instruction when eye-contact with the teacher was important and there were times when cluster tables worked best when doing group work. In my own practice, I often varied the seating arrangements, sometimes rows, sometimes group formations. I always let students choose where to sit at the beginning of the year as it gave me an insight into friendship groups and which students might be on the outer socially. After letting the class settle in, I would organise the seating to better suit the particular class group, making sure no one was excluded. Adjustments were often made each term as I reviewed relationships and adjusted desk arrangements for better learning outcomes.

Classroom management and organisation are intertwined. How the classroom environment is organised influences the behaviour in it. In Chap. 4 "Changing Behaviours within the Classroom" Terri Miller reflects on her experience in what she describes as a low SES secondary school where she experienced issues that arose out of disruptive behaviours. This experience gave her cause to reflect on her own schooling background: she had attended a similar school, came from a divorced family and moved schools a lot, but was not a disruptive student. She enjoyed school, worked hard and did well. This led her to question the influence of family background on behaviour and why background is often given as a reason for disruptive behaviour.

Reflecting on my own early teaching experience in the 1960s, teachers talked about discipline but not so much the term "behaviour management". The only disruptive behaviour I can remember experiencing was talking in class. As the years went by, the behaviours became much more challenging and varied and teaching in many situations became as much about managing behaviour as imparting knowledge. In

my experience, some students could cope with activity-based learning and choice but others needed boundaries and structure to have a safe learning environment.

The proliferation of challenging behaviours in Australian classrooms is supported in research by Sullivan et al. (2014). This and other similar research studies in Australia paint a consistent picture of widespread low-level passive disengagement and disruption. We do not know exactly what causes students in Australia to disengage—it could be problems at home, or subject matter that is too hard or too easy, or poor-quality teaching (Sullivan et al. 2014). This South Australian study showed that the problem is widespread, but much worse in schools with many low socio-economic students. However, students from low SES backgrounds do not inherently misbehave. Many disadvantaged schools have few behavioural problems (Angus et al. 2009).

One of the great challenges in today's diverse classrooms is the need to differentiate the curriculum. Differentiation means tailoring instruction to meet individual needs. The goal of a differentiated classroom is to maximise student growth and individual success. In Chap. 5 "Improving Reading Fluency in the Struggling Middle-School Reader", we see Agnieszka Medrecki reflecting on the issue of struggling readers in middle school. Like many of our pre-service teachers when first experiencing their school practicum placements in secondary classrooms, she finds this an unexpected challenge. Reading and comprehending English is essential for success in all content areas. If students lack foundations and strategies necessary to read subject-specific content and textbooks, then their academic success is compromised. She believes they need both fluency and comprehension skills. Secondary teachers need therefore to teach literacy skills as well as their subject area, something they do not always feel confident about. That every teacher is a literacy teacher has been the call of educators for many years who have made their lifework the promotion of reading and writing for middle and high school students (Vacca and Vacca 2002).

After teaching younger students, my first experience teaching Year 6 came as a shock. I remember having expectations about their literacy capacity, but when early in the year standardised testing took place, the results showed a seven-year gap between the highest and lowest literacy scores. Things that concerned me were:

- How do students get that far without adequate literacy skills to access the curriculum?
- How can a teacher remediate and progress other students operating at year level or above?

A positive was peer support—students recognise the struggles of others, and a good teacher will create a classroom culture where all students are valued and respected. Group work has benefits because it can provide peer support and quiet tutoring. Students who struggle worry that they might not cope when they transition to high school or middle school. I remember a student asking me why there was no examination at the end of primary school. Why was promotion automatic?

The challenge is to connect the teaching of reading and writing to the rest of the secondary school improvement agenda, treating literacy instruction as a key part of the broader effort to ensure that all students develop the knowledge and skill they need to succeed in life after high school (Heller and Greenleaf 2007). Agnieszka came

to the conclusion that teachers need to find effective strategies for trying to close the literacy gap in the middle years, and one important factor was the importance of regular reading in class as well as home reading.

Closing the gap or tailoring instruction to meet individual needs is also the theme of Chap. 6, where Jeremy Hunt, as mentioned in my introduction, tackles the issue of explicit teaching, and more specifically the programme Direct Instruction. Jeremy asked the question "Why all the fuss about the DI programme?" when he found himself working as a teacher assistant in a remote Indigenous school, a new experience for him. He admits he had low expectations of the students, but he came to recognise that they were "smart kids". Jeremy's acknowledgement of low expectations is something that Chris Sarra writes about: Sarra's (2014) work in developing the Stronger Smarter Philosophy (a belief in the transformative power of higher expectations) has brought consideration of the need for high expectations to the forefront of discussions about Indigenous education in Australia. In any case, the school Jeremy found himself in had adopted the DI programme, and although students did not particularly like the programme they took pride in realising that they were making good progress.

When I began my teaching career in the 60s, the teacher was the centre of the classroom and teaching was explicit. Motivating learners was still important, so you needed to engage students, but the teaching was explicit and sequential with an emphasis on practice. This would now be considered traditional teacher-directed learning and is often derided as "drill and kill". I must admit I found it hard to adjust later on to new notions of student-led learning and activity-based learning. Does this work for all students?

The teacher's role of directing the learning was challenged by the idea of teacher-facilitated child-centred learning, or "the guide on the side". I could ask the question, "What's wrong with explicit teaching?" Have we been misguided in abandoning teacher-directed methods of learning? Rather than dismiss explicit teaching as "drill and kill", why is there not more research done into how to make explicit teaching more effective.

In Chap. 7, Brooke Trudgen looks at the place of visuals in the classroom. While she looks specifically at visuals in a special education setting, visuals are important in any setting. Brooke came to feel that visual prompts did not just have academic benefits: They could help students feel less anxious and more engaged in their learning. Brooke also felt that visual aids could play a part in a student's readiness to learn.

Visuals are used in classrooms in many ways. In addition to the many visuals displayed as an adjunct to learning, visual aids can be used as prompts for classroom routines and behavioural expectations. They can allow students to express themselves (such as through emotions charts) and can help them better manage their tasks. We sometimes just accept visuals in the classroom, especially in early childhood classrooms, without thinking about why they are important.

I still remember the final farewell lecture at my graduation years ago. In addition to being advised about our status and expected behaviours, especially if we were sent to country placements, we were told to dress in colourful clothing as children like colour! I remember spending a lot of time creating thematic displays with my

students and often decorating the classroom to set the scene for a unit of work. However, I agree with Brooke that in addition to the academic value of visuals, they can have a more practical value: "Visuals are a lifeline to help students through the day".

In Chap. 8, Alison Bosnakis is also interested in visual learning, focusing this time on visual literacy in relation to authentic assessment. As a visual arts pre-service teacher, Alison was aware of the literacy demands of the visual arts. She says that visual literacy is becoming increasingly important as students are immersed in visual images in this digital age. As a student in high school, Alison felt that she could express herself through the visual arts more so than verbally. She reflects on the issue of critical reflection and analysis and the link to authentic assessment.

Assessment and the associated feedback are an integral part of instruction as it determines whether the goals of education have been met. Authentic assessment differs from conventional assessment by asking students to prove their comprehension of learned concepts and display in-depth understanding versus superficial learning. In authentic assessment, practical, meaningful tasks are designed that are reflective of real-world challenges. The challenge with this type of assessment is that it can be more time-consuming and may require greater funding. In her paper, Alison has attempted to demonstrate the effectiveness of these approaches on improving student achievement and engagement in middle school years in Australia.

One issue that seems to come up with every cohort of pre-service teachers in the research unit offered in the final year of teacher education study at Charles Darwin University is the issue of homework. Why is there such a debate about homework now when once it was accepted as an integral part of one's schooling experience and an important part of the parent/school relationship? Mikaila Mangohig tackles this issue in the last chapter in this section, Chap. 9.

The context for Mikaila's reflection is middle and senior secondary school. Her teaching area is mathematics. After reflecting on her own mixed feelings about homework throughout her school years, she examines the relationship between homework in primary and secondary school. Is one a preparation for the other? While she comes to see a positive value in homework, she believes the tasks need to be differentiated to cater for differing student needs. Some students benefit from the practice of skills, while others need extension. There is benefit, she feels, in regular revision for embedding learning in memory.

In my own schooling experience, I did not question the benefit of homework. I remember sitting with my father at night, while he helped me with my maths homework, particularly problem-solving. I remember this as a precious time in my relationship with him. In high school, the work was beyond my parents, as they had not had the opportunity to complete their secondary schooling, but they encouraged the habit of homework.

As a parent, I valued the opportunity to see what my children were learning at school and helping them with their projects, often learning alongside them. I remember a parent thanking me for giving regular homework to my Year 6 students, as she said it stood her daughter in good stead with homework expectations in high school.

In my experience, homework can help children develop good habits and attitudes. Homework helps children learn to be responsible and gives them a sense of control and accomplishment. It can teach children to work independently and to manage time and meet deadlines, and it encourages self-discipline and responsibility. It must however be acknowledged that not all families have the conditions, time or necessary knowledge to help their offspring with homework requirements.

Teaching is complex. The seven issues highlighted in this section are but a sample of the issues which teachers need to grapple with in preparing students for learning—the instructional side of teaching. Mastering the instructional component is just one part of the whole complex art of teaching. Teachers who are skilled in the instructional component of teaching, being able to communicate necessary skills and concepts in a way students understand, can create a positive learning environment for all students. Effective teachers are the most important contributing factor to student achievement. The pre-service teachers in the following chapters have reflected on some of the real challenges in classroom instruction. Reflection is a long process, the benefits of which will help them become more effective practitioners, develop positive relationships and deliver better learning outcomes for the students they will teach.

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Chapter 3
Banish the Graveyard: How Does Classroom Layout Affect Students' Engagement?

Linda Hamilton

Abstract This chapter investigates the impact of classroom layout on children's engagement within learning. A variety of classroom layouts within today's educational environments, from traditional seats and rows to alternative layouts with variable seating options and without tables were investigated. I discussed with teachers their motivations for changes to traditional classroom layouts to interpret their reasoning for such change. Every classroom layout is unique, with teachers needing to contextualize multiple factors in order to create a layout that works for their own pedagogical style as well as the students' preferred learning environment. Educators need to give careful consideration when deciding upon classroom layout so as to maximize potential engagement of student learning, which may mean looking beyond the traditional classroom layout.

Journal entry, 3rd May 2016:

On the first day of my placement before the day began, I stood in wonderment when entering the Year 2/3 classroom. This was to be my learning space for the next 20 days. My class comprised of 25 students. How was this classroom going to work? I had never encountered a classroom that had a picnic table as a desk for students to work at, also a coffee table with soft cushions around it, a couch and some beanbags. There were only two clusters of tables that would accommodate eight children, and the other seating was more like walking into a bar. Students could sit around the edge of two sides of the classroom. This does not sound out of the ordinary, but the difference was that their backs faced the interactive smart board and the teacher. I can remember thinking, "This will never work".

Introduction

I grew up in a small rural town in the southeast of South Australia, 400 km from Adelaide. I went to a Catholic primary school, the only private school in our town. My schooling started in 1969, and I completed my 12 years of schooling in 1981.

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My primary education was one that was made up of structure and discipline, not much different from today's classroom. The main difference though was that my Year 2 classroom, like many in that era, resembled what looked like a graveyard. We all sat in neat rows one behind the other. We did have the luxury of being able to share our wooden bench style seating with its flip top compartment with another student chosen by the teacher. The bulk of our school days were sitting at these desks, copying from the blackboard. It was not uncommon if you turned to talk to the person behind you for a millisecond to have the blackboard duster thrown at you. I have no recollection of any group work or work done on the floor. The only time we sat on the floor, a small rug that covered pine floorboards, was during morning talk usually conducted on a Friday morning.

What Was I: Seating Arrangements and Myself as a Student

I enjoyed school, not that I was a star student by any means; plodding along doing alright was pretty much how I spent my school days.

As mentioned above, my Year 2 classroom resembled what looked like a graveyard, three neat rows of desks with four desks in each row. Each desk accommodated two students. My Year 2 teacher, Sister Kathryn, would allocate each student to a desk, and she would choose the person that you would sit next to.

I wonder if maybe I might have achieved higher grades if I was in school today. I think that working in groups instead of independently, being able to talk to peers during lesson time, and general collaboration may have suited me better as a student.

Our classroom never changed. It was always set up the same way, as were all the classrooms throughout my primary education. Even the teacher's desk and chairs were in the same position in each classroom. The furniture was always the same, a wooden slat-back teacher chair and a large wooden teacher desk with two small drawers down one side.

I was generally a well-behaved student, so my desk was usually in the middle row or somewhere toward the back. Students that were talkative during lesson time (which was classed as bad behavior) always sat in the first few rows. I now know that this was a behavior management strategy, something that I now realize since doing my placements.

Classroom Layout and Myself as a Pre-service Teacher

I am a pre-service teacher and will be a teacher at the end of semester 1, 2017. I have been lucky to be able to do my practicum at a variety of different schools in my local area, the southeast coast of South Australia.

I have always been interested in the way that classrooms have been set up, in particular, different seating arrangements and if this impacts on student engagement during learning time.

The classrooms in my previous practicums were of a more traditional style. However, each one still had its own layout. One thing I noticed in all the classrooms was the reduction in tables and chairs. Each classroom still had small clusters of tables, but what intrigued me most was the casual seating that the classrooms offered. The classroom layout of my first placement was one that I was more familiar with and had seen used when my own children were at school. The classroom was set up with tables and chairs in "clusters." This plan was useful when students were working in groups. It allowed my mentor teacher and me the ability to monitor students' work. However, I noticed that when my mentor teacher's back was turned, some students misbehaved when she was not looking.

The classroom setup of my next placement had tables in rows. My mentor teacher preferred this arrangement; she said that it reminded students to remain on task, as she was able to walk between the rows. Both classrooms still had casual seating in the form of beanbags and cushions, but these were set up in the library area of the classroom. This form of casual seating was only used when students had finished their work early, or during guided reading.

So when I entered the classroom of my last placement, I was both surprised and apprehensive. It was so different from any other classroom I had been in. I did not think that the students would be able to concentrate and remain on task, as some had their backs to the teacher and smart board, others were sitting in a relaxed position in beanbags and on a couch, or sitting on the floor around a coffee table surrounded by soft cushions. It did not take long for me to realize that these seating arrangements suited this group of children. The 25 students in the classroom seemed to be relaxed and ready to learn.

Was this due to the relaxed atmosphere of the classroom? Was this because the students were able to choose where they sat and whom they sat next to? Alternatively, had my mentor teacher relayed to the students her class expectations prior to using these seating arrangements? These were just some of the questions I was going to have to ask my mentor teacher and also the students.

The students that made up this Year 2/3 class were from varying socioeconomic backgrounds. Some were from broken families, and some had low socioeconomic backgrounds, while others were from middle-class families. The class had some students that were high achievers and a couple that needed assistance with their learning. They all seemed to look and feel comfortable working in this environment. As we know, some students' home life can be in turmoil. Was the relaxed seating arrangements and relaxed feeling in the classroom due to the aesthetics, or my mentor teacher providing students with a safe, comfortable, and inviting environment in which to learn?

As I got to know the class, I began to realize that some of the students that chose to sit next to their friends did have a tendency to be talkative. My mentor teacher gently reminded these students that if this continued one of the students would be moved to the floor. She continued to tell them that it was their choice where they sat,

but if it impacted on their learning time, was this particular seating arrangement the right choice for them? I was surprised to see one of the students get up from their seat and move to another spot of their choice. There was no fuss or tantrum. I was amazed; I kept thinking this is exactly the kind of class and classroom I wanted once I graduated. It had changed my way of thinking. Perhaps students do not need to be in rows like a graveyard to concentrate. Perhaps if students had control of their own classroom layout, this would be enough.

Of This Much I Am Sure

I decided to ask a number of teachers if they thought that seating arrangements had any impact on students' engagement. Some teachers thought that a classroom needed to have students sitting in rows, and others thought that tables needed to be in clusters. One teacher said that this term she was trialing the borderless classroom with her students, as she thought that it might help with both classroom behavior and engagement.

I also spoke to my mentor teacher to help clarify some of the questions that I needed to be answered. I asked her if she always set her classrooms up in this way. Her answer was quite surprising to me. She said that this kind of setup does not work for every class. She said that she had a Year 2/3 class last year, and she had to revert back to a more structured classroom, putting her tables in rows conforming to a more structured form of seating and classroom design. Her reasons for this was she felt that the more relaxed free choice of seating did not work well for this particular class; they needed more structure in their day, as she put it, "more old school." The row arrangement can serve as a reminder to students to remain on task, as the teacher can walk between rows. My mentor teacher had answered one of the questions that I needed answered; she felt that seating arrangements did affect students' engagement. This was a factor that I would need to consider when setting up my own classroom. I would also need to consider that classroom arrangement from a student's point of view symbolizes their personality (Professional Learning Board 2016).

I asked the students who had been exposed to both a structured classroom and a borderless classroom which classes they preferred, and the borderless classroom was chosen by most of the students. Many chose this style of seating arrangement as their favorite as they felt that it helped them remain on task, others felt they were less distracted by their classmates, and some felt that they were able to see the board better.

The Professional Learning Board (2016) recommends a number of alternative seating arrangements to consider. Arrangements that stood out to me are the circle arrangement (this arrangement can help foster group dynamics), the semicircle arrangement (the teacher can maintain eye contact with all students and check to see they are attentive), and the round table arrangement (useful when working in groups, allowing educators to monitor students' work; however, disadvantageous in that students may misbehave when the teacher is not looking).

Conclusion

Following my experiences during placement, reading articles, having discussions with mentor teachers, other teaching professionals, and students, I have come up with the conclusion that seating arrangements can have an impact on student engagement. While a borderless classroom may suit some students, it may not help others with their engagement. Therefore, a more structured classroom setting would be beneficial.

Through this process, I have learned although you may start with one style of seating arrangement for a particular group of students, it may be necessary to change to a completely different style to better accommodate the students' learning and engagement during lesson time. When setting up a classroom one of the major decisions is how seating will be arranged, and you need to consider the effect various structures have on the style and level of communication in the classroom and on the learning styles of the students. As my mentor teacher describes it, "A good classroom seating arrangement is the cheapest form of classroom management."

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Chapter 4
"Johnny Is just Disruptive": Changing Behaviours Within the Classroom

Terri Miller

Abstract At first as a teacher, I liked my classroom nice and neat, in four straight lines with students facing the front, raising their hands to speak. However, some students were disruptive, fiddling with pencil cases, talking with friends, swinging on chairs and calling out in class. Observing the more disruptive students during a Non-Instruction Time session, I noticed one in particular who would not stay in his seat, kept fiddling and seemed constantly disengaged. Then it hit me: this student was kinaesthetic! From talking with parents, I was also astounded to learn that students I thought would be playing video games at homes were actually out climbing trees, riding their motorbikes or riding horses. I then talked with my students about what they like and how they learn best, and in response, I gave them more choices, such as whether to sit on the floor, in a beanbag, or at a desk. I was pleasantly surprised by the positive impact this had on student learning, I now take the class outside and use the environmental learning area for maths and science lessons, and to engage students I too may sit on the floor with them, or walk or even dance around the classroom. I concluded that the children were not the issue but just the disruptive behaviours they displayed out of boredom. This made me look at my pedagogy and to include the students more in their own learning, with fabulous results.

Journal entry 23rd August 2016. Loxton North, South Australia

> The class I am currently placed with during my final practicum includes students of varying backgrounds. Many are from low socio-economic homes and have parents that are divorced, single parent families or blended families. Very few students are living with both their mum and their dad, and only one student in that small handful has parents that are both employed. Many of these students display disruptive behaviours.

> This is very similar to my experience as a primary school student, in the 80s and 90s. Living in a low socio-economic area, parents divorced, both my mother and step-father are working full time. I, however, do not think of myself as being a disruptive primary student, and why is it that the students themselves are labelled disruptive" instead of the behaviour? Why is it that maybe Johnny's parents are separated, and yes he lives in a low socio-economic area, makes him a disruptive child?

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Introduction

I like to say I grew up in Renmark, a small town situated within South Australia's Riverland region, 260 km from Adelaide. My parents separated when I was seven, and I lived with my mum, step-dad and younger sister after the divorce.

During my junior primary school years, I lived in Elizabeth, a suburb of Adelaide very well known for unemployment, crime and drug and alcohol abuse. After my parents separated and later divorced, I moved schools five times before we left the city and settled in Renmark, where I started Term 4 of Year 3. Each time I bounced from new school to new school, I would have to make new friends, leave old ones behind and learn to settle into new schooling routines and expectations.

I loved my primary school memories in Renmark. Classrooms took on themes each term, there were at least 8 or 9 male teachers on staff, excursions and class walks were a regular occurrence, and the school camps were something to look forward to every year. We rarely sat at our desks, and a lot of our learning (as I remember) was in small groups, on the floor or in the yard or playground amongst other crazy things you would not even dream of seeing in a classroom situation today.

Throughout this paper, I will discuss possible reasons as to why "Johnny is a disruptive child", and my objective will be to observe that it is not necessarily the child that is disruptive, but the behaviours, and to identify the possible reasons for the display of such behaviours within the classroom setting.

Who Did I Think I Was?

I thought I was a pre-service teacher who was going to change the lives of children, one little chicken at a time. I did not think I would be the perfect teacher, but I did believe (and still do) that strong teacher–student relationships are the key. Some days, however, kids will be kids, and I will have bad days. People (my fiancé and children) say that I display OCD traits. I believe, however, I just like things nice and neat, and in straight lines, so this is how I set up my classroom, four straight lines, students facing the front, and I liked it when students raised their hands. I was able to see each student and see when they were engaged and disengaged. However, why were some of the disruptive behaviours, such as fiddling with pencil cases, talking with friends, swinging on chairs and calling out in class, still occurring, even when classroom guidelines were put in place and implemented regularly? Why was their attention everywhere else than where I needed it to be at the moment? My lessons were well structured, and what I thought to be somewhat flexible and engaging.

The statistic of 2.1% of the resident population in Australia divorced in 2013. This is the alarming total of 47,638 divorces for that year alone (Australian Institute of Family Studies 2016). Can this be the reason behind some of the behaviours seen in the classroom? Possibly, however, behaviours linked to divorce and marriage/partner breakdowns, are more likely to be defiance, aggressiveness, non-compliance and a

lack in self-regulation (McIntosh et al. 2009), with behaviours that include with-drawal, possibly being due to a lack of social skills and emotional trauma (Victorian State Government 2014).

I began to wonder if I was just a picky teacher that didn't like "the little things". Maybe?!

During one of my Non-Instruction Time (NIT) sessions, I decided to stay back in the classroom and just observe the students that usually cause disturbances. I took particular notice of "Johnny". He would not stay in his seat, kept fiddling with anything in sight and seemed disengaged constantly. Then it hit me like a lead balloon: Johnny is kinaesthetic! I remember him being so eager to build a catapult during a science lesson, and how he loved to practice his time's tables with a deck of cards, and here I was, the newbie teacher, making him sit at a desk like a robot. What if all the students were like Johnny and didn't learn best the way I thought they would?

I looked deeper and started to question some of the parents if there were any behaviours at home they were concerned about, have there been any large changes in the family unit and do their children prefer to sit at the Xbox or play outside? The results did astound me. The children whom I had assumed all sat on their Xbox or PlayStation the minute they got home were actually out climbing the trees, riding their motorbikes or riding horses. BANG went that theory!

After many informal conversations with parent and teaching staff, I realised that I had not asked the students themselves. I asked them with one simple question, "How do I think I learn best?" It was that easy. I had already established individual relationships with all of the students within the class, and the results were honest and open. I had explained to them that if I was to be the good teacher they continuously told me I was going to be, I want to know what *they* like and *how* they feel they learn best and I would take on board everything they had to say and change my pedagogy accordingly.

Truly the best thing I could ever have done.

Who Do I Think I Am Now?

Now, in the last two weeks of my bachelor degree, I have taken a totally different approach to my personal pedagogy. I have incorporated the negotiated learning and seating area; whether this is on the floor, in a beanbag, or at a desk, I have let the student themselves decide. I was ready for this to turn out badly. However, I was pleasantly surprised by the positive impact it had on student learning. Students who used to swing on their chairs chose to sit in beanbags with their books on clipboards and only a pen instead of a whole pencil case to fiddle with and the lack of pencils was by the students' personal choice. I am now a pre-service teacher who asks her students how they feel they would learn best for a particular subject or unit of work. I now take the class outside and use the environmental learning area for maths and science lessons, instead of trying to bring nature into the classroom. Explicit teaching now sees me sitting on the floor with the students, walking around the classroom (and

sometimes dancing), constantly engaging with students and asking them if I changed something, would they feel they would understand the topic better. I am including more "brain breaks" during longer lessons, and the inclusion of student-lead learning has created a buzz throughout the classroom.

Of This Much I Am Sure

From speaking with my mum and step-dad, and also with my dad, their response was the same. I was never a student who messed around at school. I was not an overly academic child, and my behaviours at home were not always attractive, but during my schooling, there were never any comments in regard to behaviour issues or disengagement. Until high school, that is, where we were made to sit in rows, and all lessons were explicitly taught. That's when I became bored and unplugged. Lightbulb!! If I was bored back then, what has changed? Nothing!

This then leads me to think about the low socio-economic area in which I teach. "No", my mum said immediately, "we all lived in Housing Trust houses back then, and had no money before, during or after the recession". So I believe there to be minimal differences between the ways we lived back then to the lives of some of the children I teach today.

I then asked the teachers I work with, both of those that have over 30 years' experience and those that have 5–10 years' experience. I spoke with male teachers and female teachers, student support officers and finance officers, with all stating that the only impact they have noticed in regard to the financial status of the schools' families is that during the drought, a lot of families were leaving the region and their horticultural properties. The families that remained in the area have not changed, and collectively they feel that the low economical structure of the town has minimal effect on student behaviours within the classroom.

After many conversations, researching and data collection, I now know that not all students learn the way I was teaching, the way I learned in high school.

Conclusion

To re-address my original question: As a pre-service primary teacher, what can be done to minimise disruptive behaviours in the classroom, and what, if any, are the possible causes for such disruptions?

My conclusion is this. It is not the child that is disruptive, but the child displaying disruptive behaviours that is the issue. Yes, some children do act out violently, display disrespectful and disengaging behaviours after a family separation or divorce. However, the class I am currently teaching does not display such behaviours, more that of boredom and tuning out to the sound of my voice. I do not blame the students for these behaviours, as it has made me look at my pedagogy and to include the

students in their own learning—and, I can say, with fabulous results. After changing the drill and kill approach to times tables, and introducing tables snap, the students are progressing through the timetables at alarming speeds. Clapping out syllables, or bouncing a ball to the syllables for spelling words, has shown the lower-level learners achieving results in their spelling tests, ones they are proud to share with classmates. Allowing students to choose whether they sit at a desk or on a beanbag has reduced swinging on chairs and increased the amount students write during journaling time. As for "Johnny", it was discovered that he just needed a bouncy band put on the legs of his chair and a pencil pot instead of a pencil case. Whenever he feels himself becoming fidgety, he bounces his legs up and down and gets straight back on task. I continue to ask for students to raise their hands but have also included "shout out" times, when answers to my questions can be called out at will. I ensure I give them plenty of notice when it is time for hands up, or time to call out, so they do not become confused.

Each student learns in a different way, and if the teaching style does not meet the needs of the learner, they are more likely to become disengaged (Hyde et al. 2010). I believe getting to know each student, and how they learn is imperative to a successful learning environment. By grouping like-minded learners together for different tasks, teachers are able to incorporate each learning style into their classroom (Groundwater-Smith et al. 2011) and as through the inclusion of the student's voice.

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Chapter 5
Closing the Gap: Improving Reading Fluency in the Struggling Middle School Reader

Agnieszka Medrecki

Abstract   To succeed in the twenty-first century, students will need advanced levels of literacy to function responsibly as individuals, citizens and workers. They will need literacy to accurately evaluate the flood of information in today's digital age. They will need literacy to feed their imagination so that they can create the world of the future. Therefore, as a twenty-first-century teacher educating twenty-first-century learners, one must empower students with strategies that will enable them to participate in all aspects of their lives. Throughout my practicum observations to date, and supported by the literature, a disturbing number of serious reading problems exist among middle school students. This study will critically investigate and evaluate strategies to improve fluency in struggling readers to close the gap between the struggling middle school reader and their grade-level peers. This will take form using personal reflections and critical evaluation of my own practices, my peers and mentors and will be supported by literature on the topic to date. I dedicate this study to all the hard-working students who struggle with reading fluency. Without these students, this study would not have been possible. The students' hard work and determination to make significant improvements in their reading ability inspired me and made me not only a better person but a better teacher.

Journal entry, November 11, 2015, Cumberland Park, South Australia.

> The room is so quiet. Students in the Year 8 English class are silently reading their class novel … or are they? As my mentor teacher sits at her desk, I decide to walk around the room during this observation day. Something was not right, and I was determined to find out what. Some students begin to fidget, others quietly chat and laugh with their peers, while others who look like they are concentrating seem to have their finger stuck on the same paragraph for five minutes. Some students seem disengaged. Is it an inappropriate novel for the class cohort, or is there another factor I am not noticing something that could be easily addressed? As I took over the class the following week, I began with whole class oral reading of the novel hoping for fluent reading that would mirror spoken language, with adequate speed, use of appropriate phrasing and intonation (Mraz et al. 2013). Instead I was faced with slow, halting reading, poor phrasing and a lack of intonation patters. Where to from here?

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Introduction

I am a wife, daughter, sister, and a mature age student who, standing at a cross-road of her career, wants to make a difference in the lives of young people. As a teacher, I want to teach, inspire and motivate. I want to nurture my students' imagination and thrill the intellect, so they are motivated to explore, learn and grow academically. With life experience, a career in psychology/journalism and a love for the English language I want English to be an avenue for my students' success in other content areas.

My teaching placements to date have been incredibly rewarding experiences where I could begin to apply what I have learned throughout this course and uncover the contradictions that lie between pedagogical theory and practice. This was complemented by ongoing reflective practice to evaluate not only the outcomes of my teaching practice to enhance student learning but also my own personal learning path. It is such a critical reflection and observation that have led me to look deeper into the struggling middle school reader.

Who Was I in Relation to Fluency in the Struggling Middle School Learner?

During my school years, I was a strong reader, taking somewhat for granted the complex and interactive process of the various multiple interactions (Mraz et al. 2013) that reading entails. With a passion for teaching English, I was somewhat shell-shocked to see a disturbing number of serious reading problems among middle school students, who lacked the foundations and strategies necessary to read subject-specific content and textbooks. Oral reading fluency, defined as the ability to read connected text accurately, quickly and with proper expression (Torgesen and Hudson 2006), is a critical part of learning and a stepping stone to comprehension. As curriculum across subjects relies heavily on reading fluency, students who struggle in this area have their ability to gain knowledge through reading suppressed and their academic success compromised.

Although several students were provided with additional literacy support in an intensive reading class, this did not include instruction in fluency. I felt more needed to be done. I soon came to realise that, as a twenty-first-century teacher, simply teaching content was not enough; I needed to develop the "discipline of noticing" and changing what can be changed (Mason 2002). It was my responsibility to notice the struggling readers and to find appropriate strategies for integrating literacy instructional activities within my content area to strengthen their literacy skills and help them succeed. However, first I had to consider one key assumption: Fluency does not cause comprehension. Although this is true, fluency is seen as a bridge between word recognition and comprehension and a necessary component of successful read-

ing that can be further developed and enhanced through explicit fluency instruction and repeated reading.

My goal was to train students to read effortlessly, so they could focus on text comprehension; this required fluency instruction. With research lacking on effective instructional tools for meeting the reading needs of struggling students (Joseph and Schisler 2009), I began by explicitly modelling fluent reading, remembering to read with expression and prosody. To aid the students' understanding of fluent reading, I explained prosody to the students by saying things such as, "I paused here because there is a comma" and "The exclamation mark tells me to raise my voice a little at the end of the sentence". Further, I increased students' opportunities to read through the use of repeated oral reading with corrective feedback from a more proficient reader, ensuring no student felt uncomfortable in this process.

Where Am I Now?

In the past, I thought that reading difficulties were predominately dealt with in the primary school level, but I have experienced first-hand struggles that middle school students' experience, falling further and further behind their peers. Observation, critical reflection of my own practice, and reviewing a vast amount of literature have enabled me to evaluate and see the effectiveness of various strategies upon fluency levels of struggling middle school readers. This gives me a resounding feeling of optimism.

I am now reaching the end of my teaching and learning journey, and feel inspired to help my students succeed. Through personal reflection, critical evaluation of my own practice, conversations with my peers and mentors, and the reading of academic literature, I realised that to ensure growth in student reading, I need to provide many opportunities for students to read. Although many struggling, readers may require additional support, and this will require carefully coordinated instruction between the reading specialist in the intensive reading classes and myself as the content teacher. Going into my last placement in 2018, I will need to critically evaluate my class schedule and routines to ensure I design lessons that increase time and opportunities for students to read and that teach vocabulary, comprehension strategies and increase fluency. Beyond the strategies mentioned above, I will also incorporate reader's theatre, which involves students in extensive practice and rehearsal of scripted material to be performed for a group (Mraz et al. 2013). Such material can be developed from poetry, song lyrics, plays, stories or novels with rich dialogue.

Of This Much I Am Sure

A challenge facing both struggling readers and those who may have been considered fluent at one point are to continue frequent and regular reading; of this much I am

sure. Therefore, a systematic plan of action focusing on both decoding and vocabulary must take place to improve fluency in struggling middle school readers (Kamil 2003).

As a teacher, I need to frequently and regularly model fluent reading, which will give students a standard for which to strive. Oral reading in middle and high school classes continues to be necessary. Further, students should be engaged in repeated oral reading, as this helps students to develop fluency (Archer et al. 2003). By integrating repeated reading into my instruction, with sensitivity for the struggling reader, I will be able to provide students with the opportunity to frequently and regularly practice fluency skills, while providing feedback and guidance. Partner reading, as another instructional strategy to build fluency, may also be used with guidance by the teacher. Although more work needs to be done on the correlation between improved reading rate and fluency, all of the above strategies encourage students to read more often in the presence and with the guidance of a more fluent reader. Considering the struggling readers' needs during planning and teaching will enhance their learning and promote their motivation; of this much I am sure.

Conclusion

> I walk towards the classroom today and see Sarah and Rachel [names changed] sitting beside the closed classroom door, reading quietly the prescribed novel. These were girls who were known not to be motivated by reading. I was amazed. However, today was going to be a tough day. We were to read the last chapter of the prescribed novel, with the intensive reading class teacher as a relief. Jake [named changed], who at the beginning of our oral reading shied away, not wanting to read, put his hand up. "Miss, can I read first?" The students took turns, reading fluently, with accurate speed, phrasing and intonations, and smiles on their faces. "What have you done Miss Medrecki? These six intensive reading students read amazingly. What strategies did you use?" What a proud moment! All that hard work: I have made a difference, and helped my students succeed.

Reading fluency is the essence of reading: essential not only to academic learning success across curriculum subject areas but to lifelong learning as well. Improving students' fluency is arguably the most important challenge teachers, and students face in the middle years. As a pre-service teacher, with a high sense of efficiency and soon to enter the teaching profession, I want to engage my students in rich and meaningful activities by incorporating various strategies to enhance instruction and promote students' success in using reading as an avenue for learning in different learning areas.

The more I learn about middle school readers, the more I am convinced that all of them, even those who have struggled with reading since kindergarten, can become successful, engaged readers. This only requires appropriate strategies and a teacher who is attuned to the needs of the students.

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Chapter 6
Direct Instruction with EAL/D Learners in the Northern Territory

Jeremy Roy Hunt

Abstract This chapter explores a reading program that I believe can significantly aid Indigenous EAL/D learners to meaningfully grasp the secret keys to Standard Australian English (SAE). It is clear that there is some merit regarding the literacy program in the effectiveness of the Direct Instruction program. Moreover, it is reasonable to suggest that with community support, Direct Instruction programs can play a significant role in facilitating the effective learning of SAE amongst EAL/D Indigenous learners. It is evident that the success or otherwise of the program is in part dependent on its facilitation and that teacher hostility to the program will result in limited positive outcomes for learners.

Journal entry, August 2016, Alice Springs, Northern Territory:

> I could not believe it! He was getting it. Travis was actually reading. Reading properly. Without pausing and sounding out every word individually! One hundred and seven words in a minute! I cannot read much faster than that! I was so excited for Trav. As the recess bell went and the class went out to play I remember reflecting that Travis' new found reading skills should be expected; should be normal and standard for a smart learner his age. A kid that has barely missed a day of school for eight years *should* be able to read. Why didn't he learn to read in his early primary school years like most of his non-Indigenous peers? Why does this reading program seem to work so well for so many students like Travis? So why all the fuss over this DI program? The tensions that the DI program brought when implemented a couple of months earlier were palpable. I remember my own apprehension towards the program as a result of a couple of Google searches I had done on the Internet; I remember the well-respected teachers and academics labelling it as rubbish. However, the program works, doesn't it? I had seen it with my own eyes.

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Introduction

I had the privilege of growing up in regional New South Wales in a small country Riverina town called Cootamundra. It was a truly amazing place to spend my formative years, which were filled with abundant freedom, adventure and many active pursuits. My idyllic country upbringing was cut short as I neared the completion of my primary schooling when my family decided to move to Melbourne. It was in the city that I completed my secondary schooling and navigated my way through four years of university study. The following four years involved meeting my wife to be and a career change from architecture to carpentry. With a shared yearning for adventure and a more meaningful existence, we decided to uproot and move to the Northern Territory. Fate would have it that I would soon embark on another career change. I soon found myself working as a teacher's assistant at an Indigenous school in Alice Springs, my vocational journey into teaching. I now find myself deeply passionate about Indigenous learners. The following discussion will explore a reading program that I believe can significantly aid Indigenous EAL/D learners to meaningfully grasp the secret keys to Standard Australian English (SAE).

Who Did I Think I Was?

I consider myself fortunate to have had a reasonably privileged upbringing in the sense that family and friends always surrounded me. However, one thing that was absent from my early learning and ingrained through the dominant culture that I was surrounded in was the virtually non-existent recognition of Indigenous Australians, despite the fact that I was brought up in a regional setting with a significant Indigenous population, not to mention the fact that Cootamundra was the location of an infamous girls' home, far removed from the town's consciousness. However, my move to the town of Alice Springs did not include an understanding of its history, and consequently, I did not have an appreciation or understanding of Indigenous culture.

Little wonder then, that I arrived in Alice Springs with scant awareness of the issues and challenges that Indigenous Australians faced. I was about to begin my own education. Living in Alice Springs opened our eyes and softened our hearts. My education started with friendships and engagement in the community. By year's end, I found myself re-evaluating my pursuits in carpentry and, with some encouragement, found myself gaining employment at a local school that caters specifically for Indigenous students.

I had low expectations of these learners. In retrospect, if I am totally honest, I probably even questioned their intellect. I had been preconditioned to think that my way was always the right way. I knew that their literacy and numeracy levels would be low, but I would soon be shocked at how low (Burke 2015). The expectation I had for these learners slowly slipped even further. With my education study now

commencing, I was faced with an interesting dilemma that I would argue many teachers who work in challenging contexts face. Should I only have low expectations for these learners so as to protect them and myself from disappointment? No. A quick paradigm shift was required. These are smart kids. They can do it. I can do it.

That first year was eye-opening to say the least. There were small victories. A solid core of students now attended the class I assisted in. I quickly bonded especially with the young men in Year 7, 8 and 9. My "street cred" from the footy club was invaluable as I quickly learned that the old saying, "people do not care how much you know until they know how much you care," was true of these learners. As the school year progressed, I found my eyes opened to the possibilities as I guided students in their numeracy and literacy. A highlight came in the admission of a young Year 7 student to the school who could speak almost no Standard Australian English (SAE). Countless hours of tutoring and two months later, the learner was virtually fluent in SAE. This changed everything. Watching this young Indigenous learner master SAE was a pivotal turning point. It also occurred while I continued to wrestle with many preconceived ideas I had of Indigenous learners. The more I thought, the more I realised that they were not the ones failing, but rather the system was failing them: The revolving door of education staff, the lack of support for EAL/D learners, the lack of meaningful prospects awaiting the completion of their schooling, the low bar that has been set (Milgate et al. 2011). What hope did they have?

Who Do I Think I Am?

I now have a deep appreciation and respect for Indigenous culture, and we love the Territorian lifestyle. Between my wife and I, a night does not pass without time spent with our new wider extended family, whether it be at the clinic, the footy club or just down the street. I now firmly believe that Indigenous learners can achieve and can meaningfully learn SAE. I believe that finding common ground is key to meaningfully engaging learners. With learners engaged in a culturally appropriate manner and with the help of the wider community, I believe that truly meaningful learning can be facilitated. I now take the view that it is incumbent on educators to indeed facilitate the education of learners, as opposed to blaming external factors for the poor results obtained.

My resolve to see Indigenous learners thrive was further encouraged at the beginning of 2016 when it was announced that the school would be implementing a new literacy program called Direct Instruction or DI for short. After some quick research, I found out that there has been notable debate around the merits of the program. Trying to keep an open mind, I began facilitating DI with a small group of learners. At the end of the year, despite my absence for periods of time whilst on placements at different schools, the results were nothing short of remarkable. While not a silver bullet to all the educational challenges faced by Indigenous learners, I feel the program provides important structure and a pedagogical approach that evidentially seems to resonate, especially well with Central Australian Indigenous learners.

Of This Much I Am Sure

So, does Direct Instruction facilitate meaningful and effective teaching and learning of Standard Australian English for EAL/D Indigenous learners in the Northern Territory? It is reasonable to say that the studies I conducted brought out few surprises and mostly confirmed my expectations. The response from educators supported my own observations that the program has, in a short period of time, facilitated an overall improvement of learners' grasp of SAE. This is plainly evident with the number of learners who have improved their reading proficiency—the number of words spoken per minute measured on a daily basis as well as the number of words mispronounced in this minute. This was also the case with the class that I facilitated in Semester 2 of 2016 comprising Year 5 and 6 students.

It should also be noted that the students in my class that experienced significant improvement also maintained at least an 80% level of attendance throughout that semester. It thus could be argued that their progress in literacy is the result of school attendance rather that the program itself. However, the majority of these students have maintained satisfactory levels of school attendance throughout their primary school years. It has only been since the implementation of the DI program that they have experienced an improvement in their literacy skills. In future years, it should be expected that this improvement will be reflected in NAPLAN data.

What I have found interesting is that I have generally observed that learners explicitly express their displeasure at the program. It should be noted that these are generally the older students, who express opinions along the lines that the program is boring. Equally interesting, however, is their pride in being able to realise meaningful learning after participating in the program. Learners may not love the program, but they love being able to read—which indeed is what the program does facilitate. Thus, it could be argued that the success of the program is not highly dependent on the attitude of the learner towards the program itself. This is also highlighted with Johnny's responses outlined by a Year 10 learner and past student of the school where I worked: "I found it has really helped me to learn SAE, and I like knowing what we are going to be doing each day. However, I get bored doing Direct Instruction every day".

I would argue that learners may find the content boring but appreciate the highly structured manner in which it is facilitated. This is highlighted by the significant reduction in challenging behaviours inside the classroom after the implementation of the program.

Another expectation that was confirmed through the research was that the attitude of teachers towards the program was relative to the experience of respective teachers. However, the correlation was not as strong as I first suspected. This data is relevant as the meaningful facilitation of the DI program is indeed dependent on teachers embracing the program. A reluctance to meaningfully facilitate the program will no doubt be reflected in limited positive results and, furthermore, attendance of students (Engelmann 2014). What is known is that younger teachers are generally more open to the highly structured pedagogy.

Moreover, there is a view that the program's nature allows for improved behaviour management and the strict routine allows students to settle in the learning environment. Additionally, the program has greatly reduced the amount of planning time required for lessons with all lessons already prepared. Thus, allowing teachers to allocate more time to other equally important tasks in their preparation time. Teachers reported that being able to spend more time undertaking pastoral care and building strong positive teacher–student relationships with learners has resulted in improved engagement in the classroom.

I also found that both Aboriginal and non-Aboriginal educators had reservations about the cultural appropriateness of the program. This was reflected in their attitude towards the North American content in the program. Although the organisation overseeing the program advocates reasonably strict adherence to the content of the script (National Institute for Direct Instruction 2015), there is no reason why skilled educators cannot adapt the content and substitute relevant and appropriate content for learners. For example, replacing the word "autumn" for the word "fall", and "petrol" instead of "gas". Likewise, poems listing American Indian tribes could easily be replaced with Central Australian language groups. Apart from the content, some respondents had an issue with the manner in which the program was facilitated and viewed that as being culturally inappropriate. The main source of this was the view that it was inappropriate for young men aged 13–15 to be grouped with younger learners. The practical solution to this problem would be ensuring that men are not grouped with younger students, even if they are at the same level, and this would require additional staffing.

What is evident is that the DI program does facilitate meaningful learning of SAE, and thus, it is recommended that similar schools, especially in the Central Australian context, should examine the merits of the program and consider its possible implementation. Whether a school-wide implementation is necessary will depend on the SAE level of learners; however, it is clear that there is significant merit to the program, especially for learners that have struggled to grasp SAE despite being regular school attenders, a reality for many Indigenous learners (Berry and Hudson 1997).

Conclusion

From this meaningful but limited research into the effectiveness of the Direct Instruction program, it is clear that there is indeed some merit regarding the literacy program. What is also clearly evident is that more research is required regarding the question of the effectiveness of the Direct Instruction program and its appropriateness for EAL/D Indigenous learners in the Northern Territory. What can be agreed upon is that the literacy rates in the Northern Territory require sustained attention on behalf of educators and policymakers alike. Moreover, it is reasonable to suggest that with community support Direct Instruction programs can play a significant role in facilitating the effective learning of SAE amongst EAL/D Indigenous learners. Moreover,

it is also evident that the success or otherwise of the program is in part dependent on its facilitation and that teacher hostility to the program will result in limited positive outcomes for learners.

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Chapter 7
Visuals in the Special Needs Classroom

Brooke Trudgen

Abstract This investigation is centred around my personal reflection on the usefulness and positive effects of visual stimulation in special needs classrooms. This document provides a journal entry and personal recommendations for teaching methods and classroom practice using visual stimuli and prompts. Through observations of students with additional needs in their classroom environment, I was able to perceive how and why visual stimulation can make a difference to students with special needs and how my own opinions changed throughout the research process. This chapter discusses how visual stimuli and prompts can enhance student engagement and improve students' emotional well-being in the classroom.

Journal entry—April 10th, 2017—Discovering Visuals

> Looking around, I can see that all the children are focused on getting their daily schedules correct – this is important to them. They are all listening so intently and putting their pictures in the right order. I wonder how much of a difference it makes to their day … I can understand why they [visual schedules] might be so important to them. The unknown is where anxiety stems from, and these kids already have enough to worry about without having a lack of direction.

Introduction

I am Brooke. I am a daughter, a girlfriend, a sister, a homeowner, a student, an educator, and currently, a pre-service teacher. I am completing my final teaching placement at a reception to Year 7 primary school. During my placement, I developed a personal, professional learning journal based on the effects visual stimuli have on students in a special needs class.

The focus group who was observed as a part of this investigation included 13 students ranging from ages 9 to 12. Each student had been diagnosed with a learning

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disability, and a number of the students also have autism spectrum disorder (ASD). This investigation is not based on traditional, mainstream classrooms, but focuses on students who are considered to have special needs.

This investigation was carried out over a three-week period during Term 2 of the school year. During this time, a number of scheduled observations were made and recorded while I was still fully engaging with the students.

The purpose of this investigation was to develop a deeper understanding of teaching strategies and understand how a range of visual prompts and stimuli could influence students at the school. Through this investigation, I was also able to develop my own understanding of students' additional needs and, ultimately, use this understanding to become a better educator.

Who Was I?

I grew up in a big family. I have an older brother, two younger brothers, and two younger sisters. We are very lucky that we are all healthy and able. None of us has grown up with a disability or any serious illness of any kind, so I really did not know much about these kinds of things as a child.

At the age of 18, I moved away from my home in Adelaide and started a new chapter in the city of Melbourne. This was the first time I had ever really seen disability up close. I dated a man whose younger brother had Down syndrome. At first, I was hesitant because I did not know how to act or what to say to this young boy. I had no experience and felt inadequate when communicating with him, but that all changed over the next few months. Soon I realised that, although this young boy was different, he was still just a young boy. I began to build a relationship with him that I had previously thought was impossible and I began to cherish the time we spent together.

At the age of 19, I moved back home and completed my Certificate III in Home and Community Care. I knew that helping people was important to me, so I pursued the avenue of caring in people's homes. During the time I worked in this field, my eyes were opened to a whole world of people living with illness and disabilities. I had never considered how many people needed help just getting through their daily routine; how much assistance some individuals required just to get by.

At the age of 20, I enroled at Charles Darwin University and began a Bachelor of Education, Primary degree. Over the next four years, I completed my teaching practicums in schools, volunteered in several organisations, and worked as the Assistant Director of an Out of School Hours Care program. In each of these situations, I met children with additional needs: some with autism spectrum disorder, and others with extreme allergies.

I did not have much exposure to or involvement in developing learning opportunities for children with a disability until the beginning of my final school practicum. I was someone who had seen disability from a distance, even worked with people who lived with disability, but I had never completely understood it. I was unaware

of what factors could affect people with disabilities; what could make the difference between a great day and a complete breakdown.

Who Am I Now?

Sometimes, new knowledge provides me with answers to questions I never even thought to ask. Originally, I planned to research how visual stimulation affects curriculum-based learning in the classroom but, after observing the students, I realised that was not the question I needed to ask. I began to notice that, in the special needs classroom, there were other priorities that I had not considered in previous mainstream experiences. I found that simply getting through an entire day without particular individuals in the class having a breakdown or shutdown was a huge achievement in itself, and that is where my questions began. I considered that learning can only be done when the students are attentive, involved, and calm enough to focus. Through pondering this, I observed what made the difference for these children: what made them have a positive day and what their triggers were.

When I first began observing the visual prompts that were used with the students, I was very focused on the learning side of things. I looked at how visual stimulation during teaching affected students' interest in activities. I wanted to see how pictures, images, or word visuals could fit with the teaching and learning cycle. I know now that something much bigger was happening for the students regarding their visual experiences within the classroom (Bryan and Gast 2000). I began to see that the students relied on visuals to help them feel less anxious, more prepared, increasingly motivated, and more engaged in all classroom experiences.

Before this professional experience in a school, I did not know how important certain factors were to children with special needs. I can see now that having a routine helps with levels of anxiety and unease, giving individuals the chance to get through their day without the level of stress they might feel without those prompts. As someone who has struggled with a high level of anxiety throughout my adult life, I can relate to and appreciate the importance of feeling in control of daily routine, even if that just means sticking images of tasks onto a personalised folder.

Over the several weeks, I observed the class, I learned that these children, who all have disabilities, rely heavily on routine and preparation. As a part of this, I have recognised two main factors that influence students' attitudes and engagement: visual-based behaviour and emotion charts, and detailed visual displays of classroom routines.

Observing the use of these methods in the classroom, I could see that the children felt at ease and comfortable in their environment. I was able to develop my own appreciation of visual cues and prompts to help with communication between teacher and student.

Numerous times during the observation period, I was able to see how the students interacted with the teacher when they were upset. What I found especially interesting and completely new to me was that some of them did not have the words to express

their feelings or emotions in times of struggle. In order to create an opportunity for these children to express themselves, their teacher had created an emotions chart that used images and words for a range of diverse emotions.

This chart would be given to the student during a moment when they felt over-whelmed or unable to say how they felt and they would be able to move the arrow to the emotion they felt. What I found most interesting about this visual chart was how well it worked. It was incredible the change it made for the children who had been crying or refusing to do work. Suddenly, once they were able to tell someone how they felt or, at the very least, point to a picture that expressed how they were feeling, it was clear they felt relief. They could then move on with what they were doing because someone else knew what was going on.

Moments such as seeing children use the emotions chart created experiences for me that made me realise that, although the children I was observing have disabilities, their additional needs make sense. I realised that having someone understand how you are feeling when you have trouble expressing yourself is something everyone can appreciate and that feeling safe and prepared for the day ahead is something that everyone needs (McLeod 2015). This completely changed my view, not only of the power of visual prompts but also of children's special needs.

I feel strongly about bettering myself and learning new things, so investigating how to help children with special needs feel more comfortable in their environment has been very important to me. I have been exposed to new opportunities and have been lucky enough to develop some incredible relationships through my learning journey. However, most of all, I have seen things through a new perspective, gaining an appreciation and a little more insight into how these children live.

Of This Much I Am Sure

The visual prompts used on a daily basis were drawn from the TEACCH program. TEACCH stands for teaching, expanding, appreciating, collaborating, cooperating, and holistic (University of North Carolina 2016). The TEACCH program was devel-oped by the University of North Carolina and includes services, training programs, and research, to enhance the quality of life for individuals with ASD and for their families. Implementing the TEACCH method includes incorporating visual and writ-ten information to support or supplement verbal communication, as well as struc-tured support for social communication. The TEACCH method is not a syllabus, but instead is a framework to support the achievement of educational, social, and emotional goals (TEACCH 2018). This framework includes physical organisation, individualised schedules, work (activity) systems, and visual structure of materials in tasks and activities (TEACCH 2018).

The goal of the TEACCH program is to promote meaningful engagement in activities, flexibility, independence, and self-efficacy (University of North Carolina 2016). I have seen this in action in the classroom and, in my opinion, this program really works. It truly makes a difference to the children it is implemented for.

There is evidence that visual stimuli and prompts can be helpful for learning for children with disabilities and also (and more in line with my own research) with their emotional stability. Hodgdon (2011), in her book about improving communication, explains that visual tools can help students express themselves better and also enhance their understanding. I found that, during the research process, there were many instances where the children were able to express themselves better because of the visual aids they were provided with. I also saw many times that students were able to understand a topic or idea better once a visual prompt was introduced to the learning activity.

This research venture has definitely opened my eyes to how visuals within the classroom can really make a difference to students' lives. As with every part of learning, each child will react to visual prompts and stimuli in different ways but, as a whole, there are many benefits to these kinds of tools.

Conclusion

During my journey, I found out a number of things: I love working with special needs children, I always have more to learn, and we all think and feel in similar ways, but some people just need a little extra help (TEACCH 2018). How do visual stimuli and prompts influence special needs children in the classroom? To answer this in one sentence, I would say "in every single way". The children use visual prompts for everything they do during their day at school. There are pictures and name tags displayed for them to remember where to put their bags as they arrive at school, they each have a daily schedule using images of activities to refer to throughout the day, and they all find it easier to go home at the end of the day once their charts are completed.

There is so much more to the purpose of visual stimulation in a classroom setting that I ever could have imagined. Curriculum learning set aside, the focus children within the classroom are happier, more confident and more able to achieve what is required of them each day because of a variety of pictures, images, words, and colours that they refer to constantly.

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Chapter 8
The Bigger Picture: Authentic Assessment and Visual Literacy: Applying a Nordic Approach to an Australian Context

Alison Penelope Bosnakis

Abstract   Having experienced Nordic educational practices, I wanted to investigate if the development of visual literacy skills via adopting Nordic authentic modes of assessment could be applied within an Australian educational setting to improve achievement and engagement in middle school years students arts education whilst connecting visual arts with other areas of the curriculum. Pre- and post-tests of a student following the interventions of authentic assessment indicated that students' visual literacy skills improved. Students highlighted that they felt the use of authentic assessment was a valid approach as it allowed them to engage in deeper and more productive learning. Staff from the visual arts and English faculty also commented that student skills obtained through participating in the intervention further develop student's ability to deconstruct visual texts and develop critical thinking skills in other curriculum fields, such as film studies.

Journal entry, 15 July 2016, Adelaide, South Australia:

> It was a sunny Saturday morning when I had taken my three-year-old nephew out to the zoo for the first time. It was an activity-packed morning, and as I began to feel the fatigue from chasing after a toddler, I knew it was time to stop, rest and re-fuel. We drove past the "golden arches" where without hesitation my three-year-old nephew pointed to the iconic red and yellow sign with such intensity and anticipation that without further discussion our lunch destination was chosen. My three-year-old nephew, a young child who has not yet developed basic literacy skills to read or string together a coherent sentence, could identify the symbolic reference of a fast food chain. Sure, of course, marketing plays a big role in imprinting images in our memories and connecting to positive connotations through colour, music, and repetition. However, if a three-year-old can "read" a symbol with minimal text through the means of looking and identifying the object in its context by its colour, shape, typeface, and connection to the landscape, this demonstrates how from a very early age we are able to construct meaning by seeing, describing, analysing, and interpreting.

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Introduction

I grew up in Adelaide, South Australia, in a household with a mother, father and two older brothers. Both of my parents were born in Macedonia, and I was raised in a manner that respected my cultural heritage. I remember from an early age, learning to speak in Macedonian and to perform culturally significant folk dances. During my early school days, my father would often speak about how different his educational experiences were in Macedonia compared to my schooling. My father taught me to never take for granted the education I was receiving.

Since growing up, I have had the opportunity to travel to many parts of the globe. In my travels, I have always taken an interest in the school systems in various parts of the world. I have been amazed by the enthusiasm students have for education in developing countries, such as Peru. However, it was a recent trip to Sweden and Norway which sparked my interest in their education system.

Who Did I Think I Was?

From an early age, I always had a keen interest in visual arts. I still clearly remember the day when I first visited the Jam Factory in Adelaide. A contemporary craft and design facility are representing independent artists/designers specialising in glass blowing, jewellery, ceramics, textiles and furniture. I was nine years old, and I didn't want that school excursion to end. Completely engrossed watching the making process of artists in their element, I felt I could identify with their passion and dedication to their medium. With English as a second language for me, I felt I could express my ideas, thoughts and feelings best through visual communication rather than verbal.

However, as I progressed through secondary school, it took me a considerable amount of time to understand the literacy demands of visual arts, although there came a time in high school when I began to learn to "read" artworks and construct knowledge from them through critical reflection. I began exploring the study of semiotics and discovered how these signs, images and texts play an important role in shaping our cultural identity and understanding. Artworks and other forms of visual information, such as advertisements, graphics and illustrations, have a purpose, underlying messages and meanings conveyed through visual imagery. Throughout my tertiary education, I have developed an understanding of how every colour, every symbol, every piece of text and different textures within an artwork all construct many layers of significant connotation.

From my experience teaching in a range of educational settings, it has become more apparent that students of today live in a digital age composed of visual images. Therefore, visual literacy is becoming increasingly important to allow students to make sense of the world (Freeman 1997). The most important conclusion from critically analysing visual imagery is a change in viewer perceptions, to "think" in different modes and express a much wider range of ideas and feelings through

multiple literacies. Working in Norway sparked my interest in focusing my research on visual literacy and authentic assessment by applying a Nordic approach to an Australian context.

Who Do I Think I Am?

Students I had the pleasure to work with in Norway presented critical thinking skills from an early age. They exercised visual literacy skills in cross-curriculum courses. They challenged knowledge and sparked my interest in researching the themes of visual literacy and authentic assessment in an Australian context.

One particular experience with a Norwegian student I will never forget underlined the high level of visual literacy skills developed and embraced in a Nordic educational system. We visited an art gallery for a class field trip in which students were encouraged to "read" the artwork they viewed in front of them. I found myself captivated by a piece of work from one of my favourite surrealist artists, Rene Magritte, who painted witty, thought-provoking images. In front of me was one of his famous pieces, a 1929 oil on canvas painting of a pipe which reads *Ceci n'est pas une pipe*, which translated means "This is not a pipe".

I asked a student: "What does this mean to you, how do you interpret this piece?" The student initially seemed confused by the image and suggested perhaps it was just an abstract. However, he was not satisfied with that response and knew there must have been some deeper meaning to this. So, he took a deep breath and looked. He proceeded to take notes of his observations and began to "see" by describing the composition, scale, colour and texture. From there he questioned and analysed his observations in order to interpret and construct meaning. Gauging his intrigue, I followed up with: "So if this is not a pipe, what is it?" The student turned to me and brilliantly responded: "It cannot be a pipe. You cannot hold it, pick it up, smoke it. This is merely a representation of a pipe."

This was a monumental experience for me. Not just because I was incredibly proud of such a considered and well-articulated response, but the process this student took by applying his critical thinking skills to reach a conclusion. Working with students from different cultures also challenged and broadened my understand of visual communications. Constructing meaning from images can connote very different meanings depending on an individual's cultural context, personal experiences and differences in educational systems.

I also found from my experience working offshore that visual communication is a significant universal language. Particularly evident at times where language barriers were challenging, communication was successfully engaged through the use of imagery, maps, signs, gestures and body language. It has never been clearer to me just how powerful visual language is.

Of This Much I Am Sure

My investigation focused on the themes of visual literacy and authentic assessment. Specifically, it focused on the necessity to develop visual literacy skills and adopting authentic modes of assessment in arts education. Today our education system focuses on textual literacy (digits and letters) and computer literacy but neglects sensory literacy as a core curriculum (Kennedy 2015). The aim of this investigation was to apply Nordic approaches in an Australian context and to evaluate the effectiveness of these approaches to improving student achievement and engagement in middle school years in Australia. This emphasised the significance of visual literacies as a means of connecting visual arts with other areas of the curriculum.

Visual literacy refers to the use of visuals for the purpose of communication; this includes thinking, learning, constructing meaning, creative expression and aesthetic enjoyment. A visual which is visible may include man-made objects, natural objects, pictorial representations, graphic representations, symbols and non-verbal symbols (Tillmann 2012). According to Lindström (2011), the Norwegian national curriculum emphasises the necessity to develop visual literacy in arts education.

Authentic assessment includes students receiving ongoing feedback from teachers and peers (Snepvangers 2001). Through authentic assessment, students are encouraged to take responsibility for their own learning. They are also encouraged to engage in discussions, critique, self-reflection and peer assessment to improve achievement (Ramsey 2011).

To investigate the Nordic development of visual literacy, I implemented an authentic assessment mode. For example, students were assessed with a process-folio in which research and experimentation, investigations and explanation, preliminary sketches, notes and diagrams and annotations demonstrating an evolution of a working idea were assessed in addition to the resolved artwork. Furthermore, to help students develop visual literacy skills, I completed a series of carefully designed learning activities, including ones designed to build a capacity to understand, apply, analyse, evaluate and create visual material (Palmer and Matthews 2015). This included "reading" the book *The Arrival* by Tan (2006), which uses only illustrations to create narrative and meaning. From this, students were asked to use their visual literacy skills in analysing the artwork and present their interpretation of the narrative.

The effects following these interventions were measured using a non-graded pre-/post-unit test where students were asked to look at two different, but stylistically similar paintings and write a response to the following two questions: "What do you see and what do you think it means?" Student responses were coded as either basic, satisfactory or advanced. At the conclusion of the units, students were interviewed in regard to their perspectives on authentic modes of assessment and the visual literacy components of the unit.

Whilst I was working with relatively small sample size, I can conclude that following the interventions, students' visual literacy skills improved. This was demonstrated by the fact that students made more advanced observations in the image response and offered more supporting evidence for their claims. This was

highlighted by the number of students who improved their rating to either satisfactory or advanced. In discussion with the class after the intervention, students revealed that at first, artworks seemed daunting and inaccessible. However, as they participated in a group discussion, critiques, ideas sharing and clarification of thinking, they found deconstructing the image was possible in revealing meaning and narrative. One student stated that they felt as if "We deconstructed that artwork until no brushstroke went unaccounted for".

Regarding authentic assessment, following the intervention students acknowledged authentic assessment as a valid approach. Students stated they favoured this approach as it motivated them to engage in deeper and more productive learning. Students indicated they felt more engaged as they were receiving regular feedback on their progress. Students also stated they were about to further develop their ideas as they had time to plan, develop, change or refine their ideas. Pleasingly, most students acknowledged they were proud of their artwork and felt they had completed a more sophisticated piece by allowing more time for planning.

Furthermore, some students felt as if they were actively conveying a message through their work rather than just "drawing a pretty picture". Finally, students appreciated the opportunity to actively engage in peer assessment through critique sessions developing critical thinking skills. Although at first students were hesitant to allow their work to be critiqued, most were able to see how it further enhanced their resolved piece.

I spoke with staff from the visual arts and English faculty after the study to understand any lasting effects from the study. They commented that the skills obtained through participating in the project further developed student's ability to deconstruct visual texts and develop critical thinking skills in other curriculum fields, such as film studies. Additionally, the visual arts staff noticed in the unit's post-intervention, students were more engaged and willing to take risks in their work, even at times going to "extraordinary lengths" to try and convey meaning through their artwork. Applying studio thinking by encouraging group discussions peer assessment and critique sessions also created a more inclusive environment engaging students of all skill sets and abilities.

In particular, the most rewarding feedback I received from the staff was the noticeable improvement in one English-as-a-second-language student. The student reported feeling more confident in expressing their vision and ideas and felt included and "part of a community". Coming from a different cultural upbringing myself and experiencing a sense of exclusion at times in school, this story was particularly close to my heart and an unexpected pleasing outcome.

Of this much I am sure: Everything we see is an image. We see millions of images a day without really noticing: graphics, pictures and colours through visual culture, visual studies and visual communications. Visual graphics are more important than ever in re-integrating our capacity and senses in understanding visual literacies because we live it a digital age. However, it's not until we connect our sight with cognition and memory that we understand or even remember what we see or what these images represent. This is the epitome of visual literacy, constructing meaning from images. It's a universal language that is multi-modal and multi-disciplinary.

Conclusion

I have found that using authentic modes of assessment and specifically teaching visual literacy skills have made a positive effect in educational outcomes. Whilst I noticed an improvement in students thinking, it is equally as important that students reported increased engagement and productivity in their work through this study. Finally, it was pleasing to note the opinions of teachers in other curriculum areas reporting improvement cross-curriculum. It is my hope these students continue to be risk-takers in their artwork and broad educational experiences.

By embracing the Nordic approach to visual literacy across the curriculum, students and educators will have a greater ability to understand and construct the meaning of what we see every day. It will give us something to enhance our communication across the entire world with this truly universal language. "Art provokes people to think. Art provokes change" (Heller 2002).

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Chapter 9
Mathematics Homework

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Abstract I did not think very highly of homework in my primary and middle years and did not feel it very beneficial to my learning—in fact, it turned me off school. In my senior years, I developed my own pattern of study and admitted that homework in the senior years had benefit. Now as a pre-service teacher I approached my placements with the belief that homework was important, especially in the senior years, but the reality of my placements led me to question the benefits of mathematics homework in particular for my students. My practicum experiences led me to a belief that with mixed-ability classes, one size does not fit all, and as with in-class teaching, the homework also needed to be differentiated to meet the needs of the students and to keep them engaged. I conclude that I am not an advocate of homework for the sake of homework, but if well designed, homework can be a useful support for classroom learning.

Placement journal, October 2016, Alice Springs, Northern Territory:

> I was marking a set of mathematics homework given by another teacher to a group of Year 11 students. The students were given around 20 of the same type of question to complete. About half of the class got nearly every question right, and about half the class either did not attempt or got most of them wrong. It did not take me long to work out who understood the concepts and who did not. For the students who did understand, I thought the homework must have been incredibly boring; for the students who did not understand or attempt the work, I though the homework probably had little benefit. This caused me to think more about the kinds of homework I would give as a teacher. I considered what benefit different kinds of homework might have and how to help students see the benefit of homework in senior school particularly.

Placement journal, May 2017, Alice Springs, Northern Territory:

> For my second practicum, I was placed in a middle school which did not give any homework, teaching two Year 9 classes during the final weeks of Semester 1. For the two weeks I was teaching the classes, the teacher asked me simply to ensure that all the students were up to a Year 8 level in linear algebra, so that she could begin teaching the Year 9 content in Semester 2. There were a handful of students in both classes who were capable of being extended

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beyond a Year 9 level, while the majority of students in both classes would really benefit from the revision. For the students who needed the revision, the only thing that made sense to me was to give them lots of the same similar questions. I thought that they would find this boring but instead found that they would happily do the work, and ask for more similar questions rather than wanting to be extended. The students at a Year 9 level and above, however, thrived when I gave them extension questions and kept asking for more work of this kind.

Introduction

I went to a primary school that did not give homework, and when I started high school, I did not think very highly of homework. In fact, given the opportunity to write an essay on a topic of my choice in Year 7, I wrote an essay on homework, containing paragraphs such as these:

> Homework is just another reason I hate school and misbehave. I mean I like high school, I like [name of school], but I hate homework, and it makes me hate school more, and I am sure other kids feel the same way, which will make them more likely to misbehave. If they do misbehave or they do not hand in their homework, they will get detentions which will make them hate school more and get more detentions, and all schools will be bad places, while all they had to do was stop giving us homework.

In Years 7–9, my strongest memory of homework was being given 30-plus "kill and drill" mathematics questions after each lesson on the concepts we had covered in class. During these years, I did not find mathematics challenging, I usually understood concepts in class, and didn't understand why I would get an E grade for my bookwork or even a detention simply because I did not prove my understanding by doing 30 plus questions every night in what I considered to be my spare time.

In Years 10–12, I developed my own patterns of homework and study, revising the day's learning each evening by developing mind-maps, comparing the day's learning to the state's curriculum rubric, and practicing exam questions, which were often extensions of what I had already learned in class. I excelled in mathematics and science particularly using these study tools, which I continued to use into my undergraduate degree. I came to see the power of regular revision for embedding learning in the long-term memory (Buzan and Buzan 2010, pp. 9–11). I suppose that from Year 10 onwards, I considered homework to be useful.

Who Did I Think I Was

Upon beginning my teacher training, I thought that I was an advocate of homework as a tool for revising the day's learning and solidifying it in the memory. I thought that I had matured from my Year 7 views, now believing that the high school years are times to prepare for adulthood in which there are many demands on our "free time".

However, when as a pre-service teacher I came to my first experience of marking a set of homework questions from Year 11 students in which they answered repetitive questions, I found my attitude was different. I was bored myself by the repetition and felt frustrated and bored on behalf of the students who clearly understood the concept. It seemed that after marking 5 or 6 questions, I had a good idea of whether the student understood the concept or not. The following 15 questions were tiresome to mark and must have been particularly tiresome for top students to complete. I found myself thinking back to that essay that I wrote in Year 7 and digging it up to gain some potential insight into the minds of these students.

Who Am I

My second placement was at a school which did not give homework. I, therefore, chose to investigate how students responded to different types of mathematics work in class. I had two Year 9 classes and I gave them three types of work adapted from Kaur (2011): (1) simple repetitive questions to revise content they were learning at the time, (2) extension/enrichment work which linked their learning to experiences they might have outside of school, and (3) questions that revise topics from previous years to prepare for the next topic. The unit the students were just completing was statistics, which was the focus of the first two sets of homework, and the unit they were about to begin was linear algebra, and this was the topic of the final set of work. I then handed out a list of questions to the students on how they found the work, and the results were very interesting.

The work that I gave to the students was pitched at the majority of students, and so was not too difficult. More capable students who gave comments on the different types of homework therefore commented that all the work was too easy and they wanted it more challenging, particularly when it came to the repetitive questions.

There were, however, also a number of students who responded positively to the repetitive questions. There were three students who commented that the work was "good" or "okay". As I walked around the room observing students doing this work, it was evident that these kinds of questions were very helpful for students still getting their head around the topic.

The extension/enrichment task was the work with the most mixed results. This task involved using their understanding of statistics to interpret data in sports games, dietary guidelines, etc. Comments ranged from "It was fun" to "Other questions just have numbers, this has words. This is a big difference". A number of students commented that they could have done it if a teacher had taught them how. It was evident through this feedback that jumping to more "fun", seemingly more interesting/relevant topics may be a challenge for students who are still becoming familiar with the maths required to answer the questions.

The final piece of work was a relatively simple set of revision questions from previous years learning to prepare for the next topic. The majority of students said that this task was useful for remembering work that they had done in the past. As

a teacher, I certainly found this "homework" useful for ascertaining how much the students had recalled from the past. While many students said the work was easy and helpful, the work of some students indicated that they needed revision.

Many of the students needed help with the first two tasks, even though they were just finishing a unit on this topic, and many said that they would have not been able to do it at home. There were posters around the room showing how to calculate the median, maximum, minimum, and range, which many of the students referred to, indicating that they would have needed some assistance in order to handle the work at home. Many of the students commented that they were able to do the extension homework when it was explained to them by a teacher and an example was given. Some students in the class were Indigenous Australian, and so the principle of giving examples for everything aligns with the Aboriginal pedagogy deconstruct/reconstruct principle of "watch then do" (Yunkaporta and Kirby 2011).

For the final tasks, I did give examples because it required them to revise the work they had done in the previous year. Many students responded positively to this.

A differentiated classroom offers a variety of learning options designed to meet the needs of learners at different readiness levels, interests, and learning profiles (Tomlinson 1995, p. 2). The tasks that I gave the students over the first week of my practicum were designed to reach students with different:

- interests (the work included solar energy, basketball, AFL, mobile phone plans, diets),
- readiness levels (re-introducing the whole Year 8 topic to the class, while allowing some students to start on Year 9 work), and
- learning profiles [giving many examples for Aboriginal students who prefer to "watch then do" (Yunkaporta and Kirby 2011)].

On the whole, I think differentiating the classroom in this way was very successful, and if I were giving homework to the class, I would differentiate it in a similar way.

Watching the responses of students to work and reading through the feedback, I very quickly realised that the groups of vastly varied ability throughout the class needed different kinds of work to stay engaged. I realised that the investigation I thought was about homework, was really an investigation on differentiation in mathematics work for a mixed-ability classroom—regarding work students do both in the classroom and out.

Of This Much I Am Sure

My investigation in two Year 9 classrooms during my second practicum has pointed to the need for tasks of differing difficulty for different students, which is likely to apply to work students complete both inside the classroom and at home for homework. I observed students who benefitted when I gave a number of examples that they copied, and then completed a set of up to nine very similar questions. I also observed students

who thrived on a challenge and did not require any instruction when given a new kind of task. Indeed, these are the principles of a differentiated classroom (Tomlinson 1995, p. 2).

I also investigated the benefits of three different types of homework (Kaur 2011). Of this much I am sure, the results suggest that different students will benefit from different types of homework at different times and so differentiating for the different students in the classroom is important for keeping students engaged in mathematics.

Conclusion

During my work as a pre-service teacher, I have realised that I am not an advocate of homework for the sake of homework and that I do not think that all kinds of homework are useful for all students in all situations. I am a pre-service teacher who wants to give homework that will have the greatest benefit to student learning, and which will not make students hate school in the way that an 11-year-old Mikaila thought homework did.

I realise that some students seem to like repetitious questions, to help them feel confident in their abilities, while I believe others get bored and disengage from mathematics if all the questions are simple and similar. I, therefore, embarked on this journey to find out how different kinds of homework benefit different students.

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Part III
Engaging Students as Learners

Chapter 10
Reflections on Engaging Students as Learners

Paul Black

Abstract A central concern of teaching is creating situations which will engage students, motivating them to learn. My own teaching background has largely been in adult and higher education, where this tends to have the fewest problems, since at least the students have made their own choices to undertake their studies, but this does not mean that their teachers should not help them find good reasons to happily engage in these studies. The five student chapters in this section focus on the more difficult task of engaging students in compulsory schooling, looking at the relative advantages of intrinsic and extrinsic motivation, the importance of positive teacher–student relationships, the pros and cons of allowing music in classes, and ways of promoting student engagement in language learning.

The old saw says, "You can lead a horse to water, but you can't make him drink." Similarly, you may be able to force kids to attend school, but there's no way you can really force them to imbibe the intended learnings there. (I don't think that even thumbscrews would work.) The best you can do is to create situations that encourage them to want to learn. Arguably this is what teaching is all about, since even the way content is presented to students can encourage or discourage learning.

There is thus a vast literature on getting and keeping students engaged, focused, motivated, or on task, various expressions used to talk about much the same thing. Since this is such a key aspect of teaching, it is actually dealt with in a number of chapters in the present volume, whether more obviously or indirectly. Some of the more obvious contributions in other sections include Linda Hamilton's paper in the preceding section (Chap. 5) and Laura Checkley's paper in the following one (Chap. 21). The present section includes five student contributions on this issue, but before introducing them perhaps I should make my own background and views on the matter clear.

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Where I Am Coming From

My lifetime experiences have led me to believe that the extent to which engaging or motivating learners is likely to become an issue depends firstly on just why the learners are undertaking their study. The pre-service teachers that have contributed to this volume have a particularly difficult task because their students did not themselves choose to undertake their schooling, but rather they are there because it is required by law and often also their own parents.

Even before I ever taught anything myself, thanks to a teacher wife I became familiar with early books by Holt (1964, 1967), who took the position that children have a natural curiosity that drives them to learn, but that compulsory education tends to destroy this as it dictates just what things are supposed to be learned in just what ways. The work of Holt and others fostered a movement toward "deschooling society," which took the position that "Universal education through schooling is [simply] not feasible" (Illich 1971, p. xix).

While I'm not sure I would take the same position, certainly I remain convinced that compulsory education is problematic because children will vary in the extent to which they can be induced to be interested in what adult authorities believe they should be learning. As a specialist in language education, I've seen the same problem with the notion of "scaffolding," which has been justified in terms of how caregivers help children accomplish things they want to do, and yet in educational settings has been more concerned with getting the kids to accomplish things that their teachers want them to do (Searle 1984).

What to do instead? The extreme option on the other end was pointed out to me some years later by a friend who was a specialist in adult education, Kevin Diflo (personal communication). Citing Knowles (e.g., 1984), Kevin noted that when adults wanted to learn about something, or learn to do something, ideally they would be able to undertake study on it just to the point where they felt they had learned what they wanted to, with no need of any sort of award or certification, since the knowledge itself was what they desired.

This reminds me of an educational movement I was aware of while living in New Haven, in the eastern USA, in about 1970. Across the street from Yale University was a storefront in which people advertised free courses that they would like to take or teach: It was just a matter of putting those interested in the learning in touch with those who were happy to teach them. I'm not sure how well that particular venture actually worked, but in more recent years my current wife and I have written about the advantages of nonaward programs, that learners can use to whatever extent they see fit (Chen and Black 2014).

In view of what my friend Kevin told me, it could perhaps seem that teachers in such nonaward programs need not worry about engaging their students at all; their students will take what they want from the teaching. In practice, however, the latter might only apply to disciples who cling to some particular guru because he or she has something so special to offer them that they would pursue him or her to a mountain top to take in any droplets of knowledge, regardless of how the guru might treat them.

Otherwise, even in situations where learners are seeking instruction for its own sake, they will naturally be attracted to those teachers that are best prepared to help them learn, especially in enjoyable and insightful ways, and thus to that extent, those teachers had still best know something about how to engage students in learning.

In my own teaching career, I have largely been fortunate in being able to avoid compulsory education. The closest I came to it was in 1972–73, when I taught English to secondary school students in the private Commercial School in Addis Ababa, in Ethiopia. The parents of these students chose to place the students in this school, but that may not have meant that the students themselves were actually happy to be there.

At this time, by the way, I certainly could not claim to be a reflective teacher. I was then a linguist with no qualifications in education at all, and while I hoped the students were learning, I basically followed a set curriculum and textbooks as best I could. Where I learned to reflect on my teaching, and what I might mean by that, was under rather unusual circumstances, which makes me believe that there must be a variety of paths to becoming sensitive to the things one does as a teacher and how they affect one's students. As a linguist, I was employed from 1981 to 1989 in an innovative program designed to educate Indigenous literacy workers and translators and interpreters (see Black and Breen 2001). This involved helping Indigenous adults who had rarely gone beyond primary schooling to learn to write and compose in their first languages and master basic linguistic understandings relevant to their work.

This was not a program that normal teacher education programs can prepare anyone to teach, and in fact staff tended to feel that having a teaching qualification could be more of a hindrance than a help. Instead, I needed to pay close attention to what I was doing to make sure I was making literacy and linguistic principles accessible to these students and that they were actually learning. My colleagues and I had to develop approaches for such things as teaching students how to write well in languages that we ourselves did not control, which led us naturally into student-centered approaches with peer support. I also had to reflect on the many surprises I encountered, such as when I told my students that a suffix came at the end of a word, and they asked me, "Which end?" They were used to thinking of things like sticks as having two ends, unlike mainstream students who had come to think of words as having beginnings and ends.

In this program, all of my students had at least made their own decision to undertake their studies, but of course this did not mean that they would automatically find their classes motivating: I still had to concern myself with issues of how best to engage students. I also developed the notion that my job was to ensure that all my students would master the learnings required to pass their courses as long as they cared to. I tried to keep assessment formative as long as I could, rather than using it to simply divide students into those who passed and those who failed.

However effectively I could apply these beliefs, I carried them with me when I subsequently moved on to university teaching, for which in 1997 I finally obtained something of a teaching qualification, namely a Graduate Certificate in Tertiary Teaching. In general, my solution for engaging students was to attempt to make the desired learnings as accessible and enjoyable as I could, hopefully tapping their

natural curiosity. At the same time, I gained an appreciation of how difficult this can be; indeed, one of my research students later found that exactly the same activity can be motivating in one set of circumstances and less so in another (Kawano 2008, pp. 95–96).

I thus had little experience in trying to teach students who had no interest at all in the study they were subjected to, as one may often find in primary and secondary schools, and I wonder how I would be able to proceed under such a circumstance. In the present section, McNeilly's and Ifould's chapters suggest that building positive personal relationships could be helpful, and this reminds me of how building such relationships helped Kohl (1967) transform a difficult Year 6 class in a depressed area of New York City. However, I can't say I myself am particularly good with developing personal relationships in a classroom context.

Student Contributions on Engaging Students in Learning

In the present section, **Brodie Curtis** is concerned with the issue of whether intrinsic or extrinsic motivation is more effective for promoting learning. I think he takes a nicely balanced approach, which does not exclude a role for extrinsic motivation even though he himself recalls "being most motivated when the learning was on a topic of interest to me." This is certainly also how I feel from my own personal experiences, and I also especially appreciate his belief that "the ultimate goal is for students to be self-motivated to become life-long, autonomous learners who are intrinsically motivated to achieve."

Thinking about this further, I'm sure I've achieved that goal myself, and yet I can still see an occasional role for extrinsic motivation in my own learning. Sometimes that may involve a tiresome and repetitive task that is not particularly interesting in itself, but which is needed to make progress, such as working through dozens of Web sites to locate useful information and references. In such a case, I may want to sustain myself by taking a break for coffee or whatever as a reward for reaching particular stages in the process.

At the same time, while both intrinsic and extrinsic motivation may play a role in learning, according to Ramsden (1992, p. 66) they promote different types of learning. He stressed the importance of extrinsic motivation for "deep" learning, a thorough understanding of key concepts, while a failure to perceive relevance may at best result in "surface" (or superficial) learning.

Leah McNeilly's chapter on "The Role of Positive Teacher-Student Relationships" is in part based on her own experience. Having been encouraged to start with by taking a "tough teacher" stance with her classes, she found this didn't work very well in her placement with a Year 11 business studies class. She did much better as she allowed herself to show her friendly side by chatting with students and treating them in ways that showed care and respect for them as people. Their challenging behaviors then lessened and they became more engaged in the lessons.

Leah also tells how another beginning teacher was having difficulty with one particularly troublesome student, but began to do much better after he made a conscious effort to improve his interactions with him. This ranged from simply saying hello to him in the school yard and asking him how his weekend was to getting to know about the activities he liked and disliked, which this teacher then used to better tailor tasks to suit this student's needs.

This paper drove me into looking into the literature on teacher–student relationships. One thing I found was a widely quoted axiom that "Students [or people or clients etc.] don't care how much you know until they know how much you care," a quote that in slightly different wording is often attributed US President Theodore Roosevelt and subsequently the American author John C. Maxwell (e.g., Andrew 2015). While Ford (2017) goes so far as to maintain that "Student–teacher relationships are everything," I myself wouldn't go so far as to say "everything"—I think that a teacher must also have the ability to expose their students to useful learnings in useful ways.

This also reminds me of the stress that authorities like Harris (1980) and Christie (1985) placed on the importance of student–teacher relationships in Indigenous education. I was bothered by this at the time, not because I thought it was untrue, but rather because I believed it was important for non-Indigenous students as well. Perhaps it's a matter of degree?

Kirsten Ifould's chapter is similarly concerned with the importance of meaningful relationships in connection with music education, if with some differences. She moved from believing that it was generally beneficial to include music programs in schools to a realization that it depended heavily on the teachers. While her son had suffered two highly negative music teachers, who "spent a lot of time yelling," expecting "students of all ages to perform like veteran musicians," she found herself awestruck by a music program at a particular primary school that managed to happily meld about fifty students into a quality band with minimal direction. Kirsten attributed this to how the teacher worked closely with the students as fellow musicians, rather than as mere students over whom he has authority.

The chapter by **Caitlin Taylor** also relates to music, but in a different way, by exploring the question of whether students listening to music in class interfere with their ability to be mindful learners. While Caitlin doesn't actually explain what she means by that, I suppose she is thinking of such work as that of Langer, who defined mindfulness as "a flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context," rather than acting "like automatons … according to the sense our behavior made in the past, rather than the present" (Langer 2000, p. 220; see also Langer 2016).

In any case, Caitlin initially had no reservations about students listening to personal music devices during her classes, but she had second thoughts when she found this interfering with their creativity, efficiency, and especially their ability to communicate with peers and teachers. While appreciating how listening to music can help students block out "white noise" and thus concentrate better, she ends up suggesting that schools should have guidelines for when this is and is not appropriate.

To me this seems a healthy and useful reaction against a tendency for classrooms to having rigid "all or nothing" rules, rather than ones that can vary with the situation. Certainly, there are places for music in the classroom. As a child I grew up in the early days of television, and I found that leaving the television on while I was studying helped me focus, even though I paid no attention to it. As an adult educator, I also learned how music can play useful roles in the classroom, such as the use of baroque music (and yoga breathing) for both relaxation and to support language learning in Suggestopedia approach of Georgi Lozanov; I especially appreciated Stevick's (1980) account of this approach. At the same time, certain music and other sounds can detract from people hearing what each other are saying, and that can also be important in the classroom.

Zerina Hadziabdic's chapter on language learning is close to my heart, since the learning and teaching of languages has always been of great interest to me. Like her I too am often "disheartened to learn that the traditional language learning instruction is still implemented in the twenty first century," and I'm not surprised if students find this off putting. I heartily agree with her suggestion that "language learners are social beings who acquire language in social contexts."

One of the things that Zerina is particularly concerned with is helping students see reasons for studying languages. I myself think this is vital for any sort of study: If students can't see a reason for it, why would they want to pursue it? This is also in accord with how Ramsden (1992, p. 66) maintained that a failure to perceive relevance at best results in "surface" learning. However, I don't think that means the reasons for study must be instrumental: I think many students are like me in being fascinated by the odd workings of other languages, which ultimately add up to alternative universes of reality. In such cases, the trick is not to kill such interest with lessons that are pure drudgery.

Zerina's other concern is with the use of technology in language learning. Because of my age (74 this year) this may have struck me differently from how younger people might see it. Perhaps more than in other subjects, technology has long played a major role in at least some language learning classes, with the use of language laboratories (for taped language lessons) being common even in the 1960s. Accordingly I don't see the mere use of technology as any sort of panacea; instead, its value depends on how appropriately and effectively it is used, a matter on which I've expressed some views (Black and Goebel 2001). My wife is quite a capable teacher of Chinese, I believe, and yet for her, technology is just one element that helps her create effective programs.

Conclusion

For me, reading these student chapters has been an interesting and rewarding experience. On the one hand, I find it interesting to see the students coming to grips with some of the same issues I faced at times in my own career. On the other, the papers by McNeilly and Ifould especially make me wonder if I might have done better in

building personal relationships with students in my classes. I seem to manage this reasonably well in one-to-one relationships, as when I supervise research students, but how to do this with students in an entire class, or at least those students who seem to be having the most difficulty in a class?

In recent years, my university classes were often online, and from periodic assessments I became aware of various students who were not doing well, and sometimes not keeping up with their work at all. Sometimes I did try to contact such students to find out what difficulties they were having, but I seldom seemed to be able to help them. I wonder if I could have done better. In any case, I hope you also find these student chapters as interesting and rewarding as I did.

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Chapter 11
Motivating Students to Learn: What Works? Intrinsic or Extrinsic Motivation?

Brodie Lee Curtis

Abstract This study's focus was to discover the effect of intrinsic and extrinsic motivation on students' learning as well as teachers' and students' preferences in motivation strategies used and the reason for using certain strategies. While observing, I encountered multiple examples of intrinsic motivation being supported by teachers, but also an overwhelming amount of extrinsic motivation being used to entice students to complete their work. I discussed different motivation strategies with various teachers and through surveys and interviews began to discover and analyse their motivation strategies, opinions, and thoughts. No student is the same, and it is a teacher's responsibility to distinguish what type of motivation will work best for a certain student during a particular time or setting. However, the ultimate goal should be to maximize a student's determination to become a self-motivated, autonomous learner.

Journal entry, 11 April 2017, Port Lincoln, South Australia:

> During today's lesson, I was sitting to the side of the class taking notes on different strategies being used and observing the teacher and her interactions with the students. I could see that the teacher was having a tough time with the students; they did not seem to be in the right frame of mind to be completing the work asked of them and just lacked motivation. That was until the teacher said, "Whoever finishes first gets a pick out of the rewards' box!" I have never seen a class suddenly go from being off the task to heads down, pencils writing as quick as they could. I thought to myself, "Wow! They are on task and working hard now!" However, then I questioned about why the students were now working. Was it because they wanted to better themselves by learning new things and expanding their knowledge, or did they just want a new toy? Students seemed to be rushing through their work now, and I wondered what knowledge was being retained and if they were missing key points of the learning.

During this reflection, I can remember thinking about my personal learning and how I motivated myself throughout my studies. During my schooling years, I vaguely remember receiving stickers in spelling lessons. However, this did not improve my spelling! I remember being most motivated when the learning was on a topic of

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interest to me; there was no place for stickers or other extrinsic rewards on these occasions. I like to think of myself as an intrinsic motivator, focusing on my goals and motivating myself through positive thought. During my post-secondary studies, I came to the conclusion that I use a mix of rewards such as allowing myself to play online games with my friends if I finished an assignment early or just utilizing the thought of completing my degree and following my dreams. This sparked questions like: Is there a better way to motivate myself? Is there a way my lecturers at the university could motivate me further? How will I motivate my future students? What is the best form of motivation for my students that will help them achieve their goals?

Introduction

I am currently in my fourth year of my Bachelor of Teaching degree studying externally with Charles Darwin University. I live with my girlfriend in my family home in South Australia, saving every cent until I finish my studies. I work in a local school in a classroom as a Student Support Officer helping students to increase their phonological awareness and instant recall of phonograms and multiplication tables. The main focus of this study was to investigate the different motivation styles, extrinsic and intrinsic, used by teachers of two different schools, and why they used them, as well as what students preferred.

Who Did I Think I Was?—My Previous View on Intrinsic and Extrinsic Motivation

I think I have always believed that extrinsic rewards such as stickers were effective forms of motivation for students. I believed this because it is the form of motivation used when I was a student in my primary school years. I can remember finishing work and obtaining a sticker, showing it to my friends, who then would praise me for my reward, but not my completed work. I think back to my high school years where there were no stickers, only grades. The form of motivation used in secondary school was an expectation by teachers to be autonomous and self-motivated if you wanted to pass. During my multiple practicums and time working in classrooms, I started to pay attention to how teachers motivate students to strive further with their learning. Each teacher I have encountered so far has used different types of motivation, and after these different encounters, I was left wondering what was the best type of motivation. Is there just one type? What do students prefer and why?

If I had to choose which type of students benefit from extrinsic motivation, I believed it would be students who are struggling to complete tasks or be self-motivated. I predicted that it was an easy way for teachers to focus students to complete tasks due to their lust for a quick reward. For intrinsic motivation, I believed

it suited learners who were capable and knew that they could achieve their goal. Teachers did not need to focus so much on the students who were finishing work by themselves. I thought that the capable student's ability to look forward into the future and realize where their goal would lead them would be the only motivation they would require. My experience at the "Play Is the Way" seminar with Wilson McCaskill (see Play Is the Way 2012) first introduced me to the terms intrinsic and extrinsic motivation and initiated my questioning and doubt towards extrinsic motivation.

Who Do I Think I Am?—Current View on Intrinsic and Extrinsic Motivation

Having completed my personal experiences in workshops, practicums, and the classroom, I now have a deeper understanding of the impact motivation has on students' learning and behaviour. I realize the importance of teachers being aware of what types of reward or feedback they are using to motivate students and why they are implementing the chosen strategy. My personal knowledge, beliefs, and views on intrinsic and extrinsic motivation have been heightened. It is now evident to me that both extrinsic and intrinsic motivation have their place. It is up to the teacher to identify when it is appropriate to use which strategy and how long to employ it. Each student is different and therefore will respond differently to certain types of motivation. As one teacher stated, "It depends on the student and what works for them".

However, the ultimate goal is for students to be self-motivated to become life-long, autonomous learners who are intrinsically motivated to achieve. When teachers use strategies to build intrinsic motivation, it teaches students that learning is about them. Covington (2000) believes that students are more likely to adopt richer work and study habits if they are intrinsically motivated. Students are more likely to notice and be proud of their own achievements, and as one teacher wrote, it "pushes them to excel for themselves, not for the teacher or the reward".

Of This Much I Am Sure

I had conversations with over ten teachers from two local primary schools relating to intrinsic and extrinsic motivation to gain their personal views on both forms of motivation and the experience and success they have had throughout their careers. Most teachers said that they did not use extrinsic rewards when acknowledging students learning or behaviour. One teacher even mentioned that "Life doesn't always provide extrinsic rewards. Self-motivation is the key to success when undertaking any endeavour". This reflects the fact that the majority of the teachers did not believe in

providing students with material rewards or extrinsic motivation for their behaviour and learning. Multiple teachers stated that when using material rewards, students' behaviour improves for a short time, followed soon after by a return to the original behavioural choice. It was also stated that when using material rewards, the students are trying to impress the teacher but limited learning is occurring.

Intrinsic reward is preferred by the majority of those surveyed, with one teacher stating that "Children become life-long learners and self-motivated to achieve more" if motivated intrinsically. Relevant, meaningful learning is the key to motivating students to be engaged. As another teacher stated, "If a student is interested in something, they will want to learn more about it and be motivated to continue learning for the sake of knowledge and understanding rather than just to pass or please the teacher". However, there was also a view by a couple of teachers that both intrinsic and extrinsic motivation can work together to achieve the same goal. One of them suggested that "A healthy balance of both intrinsic and extrinsic motivation can help create faster learning and appropriate behaviour", while the other one told me that "Extrinsic motivation often leads to intrinsic motivation".

I then talked with the principal of one of the schools where school policies were to use feedback to students in the form of questions and statements in order to motivate students to engage in learning and appropriate behaviour. The principal indicated that teachers will make statements such as, "I can see you have solved this problem using what we learned last lesson" or "The task was a challenging one, and you have given it a try—what could you try next?" or "The next challenge for you is this". Questions are also asked, such as "Can you tell me about your work?" or "What did you learn through this task?" or "What are you proud of?" or "What is your next challenge?" in order to help students to self-review and be motivated to continue. The school does not advocate material rewards for learning or behaviour, and so strategies such as star charts and stickers are not used. In relation to whether students respond to this type of practice rather than extrinsic rewards, the principal mentioned that if this is the common practice used throughout the school, students accept it and are motivated, especially if they know why this type of feedback is used. The focus is always on the learning in which the student is engaged and achieving.

Other than teachers and the principal, I have also had informative conversations with multiple students in regards to what reward/feedback they preferred to receive from their teachers. Although the majority of students stated that they preferred external rewards, it was obvious that students who had been taught the value of intrinsic motivation chose also to receive feedback and questioning about their learning. Students responded with, "I motivate myself by saying to myself, 'I am good at it'", "I feel good when I learn something new", and finally, "I think, Mum will get mad at me if I don't do this or learn this!"

Of this much, I am sure, that there are many different views on what form of motivation works best for students. Some teachers may believe one way while others may look in a different direction. My own opinion has now changed. I previously believed that forms of extrinsic motivation were a good way to motivate students to learn and reinforce appropriate behaviour, but I now feel as if I should avoid forms of extrinsic motivation and focus on how to intrinsically motivate my future

students. It is apparent that most teachers used intrinsic motivation over extrinsic. Most teachers believed extrinsic was for short-term motivation, and this is one of the reasons that has steered my own beliefs towards intrinsic motivation. Lemos and Verissimo (2014) stated that intrinsic and extrinsic motivation could coexist together without contradiction if used in the early years. Although I now favour the use of strategies that ignite intrinsic motivation, I understand that there may at times be a place for extrinsic rewards and that they can work in sync with intrinsic motivation strategies to achieve a similar goal.

Conclusion

In conclusion, I believe that the type of motivation used with students will affect their personal drive, how they view things in life and whether or not they will continue to achieve in the future. All teachers are different and use different strategies, but many teachers may not have examined and understood the importance of self-motivation strategies and the long-lasting effects that they have on students. In a classroom, there will always be students with diverse needs, and it is the teacher's responsibility to identify the motivation type that will suit each individual and use it effectively. However, I believe that it is important for all motivation strategies and plans to eventually lead to intrinsic motivation in order for students to become autonomous, life-long learners.

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Chapter 12
The Role of Positive Teacher–Student Relationships: How Can They Help Improve Engagement for Secondary School Students with Challenging Behaviours?

Leah Faye McNeilly

Abstract This paper looks at how a teacher can turn things around for disengaged, behaviourally challenging students through forming positive teacher–student relationships. Having followed common advice to first present myself to my class as a "tough teacher", I found that this worked in most of my classes, but not in a Year 11 business class in which a majority of students were boys. I came to realise that for students with challenging behaviours, sometimes the more you push, the more they push back. I began to allow myself to show my friendly side—chatting with students and engaging in banter and treating them in a way that showed I had care and respect for them. Once I began to build positive relationships with these students, their challenging behaviours lessened, they responded better to me as a teacher, and they became more engaged in my lessons. While this may not work for every student, I have found that negative relationships with students push them further away from where you want them to be. This is amply supported by the literature and by the experiences of another teacher with a particularly challenging student.

Journal Entry, 7 March 2017, South Australia:

> At last! A breakthrough! Who would have thought it would be so simple to get one of the most challenging students in this Year 11 business studies class, full of boys with big personalities, to work solidly through an entire lesson!? John [not his real name] was being loud and disruptive, leading other students astray as he has a habit of doing. I felt like I had tried everything – separating him, sending him to a buddy room, stern words after class about making better choices. Today he tried his usual shenanigans. "Miss, knuckles??" and holds out his fist, hoping for a knuckle bump. I get this same question from him almost every lesson. My immediate and in-built reaction. "No John, get on with your work, you're being distracting." The conversation began this way, as it always does, but then it took a different turn. "Miss if you give me knuckles I'll do my work." At this point I decided to take this bargain and use it to my advantage. "If I do this, you have to work solidly for the rest of the lesson." He took the deal and to my surprise he held up his end of it. At the end of the lesson

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I went up to John and said how pleased I was with how he had worked today. He looked at me with a big grin and said "Thanks Miss, have a good day!"

This simple interaction, a white flag of surrender to the ongoing war between us, took our teacher–student interactions a step in the right direction. Perhaps I need to take down this tough teacher attitude and start to establish more positive relationships with these students…

Introduction

I grew up on a farm outside the small country town of Parilla in South Australia's Southern Mallee. A blink and you will miss this type of town, one with nothing more than a general store, a pub and a scattering of old houses. My dad was a farmer and my mum was a schoolteacher—I do not think you could find a more typical combination of occupations for a country couple. I attended the local R-12 school in the next town, Lameroo, which was slightly bigger than Parilla but still very much a small country town. The school never had more than around two hundred students enrolled during my thirteen years of attending, yet was easily the biggest school in the district. I was a good student. I do not think I ever came home with anything lower than a B on my report card. I was no genius, but I always did my work, I was engaged, I was well behaved, and I always tried hard. I got along well with my teachers, I never had to worry that perhaps they did not like me, and that that could change how they treated me as a student.

I never really considered what it was like for the students who were a bit more challenging for the teachers. The ones who did not like school were disengaged, did not hand up assignments and whose behaviour was challenging. I did not consider that perhaps this could be turned around with a few simple acts of kindness by developing positive relationships with these students built on mutual respect for one another. This paper will look at how a teacher can turn things around for disengaged, behaviourally challenging students through forming positive teacher–student relationships.

Who Did I Think I Was?

"Don't smile before Easter!" Words of advice I was once given by a mentor teacher. Advice that no doubt many pre-service teachers and beginning teachers that have come before me have also received. To break this advice down, do not let the students see you have got a nice side until you are a solid term into your first year of teaching. Show them you are the boss. Show them what you say goes and that you are not going to take any of their nonsense.

In a way I guess this is good advice for beginning teachers. Being seen as a pushover by students is something no teacher wants, especially for beginning teachers who want and need to impress. Short-term contracts seem to be all first-year teachers are offered these days, so it is easy to see why so many feel the pressure to perform.

This pressure starts well before you are even qualified to teach your own class. As pre-service teachers we put ourselves under a lot of pressure, wanting to leave a good impression on the school we are placed at, in the hope that maybe once we finish our degree, there will be a job there for us. So when I was given the above advice by my mentor teacher, I took it on board. I became the tough teacher. This is not to say that I took the advice on literally. Of course I smiled and I was still friendly but I made sure I had a somewhat tough demeanour. This role worked in most of my classes. The students were well behaved and worked well. However, something just did not sit right with me.

I have always liked to be liked. At school, I had a lot of friends, not just in my year level, but in years above and below me, and I also managed to make friends with students from other schools in the area through sport and other interschool activities. I hated conflict! I would avoid it like the plague. I was the peacekeeper amongst my friends. I always wanted everyone to be happy and get along. So I guess this is why this tough teacher act did not sit right with me. It was not me, I was changing who I was to try and fit a mould I thought I needed to fit, and at the end of the day, this front did not work.

I was given a Year 11 business studies class on my placement. This class had around 28 students in it, with around 20 of them being boys. Needless to say, this class was a handful. None of the students were really "naughty" as such. They were never malicious or threatening towards me. They were just disengaged, loud, and disruptive. The tough teacher act did not work on them. It did not matter how many times I sent them to buddy rooms, separated them from their friends, or kept them back for a stern talking to, nothing changed in their behaviour and I needed to change my tactics.

Who Do I Think I Am?

The lesson described in the above journal entry was a turning point for me, both for that particular placement and for my own personal teaching philosophy. It made me realise that for students with challenging behaviours, sometimes the more you push, the more they push back. Taking on the tough teacher role does not always work. Sometimes you need to show students that you trust them, that you know they are able to make good choices. After this lesson, I began to adjust the way I treated these students and how I interacted with them. I began to allow myself to show my friendly side. I chatted with them about things that were off the topic of our learning; I engaged in banter with them, I treated them in a way that showed I had care and respect for them. This is not to say that they were immediately perfect, model students, but I found that once I began to build positive relationships with these students, their challenging behaviours lessened. They responded better to me as a teacher, and they became more engaged in my lessons.

The students in this class saw a change in how I interacted with, responded to and treated them. As teachers, we tend to advantage students who show higher levels

of engagement and commitment to work. We respond to these students with more support, consistency, and involvement. Without consciously realising it, teachers communicate their liking for individual students. This has an effect on the way students respond to and experience interactions with their teacher. The less engaged will respond with further passivity and withdrawal (Skinner and Belmont 1993; Newberry 2010).

This experience has changed the way I approach students with challenging behaviour. I try to get to know these students first and use this to help build positive relationships. This is not to say that this strategy is flawless; it may not work for every student. Some will not respond to your attempts. I still have to implement behaviour management, and I still have to play the tough teacher role at times, but I have found in my little experience of teaching that negative relationships with students push them further away from where you want them to be. The literature supports my position, stating that negative teacher–student relationships result in higher levels of conflict, disengagement and more rule-breaking behaviours (De Laet et al. 2016; Engels et al. 2016).

Of This Much I Am Sure

Secondary school students in Australia are becoming more and more disengaged with their education. One-quarter of Australian students are dropping out of school without completing year 12 (Lamb et al. 2015). There is a strong link between engagement and academic success (Virtanen et al. 2015) and also between academic success and later success in life. Those who do not complete year 12 are more likely to experience unemployment, lower wages and be dependent on welfare support (Lamb et al. 2015). The facts speak for themselves.

What is less clear to me is what causes a lack of engagement in secondary schools. With everything we hear about the benefits of completing year 12, why would not students want to be engaged at school? An even bigger question that troubles every teacher, at least once in their career, is how do we engage the disengaged? Challenging behaviours and lack of engagement are two concepts that are widely discussed alongside one another, yet the link between the two is still unclear. Some educators believe that engagement decreases challenging behaviours and that challenging behaviours hinder engagement. Some believe that challenging behaviours and engagement are manifestations of the same underlying condition (Hirschfield and Gasper 2011).

This is where I have found that the development of positive teacher–student relationships can come into play. The literature widely agrees with the notion that positive teacher–student relationships result in positive outcomes for the student, including high levels of engagement, motivation, effort, and overall academic achievement (De Laet et al. 2016; Engels et al. 2016). Is this also true for students who exhibit challenging behaviours? Above I recalled a class of disengaged, rowdy Year 11 s and how changing the ways I interacted with them helped them to become more engaged.

Positive teacher–student relationships can also work for students who are perhaps a little further down the challenging behaviour continuum than these rowdy, off task Year 11s.

Tom [not his real name] is a beginning teacher, teaching in a high school in rural South Australia. Throughout his university placements, he was successful in developing a good rapport with his students. However, he rarely had students that had overly challenging behaviours. His first term of teaching was a huge learning curve for him, as he was forced to quickly learn how to navigate classrooms with some incredibly challenging behaviours. A student in one of his classes, Angus [not his real name], was a particular challenge for him. Tom found that the more he pushed, the more Angus would push back. With a reputation for being one of the most challenging students in the school, Tom knew he was going to have to change his tactics if he was to have any hope of achieving positive outcomes with Angus.

After a practical physical education lesson that ended rather badly, which involved a lot of strict verbal, negative-based instruction, Tom decided to change his tune. After this lesson, Tom sat down to have a chat with Angus. He questioned Angus about why he did not like certain activities or tasks and what he does like doing. He attempted to get to know Angus and to use this to help determine his teaching strategies. Here, Tom demonstrated both attunements to the student's particular needs and supportiveness of Angus' self-direction, both of which are characteristics that Reeve (2006) describes as essential for teachers to have in order to develop positive teacher–student relationships.

As the weeks progressed, Tom made a conscious effort to make changes to his interactions with Angus to improve outcomes for him. This ranged from small gestures such as saying hello to him in the schoolyard and asking him how his weekend was, to changing his task designs to better suit Angus' learning needs. These changes reflect the final two characteristics needed by teachers: attunement by adjusting instruction to suit the learner's needs and relatedness by showing care and warmth (Reeve 2006). Along with these changes, Tom implemented different behaviour management strategies, such as planned ignoring, where he would select certain behaviours to ignore, to weaken, or to decrease these inappropriate behaviours (Gable et al. 2009). This strategy, in particular, would ensure that negative interactions which can have a detrimental effect on teacher–student relationships were reduced (De Laet et al. 2016; Engels et al. 2016). As Tom implemented these changes, Angus began to show various positive changes. He started to show interest in his classes, negative behaviours reduced, he showed more respect towards Tom, his grades improved, he became more engaged, and he put more effort into his school work.

While Angus showed some distinct positive changes within Tom's classes, unfortunately, this was not the case for all of his other classes. Angus' behaviour has continued to be poor within classes where his interactions with teachers are primarily negative. This demonstrates that the implementation of positive relationships with students with challenging behaviours can have a positive impact overall on their education. This also perhaps indicates a need for change in how some teachers approach behaviour management, as well as a need for training and possibly fur-

ther research on specific strategies that can be used by teachers to help create more positive relationships with students with challenging behaviours.

Conclusion

By making a conscious effort to create a positive relationship with Angus, Tom was able to improve multiple aspects of Angus' schooling. This particular case demonstrates that positive teacher–student relationships can help improve engagement for secondary school students with challenging behaviours. Through an increase in engagement, numerous other benefits are seen, including improved academic outcomes and a reduction of challenging behaviours. By reducing negative interactions and focusing on maintaining positive interactions, challenging behaviours can be minimised, and engagement and academic outcomes can be improved.

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Chapter 13
Music in Schools: The Importance of Meaningful Relationships in Music Education

Kirsten Ifould

Abstract   Having a love of music within my home environment and experience using music within educational settings, I decided to investigate the impact a school music programme could have on children. Through an ethnographic process, I observed the interactions between staff and students as they prepared for a concert. What became apparent during my observations was that it was not just the musical curricula or students' proficiency with instruments that made effective programmes rather it was the interpersonal relationship between staff and students that allowed for an effective programme. By forming strong bonds through music, educators were able to create an environment where children, even those from disadvantaged backgrounds, felt empowered and issues such as behaviour management were lessened owing to the strong connections formed.

Journal entry, Christie Downs, South Australia:

> When I walked into the music room, there were 50 students, lined up behind xylophones, keyboards, guitars, drum kits and microphones. They were mid-song, and while certainly not concert quality, they were definitely a tight band for their age. They finished up their song, a Coldplay medley, and the Principal asked them what they would like to play next. Hands shot up, ready with suggestions. He pointed to one and was answered with an enthusiastic "Reckless"! There were noises of agreement, and the Principal said: "'Reckless' it is"! This song is more than 30 years old, so it was fascinating to me that these kids, aged between 8 and 13 were so keen to play it. What was even more fascinating was the sudden hive of activity once the song was chosen. Most of the students leaped up from their current instrument and raced to another position, for example, some keyboard players moved to guitars or mics, xylophones moved to drums or keyboards, singers to drums and guitars. They were so quick! Within a couple of minutes, the whole band was a different creature, and they were ready to play. The band did an amazing job of "Reckless", and an incredible job of Vance Joy's "Fire and the flood", after another quick change of instruments. I found myself absolutely awestruck that one adult could wrangle 50 kids into a quality band with barely a word.

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Introduction

Throughout my 25-day placement, I also had the chance to see a production rehearsal and was equally inspired. Unfortunately, I did not get a lot of opportunities to spend time with the band other than this particular practice. However, in the weeks following my placement I chose to complete my community service for my Bachelor of Education at the same school, working with the band, the production and the school's Breakfast Club programme, giving me greater insight into the benefits of these excellent programmes. I walked away incredibly inspired and disappointed that my time with the school would be diminished by the need to complete my final pre-service placement. Moreover, I walked away with a greater understanding of music education.

The "Facts" About Music Education

It is easy to find research on music education, but it is harder to get a clear answer. Some research notes improved academic outcomes, with studies showing that music instruction appears to enhance verbal memory ability (Rickard et al. 2010), and that language development, in both native English speakers and EAL/D learners, can be positively influenced by music lessons (Paquette and Rieg 2008). Other research suggests that there are positive impacts on students' overall well-being, self-identity and tolerance, student engagement and attendance if an effective music programme is in place (Crooke and McFerran 2014; Power 2014).

However, it is apparent that the current research is relatively sparse, and not always well executed (Crooke and McFerran 2014). At the same time, it is also clear that there are massive amounts of anecdotal evidence supporting music programmes, and in reality, teachers are often in the best position to make these kinds of judgements, being on the coalface as it were. While the formal studies are at times contradictory, this is less often the case with anecdotal research, which in general is supportive of music curriculums (Paquette and Rieg 2008).

I Thought I Knew

As an aspiring educator, both as a volunteer for 11 years and an education student, I thought I knew all about the benefits that can be gained from including music programmes in schools. I had been involved in a number of projects during my years as a volunteer, including coordinating choirs for school musicals, teaching a Learning Assistance Programme (LAP), student ukulele and recorder and running a lunchtime singalong session. In fact, one of my first experiences as a school volunteer involved helping my initial LAP student to write a fun song, giving her confidence in her spelling and writing abilities.

I had also seen the negative effects that less than ideal music teachers could have. My son, despite being surrounded by music in my home, had nothing positive to say about music class during his primary school years, due to two music teachers. Both spent a lot of time yelling, gave predominantly negative feedback and expected students of all ages to perform like veteran musicians, rather than like children having fun with sounds and beat. Naturally, students of both were more often than not cringing as they went to class and developed a dislike of music as a result of their teaching styles. Fortunately, my son was exposed to positive music experiences at home, and as he grew older came to enjoy music, continuing with school classes until Year 10. Unfortunately, not all students have these positive music experiences available to counteract negative experiences with music teachers in primary school.

I have always had a firm belief that the famously misquoted line, "music soothes the savage beast", was relevant to all aspects of life, and especially so in education. There are few people who have no interest in music, whether as listeners or performers, and the same applies to children. In my capacity as a volunteer and pre-service teacher, I am yet to find a student who did not react positively to music, as long as it was presented to them in a positive way. Therefore, throughout my journey as an educator, I have taken all opportunities to include music into the curriculum wherever appropriate and have been looking forward to taking this further as a teacher. However, I do not think I could ever have imagined a music programme as inspirational as that run, almost singlehandedly, by the Principal at my placement school.

Now I Know

During the course of my placement, I was able to, at least briefly, become quite involved with the band and the production. In fact, I was fortunate enough to be in charge of filming the production's Friday night performance and attended a number of band sessions. I had the opportunity to see first-hand the benefits of the music programmes, as well as being able to discuss them with the Principal—the driving force behind these programmes.

The most important lesson that I learned during my time at the school was that a music curriculum is not enough. For music programmes to provide a wide range of benefits that are possible, dedicated staff, patience and an understanding of the individual needs of the students are also needed. It is clear that the music programmes themselves are only a small part of the overall experience, with a range of other factors equally important.

Having told the Principal how inspired I was by his ability to run a band session involving 50 students with barely a word spoken to keep them "in line", he was quite humble and explained that this was something he had been doing for a number of years. The band consists of students from Year 3 to Year 7. Over the course of their schooling, these students learn a number of instruments, and my observations indicate that the Principal works with them as fellow musicians, rather than simply as students over whom he has authority. He has worked tirelessly to build up the

band programme, working with small groups of students to teach them the basics of each instrument. In turn, these students help him to teach children who were new to the band, acting as instructors as well as band members.

The school production, with script, music and lyrics entirely his work, was just the latest of 19 years of productions for the Principal. They are clearly a labour of love for him. However, it is also clear that it is as much about the students as it was about the writing. He told me proudly that the productions were renowned throughout the state, and that the matinee sessions were always full, with other primary schools attending. We also discussed the band, and the importance of learning an instrument, particularly given that most of the students at this school come from homes where music lessons are an unaffordable dream. I pointed out that band would stand the students in good stead for high school, but sadly he informed me that the local high school had a less than a quality music programme. This is one of the unfortunate realities in low socio-economic schools, where funding is tightly managed and usually directed at academic programmes. In fact, it is only due to private donations that the school band has such a wide range of instruments at their fingertips.

One of the greatest benefits of these programmes at this school, particularly given the difficult backgrounds of many of the students, is the relationships that are formed. Watching the students work with the Principal, it was clear that there was a high level of respect on both sides. This was made even more apparent by the differences in student attitudes. The younger students were more likely to be less focused and more disruptive, although these behaviours were significantly less marked than the behavioural issues I had observed in the classroom during my pre-service placement. It was apparent that the older the student was, the more focused and appropriately behaved they were. This could be put down to age, however having dealt with some of these students in an academic setting, it was clear that age was not the only factor in play.

My observations of the band, as well as of the production cast, suggest that they had a close relationship with the Principal. Not as equals, given his level of authority, but not far from it. This allowed the students to truly collaborate with him—choosing songs for the band to play, suggestions for blocking of the production or offering new interpretations of the melody or harmony in the band. While the Principal was still an authority figure, he was also a real and relatable person with a shared interest. I believe that this explains the deeper relationships between Year 6 and Year 7 students and the Principal, as well as their better behaviour. The level of mutual respect that had developed between musicians over a number of years meant that there was little need to bridle against authority.

It was also heartening to see that students facing difficulties with academic subjects were able to build high levels of confidence by performing. One student, in particular, transformed on stage during his time in the production. A quietly spoken Year 7 boy, who was usually shy and guarded, became an incredibly talented performer far from lacking in confidence. In fact, with only a few hours' notice he took on an additional role, not only perfecting the lines but creating an incredible characterisation that was entirely different from his own role. To see this student blossom into a young man with the appearance of a seasoned performer, after seeing him in the schoolyard

with eyes downcast when speaking to adults, was a testament to the power of the programmes at this school to make a real difference in the lives of these students. Importantly, the Principal's response to my positive feedback about his performance attested to the two-way nature of this relationship, as his face lit up with pride and he talked enthusiastically about how far this boy had come.

I now know for sure what I have always suspected—a well-run music programme can have enormous benefits for children. This is even more relevant when applied to children who are facing some kind of life challenges, whether it be related to low socio-economic status, disability, abuse, or the wide range of other issues that children are too often faced with.

A Change in Perspective

For most of my journey as an educator, I have thought of music as an incredible tool—one that the literature tells me can be used to improve literacy results and can stretch across the curriculum, from maths to art. However, after experiencing the inspiring programmes at my placement school, I have realised that I partly missed an important point. I had believed that the music itself was the most important factor, but I have now come to believe that the relationships that are formed while performing or consuming music are equally important. While the studies indicate that there are clear academic benefits to music instruction (Paquette and Rieg 2008; Rickard et al. 2010), the positive impact on students' well-being may well be more heavily influenced by the positive relationships formed with educators and other students.

Conversely, if negative relationships are formed, particularly with adults, music does not appear to have such a positive impact on students. I have experienced this phenomenon, having seen students exposed to very negative experiences in music classes, due to teachers who were more focused on the quality of the music performance than the enjoyment of the music making. I have seen students faced with this situation draw back from the musical experience, disliking going to music class, privately mocking the teacher and even at times teasing those who professed to enjoy the lesson. This has always saddened me, as I believe wholeheartedly in the value of music instruction. However, despite being a performer myself, I failed music in early high school, the only failing grade I have ever received, for much the same reasons. I realise now that that failure was less about my ability or even my interest in music than it was about the structure of the music programme and the lack of quality relationships with the instructors. Of course, I have continued to love music throughout my life, because I have been able to choose the people I have a musical relationship with, and form strong bonds.

Of This Much I Am Sure

Having been fortunate enough to be involved in the inspiring music programmes at my placement school, I am sure of one thing. I will always continue to use music as an educational tool and look forward to forming powerful relationships with my future students. In my final placement, I was able to teach a number of music lessons with my class, and I was able to do so with a deeper understanding of a principle that I have intuitively applied to all areas of my educational journey—the importance of meaningful relationships with students. Not surprisingly, working with students as an instructor and collaborator, rather than as an authoritarian teacher, has led to quick success in my early lessons. Naturally, outside of the music classroom, this same principle should be applied, with teachers able to form collaborative relationships with their students that will allow them to most effectively discover their strengths and weaknesses to improve their academic outcomes.

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Chapter 14
Blame It on the Boogie: Does Listening to Personal Music Devices Within the Classroom Hinder Adolescent Students' Ability to Be Mindful Learners?

Caitlin Taylor

Abstract Before I began teaching, I saw no problem with students listening to music while studying, but I began to question this when I found it difficult to gain my students' attention in one practicum. I accordingly decided to do some research on the issue through reading and observing Year 8 to 12 students in a Visual Arts class for a week. I found that less than a third of Year 8 students were listening to music during class, but that the numbers jumped to over two-thirds for most of the higher years of schooling. While listening to music may help students concentrate on individual tasks, it can also interfere with interacting with the teacher and other students, so I ended up feeling that a compromise needs to be made. Students need to learn when it is appropriate to listen to personal music devices in the classroom and when they should not in order to maintain an engaging, interactive and mindful classroom environment.

Journal entry: Monday, April 24, 2017. Heathfield, South Australia

"All right everyone, quieten down. I'd like to introduce you all to our new pre-service teacher, Miss Taylor. She will be joining us for the next seven weeks while she completes her teaching placement with us. Please make her feel welcome".

As I look around the room trying to give a welcoming smile and make eye contact with as many students as possible following my introduction, I notice, somewhat disheartened, that there are no more than ten sets of eyes looking back at me. Instead, small groups of students are congregating around desks, flicking through Instagram pages of the rich and famous and watching the latest LADbible video, all while listening to the latest music tracks through their headphones instead of focusing on the instructions being given from their classroom teacher.

Not taking this complete brush off to heart, I entered the classroom and began to wander around the room to see what the students were working on. While most of the students were on task, the biggest thing that stood out to me was the overwhelming number of students who worked without ever removing their headphones; even when important make-or-break assignment notes were being given by the teacher. Class discussions came and went, still

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with very few students removing their music headphones, too engrossed in what they are listening to possibly be retaining what was being said. Even when I approached some of the students to have a brief chat about what they were working on, the reluctance for them to remove themselves from their headphone bubble and re-enter the classroom world reeked of an instant loathing for me.

After all, I guess, how can I possibly compete with Beyoncé or Harry Styles?

Before beginning my teaching journey, I had no reservations about allowing students to listen to music while studying or designing as it is something that I do myself and find that it usually gets my "creative juices" flowing. Now, having been a teacher in front of a distracted, music-listening classroom, I can understand why many schools do not allow personal music devices during class time. With all of this said, before becoming solely responsible for a class, I wanted to use my placement experience to research whether or not listening to a personal music device in the classroom hinders students' ability to mindfully learn.

Introduction

I grew up with a coloured pencil permanently in my hand. I begged my parents for a new colouring-in book every time we went out, just so that I could spend the rest of the week practising colouring within the lines using the boldest colours I could find. Every weekend, I woke up to the sounds of Michael Jackson, Billy Joel, Wendy Matthews and Shania Twain cranking through the stereo, while Mum bopped around cleaning the house and Dad sang (badly) at the top of his lungs. Life was so simple—that was until Mum and Dad thought it would be an amazing idea to conceive twins and send my peaceful life into a complete tailspin at the ripe age of six.

The next few years of my childhood are a blur of double strollers, mischief and endless crying as one twin set the other off. More often than not, I found myself drawing peacefully in my room while the Spice Girls played on my cassette player in the background just to escape the chaos. Mum and Dad's weekend "musicfests" never waned (I'm still adamant that they cranked up the music to drown out the whining from us kids), and we were one big happy (crazy) family. Life was noisy and hectic, but I would not have had it any other way.

Being the oldest obviously meant that I was always in charge, so as soon as the twins were old enough to understand, they were forcibly (and often with the assistance of bribery) included in all of my imaginary role-play games. "Schools" was a popular weekly game we played in which Marc, Georgia and every teddy bear and doll we owned would sit on the floor and await their name to be called on the class roll. They would participate in the ridiculous activities that I planned and even go outside for the occasional physical education class (cartwheels and handstand practice on the lawn). We would colour in pictures of Teletubbies for art class and dance around like maniacs to Hanson in our music class. With all of this said, you'd

be forgiven for assuming that I knew my calling in life was to become a teacher from an early age. Well, you'd be wrong.

I finished university the first time with a degree in graphic design, which led me down several fantastic career paths. Unfortunately, it all came to a grinding halt following a brief quarter-life crisis because I no longer felt fulfilled by the consumer-driven career path I had initially taken. So, one Australia Day several years ago, while helping to repave the driveway with Dad and reminiscing on all the wonderful childhood memories I had of forcing my siblings to play "school", I realised that I knew I had to give teaching a try.

Although my preliminary career took me down the design path, I knew deep down that my hectic, social and creative upbringing had set me up perfectly to become a teacher.

Wish me luck!

Who Was I?

As previously mentioned, having grown up in a chaotic and usually noisy family home, music has always been a large part of my life. I used it to escape the madness of home life, as well as to unify us all during our weekend "musicfests". Having completed my secondary education, plus several internal and external tertiary studies, I can completely understand why modern-day students enjoy listening to music while they work. Robinson (2010) has described modern-day students' learning environments as being one of the most technologically stimulating eras that education has ever seen. He goes on to discuss how students are essentially over-stimulated by computers, smartphones, tablets, endless advertising and hundreds of television channels every day, and yet educators are penalising these students for being distracted. Madden's (2017) views on modern-day students being immersed in a technologically advanced society mimic Robinson's when she states, "The digital era that [modern day students] have grown up in has shaped their notion of socializing … how they learn and what will attract, engage and retain them at work".

Although often not actively listening to the song playing, having music playing through headphones often allows you to block out the "white noise" and, ironically, concentrate better on the task at hand. To this day, I always find that listening to music while ploughing through my assignments seems to lessen the burden of the overwhelming task ahead and allows me to focus better. It was for this reason that when it came time for my first practical high school placement, I had no issues or reservations about allowing adolescent students to listen to music during my classes because it felt somewhat hypocritical of me to ask them to work in silence and because "music is a [modern] common part of our everyday routine" (Harmon et al. 2008, p. 41) that we as teachers need to embrace.

This opinion changed the minute I began teaching my own classes (instead of simply observing them) because I instantly realised how difficult it was to engage, interact with and instruct students who have blocked out all the "white noise" in the

classroom with their headphones and personal music devices. It was also during this placement that I realised that allowing adolescent students to listen to music during class often negatively affected their creativity and efficient output of school work. In addition, I observed the consequences of allowing headphones in class, which often resulted in disjointed conversations and an inability to appropriately communicate with peers and teachers. I realised that, while I think music is an important part of creativity and expression for adolescents, it can also have a negative impact on students' ability to interact with others and enjoy the serenity that a music-free environment can offer.

It was because of these experiences during my practical placement that I felt the need to personally research whether or not allowing students to listen to personal music devices with headphones on during class hinders their ability to be mindful learners in the classroom.

Who Am I Now?

I observed the Visual Arts students from Years 8 to 12 for a week to ascertain how many of them listen to music through headphones during class. It appeared that male adolescent students in high school are more likely to listen to music through headphones during class. In the table below, you can see that Year 8 students are least likely to listen to music during class. From Year 8, the number of students, particularly male students, who listen to music in class, increases dramatically in Year 9 and then stays roughly the same for the remainder of their education. Year 11 appears to create an anomaly to the assumption that the number of students who listen to music through headphones increases as they get older, as the data collected shows that only 59% of students had headphones on.

Students (no gender breakdown) listening to music in Visual Arts class					
	Year 8	Year 9	Year 10	Year 11	Year 12
Number of students	28	24	18	22	13
Number with headphones	8	16	13	13	10
Percentage listening to music (%)	28.9	66.7	72.2	59.0	76.9

I found these statistics interesting as this school greatly differed from my previous placement schools which had a "no tolerance" policy on headphones and personal music devices during class. At the time, I respected but didn't agree with this rule as I often found the classroom environment to be very static and sterile without music, which was often reflected in the students' uncomfortable behaviour. Madden (2017) reiterates the notion of modern-day adolescents finding silence uncomfortable when she mentions that "… technology is also often turned to as a way of filling an awkward silence", which is why I feel that a compromise needs to be made

between the students and school community. I do not want students to lose the importance of interacting with others, but I also don't want them to be afraid or to feel uncomfortable during times of silence. Instead, I feel that it is important to teach students when it is appropriate to listen to personal music devices with headphones on and the appropriate etiquette that comes with this privilege.

After discussing with several students why they chose to listen to personal music devices through headphones in class, their reasoning supported my assumption that they use music to block out the "white noise" during class time and find that it "helps them concentrate". Several students commented that when they didn't have any of their friends in a class, they opt to listen to music instead of socialising with other students, while others mentioned that they find music relaxes them. Such a comment is supported by Ferrer et al. (2014, p. 488), who state that "listening to music for a short period can alleviate the effects of stressors".

Of This Much I Am Sure

Generation Z doesn't know anything different than being overstimulated by technology, so it is not their fault that they are not accustomed to efficiently working in a quiet environment. It is also not their fault that they don't know how to relax without some form of technology as "they move between face to face and digital platforms for social life, conversations, learning, assessments, work and play with a fluidity and ease" (Madden 2017). For these reasons, I feel that the following recommendations are reasonable and achievable outcomes to ensure that students are comfortable within their classroom environment while reducing distractions that may hinder their ability to mindfully learn.

I feel that it is important for every school to have a clear set of guidelines surrounding the use of headphones and personal music devices during class. These guidelines need to be discussed with the teachers who are actually in the classrooms implementing lessons, as they are the ones who know how students work best. Often schools have a broad set of guidelines in place and then allow each teacher to enforce the finer details of the rules as they see fit. This is understandable as it may be more reasonable to listen to personal music devices during a Visual Arts class, where creativity and practical application are encouraged, compared to a heavily curriculum-based subject like biology or mathematics, where students' attentiveness and mindfulness in the classroom are important.

Of this much I am sure, that when I begin teaching my own classes, I will ask students to refrain from listening to personal music devices when in class, unless specifically told otherwise. Instances may arise where listening to personal music devices is appropriate, such as during personal artistic reflection or when students are working on a personal piece of artwork. I don't think that it is appropriate for students to be listening to personal music devices during general class time because that is when open class discussions, instructions and peer communication should be occurring. Although Visual Arts and Design is a creative subject, I think it is

important for students to be interacting with their peers and sharing ideas as well as being present in the classroom.

Another recommendation would be to offer students an alternative solution to listening to personal music devices in class. Instead of allowing students to listen to music through headphones during class, which, as mentioned, limits their mindfulness and ability to listen and communicate, I would suggest introducing a shared music device that can be quietly played aloud from a central point in the classroom. The genre of music would need to be discussed; however, something relatively mellow and easy listening would ensure that students are getting their "music fix" without completely blocking out their surroundings and ability to be mindful learners. By initiating a compromise such as this, it would allow an art/design teacher to customise the music choice to the task to potentially enhance the student's creativity (e.g. Indigenous-themed music during Aboriginal and Torres Strait Islander curriculum units or woodwind instruments while learning about sustainability).

Small changes or compromises to a student's learning environment, such as the recommendations mentioned above, can be seen to have a large impact on their mindfulness as adolescent learners.

Conclusion

My views on students listening to music through headphones during class time have changed dramatically over the last year. Initially, given that I enjoy listening to music myself while studying, I had no reservations towards students listening to music during my class. Following several school placements and conducting this research project, I no longer have the same views. While I understand that modern-day students are exposed to a never-ending array of technology and as a result often do not know how to embrace silence, I feel that allowing students to listen to personal music devices with headphones on during class time can hinder their ability to be mindful learners. It is for these reasons that several recommendations have been proposed to integrate compromise for teachers and students so that an engaging, interactive and mindful classroom environment can be maintained.

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Chapter 15
Negative Attitudes Towards Learning Languages in the Middle Years: Can These Be Changed by Increased Awareness of Language Learning Benefits and Making Learning Easier?

Zerina Hadziabdic

Abstract The difficulty of the learning process and negative attitudes towards language learning seem to be the major issue in languages other than English (LOTE) learning, and a majority of findings in the literature report negative associations with LOTE learning. More often than not parents and students see the long-term value of language learning in terms of employment-related skills but fail to see the bigger picture of the long-term benefits of language learning, namely, development and reinforcement of literacy skills, improvement on cognitive and problem-solving tasks, building of confidence and self-esteem and the increased cultural awareness and development of cultural sensibilities, which are needed now more than ever in an increasingly globalised world. The purpose of this study was to investigate whether students' attitudes towards LOTE learning in the middle years would change if the learning process was made easier and if they were aware of the long-term benefits that learning languages can have on their wider education and personal fulfilment. It supports the belief that increased awareness about language learning benefits and improved learning process for acquiring languages would change students' negative attitudes towards language learning.

Journal entry, 6 April 2017, Adelaide, South Australia:

> Students' complaining about having to complete yet another "boring" and "difficult" grammar worksheet in their book was not surprising to me. I was transported back into my own school days of learning the language in the same way, which consisted mostly of passing on the grammar structure and memorising vocabulary, topics that did not relate to the real world, and there were no additional tools other than the textbook to assist in acquiring the language. Today, I made a commitment to myself as a future language teacher that I will not spend time teaching grammar in this way. The focus should be on providing students with real language and real situations in context and letting them focus on gist, not form, then more specific meanings, such as grammar patterns after students have a good understanding of the resource being used. When I think of my own language learning I never really worry

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about focusing on grammar, and I believe the same applies to native speakers of a language. Speaking is natural in our native language. Why should it be different when we learn a second language?

Introduction

Despite the importance of language learning for all young Australians being emphasised in many reports and policy statements, students' commitment and attitude towards LOTE in the middle years is minimal as is the number of students committing themselves to a long-term study of a language beyond the compulsory requirement. Research findings of students' negative attitudes towards LOTE learning revolve around recurring themes of uninteresting, not valuable and academically too challenging (Jung et al. 2007). These findings suggest that a reassessment of language teaching methodology and an increased awareness of language learning benefits may be beneficial to create more positive students' attitudes and thus an improvement of learning outcomes.

For this study, I investigated whether students' attitudes towards language learning would change if they were aware of the flow-on benefits of language learning and if the learning process of acquiring a language were made easier. Two classes of year nine students, a total of 47 students, were asked to rate each statement about language learning benefits/awareness (e.g. learning a language is helping me to understand how English works, learning a language can improve my confidence and self-esteem, learning a language enhances my listening and speaking skills, learning languages helps me with problem-solving tasks) and about language learning processes.

An open question was also asked to the students: If you believe that languages in schools can be strengthened, please comment on how you think this might be accomplished. When asked for suggestions about how languages could be strengthened in schools, the overwhelming number of students commented that parents and the general community need to be convinced of the benefits of languages education. A number of students suggested a media campaign by famous people who speak another language, sending information to parents about the benefits of languages and organising special days to promote languages at school. It seems that parental influence and enthusiasm, as well as a school's seriousness towards learning languages, play an important role in motivating students to learn languages.

The majority of students were not aware of the many flow-on benefits of language learning that was revealed to them in the questionnaire and commented how this new-found knowledge motivates them to change their negative attitudes as they now can see how learning languages have benefits on their wider education and personal fulfilment. A great number of students agreed that an easier learning process that incorporates technology would change their attitudes towards learning languages. The above findings indicate that effective, engaging and interactive language classes, as well as more general awareness about language

learning benefits in general, would bring about a change in motivating students to commit to studying languages and change their negative attitudes.

My Initial Thoughts

As both a student of language for more than 25 years and a future teacher of language, I have been reflecting on how language is actually learnt. Before my two placements, I was full of hope that I would encounter enthusiastic language teachers who apply the latest theories and technology in language learning. Instead, I was disheartened to learn that the traditional language learning instruction is still implemented in the twenty-first century and very little or rather no technology is used to facilitate learning. It is outdated textbooks and classrooms without much indication that language learning is happening in them. There is no motivation for learning a language as the students see no purpose in what they are learning. No wonder the needs of today's language learners are not catered for in such classrooms, and they become disengaged and develop negative attitudes.

What did come out of this study is the evidence that today's teachers need to learn more about incorporating ICT into teaching to maximise engagement in learning and improve student achievement. The overwhelming majority of students commented that they would like more interactive classes supported by technology. ICT cannot be overlooked as it has an essential role in their everyday lives. Healey et al. (2008, p. 15) conclude that "teaching our students language in its traditional media is no longer enough and increasingly in everyday and professional life people need the skills of electronic literacy". My recently completed placement underpinned my views about the importance of using ICT tools in learning languages. Students enjoyed the interactive lessons, were engaged, stimulated and worked collaboratively, and most importantly commented on how their fear of speaking German dissipated. I think ICT has the capacity to transform the way students are learning, engage them, enhance their achievement, create new learning possibilities and extend interaction with local and global communities.

As part of my pedagogy, I feel it is important to help students' language learning to be a more positive experience so that they develop positive attitudes towards LOTE learning. Twenty-first-century learners are tech-savvy and want more interaction with technology, which can be an important tool, not only to facilitate language learning but also to encourage interest and engagement. I want to support my LOTE students by creating classrooms as a welcoming place respective of the twenty-first-century learners' needs for the challenge, stimulation and use of digital media.

Research suggests that the learner who is positively predisposed towards a second language and culture is more likely to experience greater success than a learner with negative attitudes (Emmitt et al. 2010). Middle school learners will generally not have negative attitudes towards a language. However, they can be influenced by adults' negativity and school seriousness about the subject. Research by Squires found that students are assigning language learning limited relevance are based on the grounds

of parental negativity or indifference towards language learning as they perceive it irrelevant (Jung et al. 2007). Yet, motivation and purpose for learning the language are very important. If there is a strong desire to learn a language, the learner will put in much more effort and achieve better learning outcomes (Emmitt et al. 2010). Hence, language programs need to be constructed in such a way that they are motivating and supportive of students' purposes for learning a language. However, if students do not have parental and school support, how are they to succeed? Attitudes are important because of their direct relationship with behaviour and as they determine how people behave towards things they like or dislike (Jung et al. 2007). It seems it is up to language teachers to continue to convey the flow-on and long-term benefits of language learning to the broader school community in order to change current negative attitudes.

My Current Thoughts

A comment by a reluctant language learning student has etched itself in my memory: "I do not need a second language". During my placements, I have experienced language teachers battling each day to convince students, other staff and principals that the benefits of language learning have been appreciated for centuries. Considerable research shows that learning a language has a benefit on student literacy in their first language, enhances listening and speaking skills, develops the ability to analyse and categorise, to find patterns, to express and defend opinions, improves study habits and understandings of how to learn and increases problem-solving ability (Mueller 2003). Not surprisingly, the majority of students reported that their attitudes towards language learning would change after becoming aware of the many benefits of language learning. They commented on how they thought of language learning benefits in long terms (e.g. employment and travel), but many were not aware of immediate and ongoing benefits that language learning will have on their wider education, intellectual and social development.

This view is supported by contemporary attitudes towards education as being increasingly instrumental, valuing learning for its immediacy and functionality rather than as an accumulative process or an end in itself (Jung et al. 2007) and probably explains why students find language classes "uninteresting, not valuable and academically too challenging" (Jung et al. 2007) and choose other subjects over language classes as they are rewarding and entertaining in an immediate sense. The challenge is to make students and the wider school community recognise the value of languages. As Mueller (2003) comments,

> it is extraordinary that as educators and policy makers struggle to design programs that will raise academic standards, encourage critical and analytical skills, as well as address literacy, the one subject area (LOTE) that can achieve all of those goals is rejected and disregarded …

It is not difficult to see why learning languages should be regarded as an essential element of good education in Australia and I believe languages can be strengthened by more people seeing it as of value.

Of This Much I Am Sure

At the beginning of this study, I was not sure what the outcome would be. The results indicate unequivocally that students' negative attitudes towards language learning would change after being made aware of the many benefits of language learning and making the learning process of acquiring a language easier. It was not a surprising revelation that negative attitudes would change. A learner needs to know why they are learning something. If there is a purpose behind learning, students are more likely to put much more effort into it to achieve a better outcome. It follows that if we can identify a learner's purpose for learning the language and support it, we can enhance their learning progress. A language teacher needs to convey the everyday tangible benefits of language learning on a learner's education so that students can see and recognise its value as an accumulative process rather than seeing it as something devoid of meaning and purpose.

"Current language theory calls for recognition of the value of students' cultural backgrounds and experiences" and points out the "importance of language being used as a socially constructed cognitive tool and language learning occurring in collaborative dialogue" (Emmitt et al. 2010, p. 209). This assertion reinforces the notion that language learners are social beings who acquire language in social contexts. Filling out grammar worksheets is contradictory to this theory and belongs to the last century. After seeing disengaged students during my two placements, I now know and understand that I need to contemporise the experience of language learners to ensure that the learning environment is rich and varied in the context in order to promote learning. Outdated textbooks and grammar worksheets are no longer adequate to engage twenty-first-century learners. Language teachers need to support students in learning by allowing them to explore situations from social, personal, intercultural perspectives in a collaborative and non-competitive atmosphere. When the approach meets students' needs and interests, they will and can learn languages successfully. Engagement, motivation, purpose and the application of twenty-first-century tools are important.

Conclusion

From the data collected during this study, the evidence is very supportive that a greater awareness of language learning benefits and an easier language learning process would change students' negative attitudes towards language learning. Students of

the digital age are social, and communication and collaboration are essential in their learning. Hence, they need ICT to become more engaged and attuned to their learning.

The needs of twenty-first-century learners for the use of digital media, challenge and stimulation must be reflected in their everyday learning. Incorporating ICT into language lessons and assessment can no longer be avoided. Otherwise, teachers run the risk of teaching to disengaged students.

In a time that requires students to develop a new range of skills as global citizens, acquiring a foreign language should be seen as an essential element of good education. This reflects a focus on a globalised world and an awareness that Australian students need to be able to communicate across languages and cultures to remain competitive in today's world. Luckily, this view is reflected in the National Plan for Languages Education which refers to "language skills and cultural sensitivity as the new currency of this world order" (MCEETYA 2005, p. 2) and in the new Australian Curriculum, which recognises the importance of the study of languages as being important to participate in the linguistic and cultural diversity of our interconnected world (ACARA 2014).

Sadly, these changes are only slowly finding their way into the minds of the wider school community as they are not aware of the flow-on benefits of language learning. Schools need to work on raising awareness of language benefits not only regarding work opportunities and the development of cultural sensibilities but also about the bigger picture of long-term benefits of language learning as discussed in this report. Also, language teachers need to have knowledge of current developments in language learning and teaching research and develop their knowledge further by engaging in professional learning regularly as well as use technology both to support learning and as a basis to communicate using technologies. This approach will engage and motivate the twenty-first-century learner. Languages can be strengthened by more people seeing them as of value. Maybe implementing and promoting National Languages Week (like Science Week, Harmony Day) as suggested by students in this study would highlight the importance of language learning and make language learning as equally valuable as other subjects.

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Part IV
Perspectives on ICT

Chapter 16
Reflection on ICTs in Education

Gretchen Geng

Abstract   Although most teacher educators come to work in this field with some sort of experience of ICTs—as a user, a researcher, a teacher, or an administrator—anyone working in the field of ICTs is well aware that there are no established patterns and pathways in this field. As a consequence, teaching ICTs requires teacher educators in the area to learn on-the-job: we have to learn the new concepts, knowledge, and skills of how to use them and how to teach them "on-the-job", as the ICTs are changing very fast and new technologies emerge every day. This ongoing dilemma, from a practice-theory view, includes designing a relevant curriculum and preparing pre-service teachers to be "ICTs ready" from both technical knowledge and pedagogical knowledge perspectives. In this chapter, I first introduce the chapters written by the pre-service teachers in this section, and then by reflecting on using ICTs in education and teaching, I weave the students' chapters into self-reflection on my own teaching and learning experience.

Introduction

Today, we have, it seems, an inexhaustible supply of various technologies and gadgets that now actually make up a significant part of our daily lives. Think about it! Think about all of the different kinds of technology that we use in a day, and how much of this technology is information and communication technology (ICT). Almost all of us have smartphones; we all probably have a computer, laptop, or tablet. We all access the Internet, these days mostly broadband through wireless and fixed connections. We make online purchases and bookings. Our banking details and actions are all online using ICT. We use mobile devices as communication tools, as writing tools, and as information gathering and dissemination tools.

While I was trained to be a classroom teacher back in the 1990s, I was never taught or assessed on how to use ICTs in teaching other curricula. Instead, it was an experience to learn some basic technical skills, such as how to use word processing

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software and how to access and answer emails. Very limited related theories of implementing ICTs in education were ever introduced in teacher training courses, and the use of ICTs in education was never a compulsory course to study.

In fact, before owning my own PC, I only had access to computers while I was in secondary school and later in university, and my first learning experience was a 40 min per week fun time with my peers in an enclosed classroom. All we were required to learn and to be assessed on was to understand the keyboard and a basic knowledge of using some specific software. I had my first PC in the early 2000s, and that "old" computer was given like a fabulous birthday present. Although at that time the giant monitor and box with a slow processor and limited storage occupied most of my working desk, I still regarded it as a very flash tool.

In the current teaching classroom, we see completely different uses of ICTs. Classrooms are equipped with iPads, interactive whiteboards (IWBs), Internet, and other resources, such as virtual reality cameras. ICTs are not only being used in literacy and numeracy teaching and learning but also in other curriculum areas, such as science, arts, and health and physical education. Many secondary students also have their own personal mobile phones and bring them to school as an everyday tool. These students communicate with each other through social media, such as Facebook and Twitter. Drones are starting to be a popular technological and pedagogical tool in teaching earth and geography science. In this section, six narrative stories written by pre-service teachers or new graduates were chosen to represent the current or contemporary issues in relation to the use of ICTs in educational settings.

Student Chapters in This Section

In this section, I reflect on the student chapters on the topic of ICT in classrooms. Students within this chapter not only show the use of most updated ICT use in their teaching, but also look into the complicated context in using these ICTs. They have triggered me to rethink and re-evaluate my own teaching as a teacher educator.

This section includes six very interesting chapters written by successful final-year pre-service teachers or new graduates. These six chapters cover different topics from perspectives on ICTs. As a teacher educator who has been teaching the use of ICTs in education for the last decade, I found these chapters provoking in their own ways, not only by representing the current trends or issues of using ICTs in classrooms, but also by connecting with my own teaching philosophies and practice. Thus, I would like to first introduce these chapters before I embed them into my own reflective practice.

In Chap. 17, **Petros Gerakios** investigate students and teachers' opinions and attitudes in using technologies in classroom settings. Petros had personally experienced both the positive and the negative in using computers in education, especially when he was a school student. Thus, he uses his observations to determine whether technologies are helpful or distracting tools in engaging students in learning. His findings are open to further discussion rather than being conclusive: While the majority

of students did engage with technologies, more than half also agreed that they got distracted by technologies. According to Petros, one possible further direction for discussion could be that teachers, including himself, need to continue finding appropriate strategies to use technologies.

Anna Bascomb's chapter is more focused on the changes or revolutions brought about as the result of the use of ICTs in secondary schools. She starts her chapter by narrating her very limited digital technology-related childhood because she grew up on a remote farm. She then moves onto discussing her positive experience with further encountering ICTs. In addition, her observation and conversation with other teachers confirmed her opinions that ICTs can enhance students' learning. Her chapter concludes with a confirmation that more use of ICTs should occur in classrooms in future.

Laura Checkley discusses the use of personal ICT devices for secondary school students by questioning their usefulness in students' learning. She observed that personal ICT devices being used by students distracted them away from "school content" to "non-school content" during her second placement, while in her third placement, she was refreshed by hearing completely different opinions on how ICTs can be used with positive results. At the end of her chapter, she pointed out that when students are already disengaged or bored, no matter whether they have access to technologies or not, they turn to access other content. She concludes that the solution depends on teachers providing better lessons to students.

The following chapter by **Dominic May** tries to find engaging strategies to teach students by using technologies. He noticed that while tablets have been widely used in classroom settings, currently teachers do not have enough training and knowledge in using them, in particular, the relevant pedagogical knowledge. This has a huge impact on achieving effective teaching and learning outcomes.

Matthew Froese's chapter considers a fresh new topic in ICT use: he investigated whether the use of virtual reality (VR) could engage students in history learning better than non-VR-assisted approaches. VR has only recently started to be used in classrooms, and therefore I found this chapter very timely. He investigated the topic by asking four students to compare their learning experiences between VR and written sources and concluded that VR provides high levels of engagement to students by providing a vivid visual and auditory experience for them.

In the last chapter in this section, **Emily Ford** takes the discussion from inside the classroom to outside it, questioning the experience of using mobile devices in early childhood mathematics learning and teaching. She focuses her attention on an early childhood play-based learning context. She investigated the positive experiences of using mobile devices, such as iPads, in enhancing students' knowledge in the early childhood education context.

Although the above six student chapters discussed different topics in the use of ICTs in educational contexts, they represent current pre-service teachers' experience

and opinions in this area and set up some useful perspectives for me to reflect on my own practice. Thus, I will next start my reflections by embedding some of their useful points into my own reflective practice.

The Rapidly Changing ICT World

Being a teacher educator, teaching ICTs is not easy: we are not only required to always keep ourselves updated with the fast-changing technologies, but also to grasp the related theories and knowledge and deliver them to the learners. I cannot recall how many times I repeated the following to my students at the beginning of the semester:

> This semester, let's learn together how to use existing technologies into learning and teaching settings, including schools and early childhood centres. However, please always keep in mind that we are not experts in the technology field, but please always keep our minds open and ready to learn new technologies.

ICTs are not new, but they have taken on new meaning and application as technology and society have changed. When mankind first started to use tools to help communicate, they were in a sense the beginnings of ICTs. The American Indians used drums and smoke signals to communicate across distance. The Chinese used to smoke and fire towers spread across the country to communicate information. When Samuel Morse invented the Morse code, a new medium of communication, electricity, was used. These days, they have some other "names" or "terminologies", such as "touch screen technologies", "mobile learning technologies", and "digital technologies".

I have been teaching ICTs in teacher education training programmes for at least a decade. During these years, ICTs have changed from big computer boxes to flat screen, to mobile learning, to virtual reality learning, and to voice-controlled learning. Consequently, the implementation of ICTs in teacher training courses has also gone through a lot of changes, from teaching pre-service teachers' basic computer skills to working with pre-service teachers on the selection of the best ICTs in teaching various curriculum areas.

The student chapters included in this section also discuss the changes they encountered. In Petros' chapter, he said: "not only has there been a dramatic change in equipment but also the efficiency of these new technologies". This "dramatic change" also happened to Anna Bascomb. Growing up in a country town with very limited access to digital technologies, she was more used to playing sports, riding motorbikes, or exploring their 30,000-acre farm instead of needing digital technologies to "survive". Differently, Laura Checkley seems to be a more comfortable or natural user of technologies: "I would not have been able to have achieved either of my degrees … without the use of Information Communication Technology". I feel I can reflect on all of their feeling and opinions towards the use of technologies in education: we unavoidably have to admit that ICTs are changing "too fast" in our daily

life as well as in classroom teaching; however, at the same time we also love the benefits and values they are bringing to us.

Operating effectively in this changing world involves new knowledge, knowing, and know-how (Vorster and Quinn 2015); teaching ICTs also involves teacher educators coming to grips with existing histories, memories, and other narratives, if in a new context (Peseta and Barrie 2017). Let me reflect on this change in more detail in my teaching practice. My teaching focus has moved swiftly across the use of emails to social Webs, from the use of mobile messages to mobile learning, from understanding online learning to develop online learning communities, from working with the first government-funded laptops for students to the use of virtual reality technologies in classrooms. This progress towards knowledge and understanding (Perkins 1997) of new concept and context includes ICTs teachers' previous experience, successes, and desires both in expected and in unexpected ways. In 2017, a new curriculum "digital technologies" was introduced in the Australian Curriculum for school students. No doubt, these changes require pre-service teachers, and teachers after graduation, to not only have adequate knowledge and skills about ICTs but also to keep updated with newly emerging ICTs and how to use them in their teaching. This new requirement spans both general capabilities and specific subject areas of the Australian Curriculum, and it is a mandatory component of the Australian Professional Standards for Teachers.

Therefore, teacher educators are required to provide opportunities for pre-service teachers who have a background in teaching to develop and deepen their understanding of the critical role that digital technologies have in the twenty-first-century education while also providing opportunities for them to further develop their ICT skills. In the end, pre-service teachers will need to understand the fundamental concepts relating to established and emerging theories of ICT-based pedagogy and consider plausible futures that might help signal and guide the kinds of responses needed by skilled educators into the future. We pay close attention to the processes in our working context and make a substantial scholarly effort to address, investigate, theorise, and make sense of the underlying unpinning of this practice.

Engagement and Enjoyment in Using ICTs

Since I started teaching, I found students are always easily engaged in using ICTs. The colourful interface, different animations, and recently all sorts of interactive use of screens can all contribute to high engagement and enjoyment in using ICTs.

This engagement is mentioned in Anna's chapter. In her chapter, ICTs are no longer a tool only accessible in classrooms, and they have also revolutionised the way teachers teach in the classrooms. The contemporary ICT tools include computers, the Internet, iPads, and virtual reality in various educational settings. New technologies are developing non-stop, they continue to grow and change, and it is difficult to predict how digital technology will expand and alter over time. However, as a teacher educator, I have also noticed the level of engagement is also changing

over the years. Ten years ago, the interaction between young children and ICTs was deemed impossible. Most of the technologies at that time were not designed for young children, such as babies, toddlers, and pre-schoolers. No wonder that when I was teaching pre-service teachers in junior primary schools, I noticed there was a "gap" in the possible use of different ICTs among young children. In 2008, I tried to use Wii games to reduce young children's obesity rates and improve their fitness and further their well-being. While piloting the study, I eventually noticed that Wii games were not designed properly for young children: the box was too big and made no sense to them.

The situation started to change with the popular use of iPad and other touch screen technology since 2009. I started to notice that the gestural interface can easily be used and engaged by young children. Classroom practitioners started to show their interest in using this technology, and even now many classrooms and schools have already purchased it for daily learning and teaching. Instead of watching a big screen or sharing a mouse with a group of other children, young children can use an iPad easily. They can use fingers to navigate their learning, and knowledge is just a swipe away. Emily in her chapter discussed how iPads could satisfy the individual learning needs of different children.

Interestingly, all the student chapters mentioned that students in all age group enjoyed using ICT tools. Enjoyment refers to a "pleasurable effective response to a stimulus" (Green et al. 2004). There are strong correlations between high engagement and enjoyment. Therefore, the use of ICT tools to engage children also has strong links to children's sense of fun. At the same time, the next discussion point seems never to go away: Are we focused only on students' engagement and enjoyment? Are they really learning any new skills while playing? Are ICTs distraction or engagement tools?

Distraction or Engagement

When I was teaching ICTs in education in teaching training courses, one of the hottest debates about the use of ICTs was whether ICT is a distraction or an engagement tool in the learning and teaching process. In the new digital age, educators have access to and use a wider range of technological devices to enhance and build on children's experiences and develop their own pedagogical practices (Cholker 2011); however, not all educators welcome the integration of ICTs in education (Blackwell et al. 2013; Ficken 2013). It is therefore not surprising that Laura studied the use of personal ICT tools for year 9 students. In her journal, she noticed that students used laptops on browsing websites instead of focusing on their work. Anna also mentioned the ways students misused ICTs in learning. Petros' chapter also investigated ICT's effects on students learning in a classroom setting. He described his view of ICTs as a "love–hate" relationship with the technology. In his investigation, he also found that his students were either engaged in learning with the use of ICTs or distracted by them. However, Petros also found the students who were disengaged with learning

were also not focused without the use of ICTs. Those students were disengaged no matter whether ICTs were used or not.

Goldspink et al. (2008) explain that engagement is the level of participation and intrinsic interest that a student displays, and involves both behaviours (such as persistence, effort, attention) and attitudes (such as motivation, positive learning values, enthusiasm, interest, and pride in success). Measuring learners' engagement during environmental interactions allows the researcher to measure child outcomes as well as programme quality (Kishida and Kemp 2006). Another term for engagement is involvement. Vygotsky (1978) explains that a person who is totally involved in their activity works to the limits of their abilities within their zone of proximal development (ZPD). Laevers (2000) argues that involvement only occurs for children when the activity meets the capabilities of the student. One of the primary distinctions within appropriate pedagogical tools for learning is that it is the content that matters, not necessarily the manner in which it is delivered. Content is mediated in the manner educators utilise digital and non-digital tools for education purposes; accordingly, the inappropriate use of digital technologies will not prove effective as a teaching tool (NAEYC and Fred Rogers Centre 2012). Therefore, educators must consider the manner in which they can utilise digital technologies for children's learning, communication, and engagement (Blackwell et al. 2013; Lee 2015; Rosen and Jaruszewicz 2009).

Digital Age or Post-digital Age?

Children who grow up in this digital age are used to living in a world of technologies or the post-digital age. Here, I do not just mean generation X, Y, or Z; I am trying to discuss the "after Z" generations. Federal government initiatives such as the National Innovation and Science Agenda highlight how Australian should be "embracing the digital age" and that investing resources into children's digital skills will ensure that the "next generation of students has the skills needed for the workforce of the future … ensuring Australia's future prosperity and competitiveness on the international stage" (Commonwealth of Australia 2016).

In order to make sure we are providing good services and training for future teachers, we teacher educators will need to possess advanced technical skills and relevant pedagogical skills. About ten years ago, I was involved in a research project about current school teachers or educators' opinions about their own technical skills. It was found they were showing lack of confidence in using the digital technologies. However, the following pre-service teachers' chapters show that our current school teachers and our future teachers are a lot of more confident and competent in using all the technologies. For example, Dominic's chapter stated he was quite confident and a very experienced technology user. When I turn my eyes back to the teacher educators in higher education institutions, the situation is not the same. A lot of current university educators are not used to online learning or not competent in using online learning technologies, and some of them show bias or reluctance in trying or

using new technologies. I believe, however, this situation will have to change to suit the needs of the new generation and the post-digital age.

In addition, during my time as a pre-service teacher I never imagined myself using iPads or VR in classrooms, and now in this digital age, I accordingly cannot predict what other new technologies are to become a "popular" tool to be used in learning and teaching in different educational settings. I am, however, very certain that the use of technologies will always be a focus on the study of pedagogy. Nevertheless, with all these developments and new technologies, some questions about the use of ICTs will always exist in teaching and learning.

Conclusion

Throughout the last decade, as a teacher educator, I have experienced changes in digital devices and the digital capabilities of children, curriculum, and pedagogies in ICTs in education. The Gonski (2018) Report Version 2.0 discussed how improving outcomes is critical to future economic and social opportunity, and equipping every student to grow and succeed in a changing world is one of the strategies for achieving educational excellence in Australian schools. However, when I am trying to be a reflective teacher on the use of ICT in classrooms, I found there was a "lack" of theoretical foundations through which I could reflect on my practice. While there are a few frameworks to comprehend my practice, such as the Technological Pedagogical Content Knowledge [TPACK] framework (Mishra and Koehler 2006), I found limited theoretical frames from which to analyse my practice. Furthermore, there is a need to keep updated with recent developments in educational technologies, forcing educators to keep surging ahead and not necessarily taking the time to slow down and think deeper regarding children's ICT literacy development.

As a reflective teacher, I am and will always be learning to have a fuller understanding of ICTs in education, and what our pre-service teachers' role is concerning both teaching about and using ICTs in education. This process is not stable. Instead, it is dynamic. To improve my ability to be reflective and self-evaluating, I must understand I will not be equipped with all the technical skills and knowledge needed for the next decade or two, but with the right attitudes towards the use of ICTs and learning "on-the-job", I am developing my own knowledge and understanding as always. This learning process is not easy for many ICTs teacher educators. It requires us to be risk takers, experimental, and non-biased in engaging in learning and teaching. It is part of being a reflective teacher. I am sure this will be an exciting pathway for all of us.

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Chapter 17
Education in the Computer Age: Information Technology and Its Effects on Student Learning in a Classroom Setting

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Abstract   After both negative and positive experiences with computers in my own schooling, I decided to investigate attitudes among students and teachers towards the use of technology in the classroom. Most students agreed that technology helped them with their work, but at the same time, more than half also tended to agree that they get distracted by using technology during the class. From observation, I found that most students remained engaged in both a technology and a non-technology-based lesson, aside from two students who showed signs of disengagement in both. From looking at assessment results, I found that academically elite students achieved well in both technology and non-technology-based assessments, but that students in a class of varying ability tended to do better with the technology-based assessment, which suggested that technological devices can be an effective equaliser for students. All teachers except one felt that using technology is either essential or at least a useful tool when used effectively in conjunction with other teaching methods.

Journal entry, 16 August 2014, Darwin, Northern Territory:

> One thing that I learned from today's lesson was using the appropriate strategies in making sure students are on task when using technology during class. In order for students to use technology effectively, it is essential that the teacher be able to monitor the students and the devices they are using. For instance, students used computers today in order to work on their memoirs. Some of the students had their computers facing in the other direction from where I was sitting. Funnily enough, every time I would walk over to that group of students they would quickly change from what they were looking at to the document that they were supposed to be working on. However, the documents that they were supposed to be working on were always blank. So I made the decision to sit at the back of the class, that way I had a clear view of their computer screens. By doing this, students got back on task and made a more productive effort.

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Introduction

Three years on and four placements later, I am still fighting the same battle. Finding a way to maximise the use of technology without it being a major distraction in the classroom has been a common theme throughout my placements and is something that I am still working on.

From my inception as a preschool student in the late nineties up until today's times, the technology used in classrooms has changed on a dramatic scale. Not only has there been a dramatic change in equipment, but also the efficiency of these new technologies. For instance, overhead projectors, an outdated and heavy machine that is limited to showing one slide at a time, have now been replaced by interactive whiteboards (smart boards), which are multifaceted and quicker to run.

During my time as a pre-service teacher and classroom tutor, I have noticed the ever-increasing reliance on technology in schools; in particular, the effects it has had on both the teaching and the learning processes in a classroom. There is no doubt that there are both positives and negatives when it comes to technology in an educational setting; however, the question is whether the negatives outweigh the positives. If so, then the role of technology in schools must be re-evaluated. With technology being a central part of our lives, there is no running away from this dilemma, but rather teachers and administrators alike must embrace this issue and find ways to overcome it.

In this study, I will investigate whether the use of technology in classrooms has a negative or positive effect on student learning. Specifically, I will examine the use of mainstream and instructional technology and their effects on student engagement and academic achievement.

Who Was I?

My love–hate relationship with technology can be pinpointed to my time as a primary school student. I still vividly remember in year 3 when they introduced desktop computers in the school. At that time, desktop computers were about the size of mini-fridges and were very expensive. They even had a special room for these computers, which could only be accessed by booking in advance. Then, the principal made it compulsory for every class to undertake at least one session a week on the computers.

Every fourth lesson on a Thursday, our classroom teacher, Ms. D, would walk us over to the computer laboratory where we would be handed over to Mr. N, the specialist IT teacher, for our weekly lesson. Our hourly lesson would mostly consist of touch-typing activities and familiarising ourselves with programmes such as Microsoft Word and PowerPoint. Most of my classmates loved going to the computer laboratory and even thrived in these lessons, whereas for me, well I absolutely hated it. I did not adapt well to the new skill sets presented to me and thus would lag behind the others.

My incompetency could somewhat be due to my unfamiliarity with computers. Growing up in a low socio-economic household, owning a computer was not a viable option for obvious reasons. In fact, our household did not own a desktop until I was eleven years old. To make things even worse, Mr. N was a no-nonsense sort of guy who did not tolerate incompetency. Thus, I was at the end of some serious scoldings from him.

The negative experiences of my primary school years made me mistrustful of technology. However, my outlook on technology changed when I reached middle school. Increasing numbers of computers in Australian schools during the 2000s also saw a spike in students' computer skills (Howard and Mozejko 2015). I, for one, was a beneficiary of this experience. As I became more familiar and better with these devices, so did my fondness for them increase. The computer soon became my choice of device and still is up until this day.

Who Am I Now?

I investigated this topic among students and teachers to gauge their attitudes towards technology use in the classroom. Most of the students agreed that they feel technology helps them with their work. However, at the same time, more than half of the students I talked with either agreed or somewhat agreed that they get distracted using technology during the class.

Of this much, I am sure that although technological devices are an effective tool to get students to work and be engaged with the lesson, they also can hinder students from doing their work as they can cause a distraction. I observed students' engagement over the course of two lessons in 35-min intervals. One lesson was technology-based, and the other was non-technology-based. Overall, the majority of the students exhibited engaging behaviour in both the technology- and the non-technology-based lessons. There were two students who showed signs of disengagement. However, the environment did not make a difference in their behaviour, as the two students were consistently disengaged in both lessons. In this case, the environment or the devices being used in the lesson were not to blame, but rather that appropriate strategies need to be put in place in order to achieve complete engagement from all students.

I then looked into students' assessment results comparing classes by using technologies or not using technologies. In an academically elite class, students are highly motivated to learn and take pride in achieving good results. Therefore, this group of students achieved well in both technology- and non-technology-based assessments. Differently, most of the students in the class of varying abilities received a higher grade for the technology-based assessment compared to the non-technology-based assessment. Thus, it can be concluded that the use of technological devices in this classroom can be an effective equaliser for students and can help students to achieve better academic results.

The teachers I have been talking to were teaching in English, Humanities, Mathematics, Special Education and Language faculties. All of the participants incorporate

some sorts of technological devices in their classrooms, whether it is smart boards for documentaries, laptops for research and assignments, or smartphones and iPads for classroom activities. Interestingly, some teachers felt that technology is very essential to their teaching and are currently heavily reliant on technological devices for their lessons. Other teachers were of the opinion that technology is a useful tool when used effectively in conjunction with other teaching methods. Only one teacher felt that technology plays little importance in connection with her teaching methods.

Of This Much I Am Sure

During my time as a tutor and pre-service teacher, I have seen both the negatives and the positives of incorporating technology into the classroom. One major positive of technology is its potential to increase student independence, engagement and communication. Technology is an effective resource to use to achieve these potential benefits as it provides immediate access to information and allows for increased hands-on learning (Houston et al. 2017).

Often, enhanced student engagement will positively correlate to an increase in academic achievement. Not only can technology be an effective tool to motivate students to do their work, but it also acts as an equaliser for students who struggle to achieve academically. In particular, it has been proven that using technological devices can assist students with learning disabilities in their ability to learn and achieve (Obiakor et al. 2010).

However, technological devices are only conducive to learning if the instruction has been carefully designed to make optimal use of the technology (Houston et al. 2017). The way teachers use technology can be determined by how technologically competent they are (Wenglinsky 1998). I find this point most relevant to older teachers who are more often than not less technologically savvy than younger teachers. Even though older teachers do not necessarily know how to use devices such as laptops, iPads and smart boards, they still incorporate these devices into their lessons as they believe it will help students to do their work. At the same time, there is a constant temptation for students to use technological devices for activities that are non-school-related. There are always those students who will use their time on technological devices to play games or check their social media when presented with the chance. Despite the negatives, I would find it very difficult without the use of technology to conduct my lessons. Whether it be displaying notes on the smart board or using laptops for students to complete their assignments, much of what I do in the classroom, incorporates some form of technology.

Conclusion

The paper was to investigate whether the use of technology in classrooms has a negative or a positive effect on student learning, specifically the use of mainstream and instructional technology and their effects on student engagement and academic achievement. After a series of investigations, I found that technological devices can be a distraction to students but at the same time can also help students to do their work. From a teacher's perspective, technological devices can only be useful when they are used as a tool in conjunction with other teaching methods. Although technology-based lessons can somewhat be of more benefit in increasing student engagement, the evidence is not sufficient enough for this statement to be conclusive. After a review of students' grades, it was concluded that technology could be an effective equaliser for students with learning difficulties. However, the use of technology does not make much of a difference with students who are considered highly academic.

To conclude, technology and technological devices such as laptops, smart boards and iPads have become intertwined in today's classrooms. The future will continue to be shaped by technology, so not using it will more than definitely set up students to fail. It is simply a matter of finding the appropriate strategies for using these devices that best shape both teaching and learning practices.

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Chapter 18
Has ICT Revolutionized the Way that We Teach in Secondary Schools?

Anna Bascomb

Abstract Cultural change is an inevitable result of new information and communication technologies (ICT) that enable access to a rapidly expanding range of information sources and textual forms. This paper shares my reflections on life before and after the ICT revolution. My memories of a happy childhood spent on a 30,000-acre farm emphasized the joy of spending time outdoors with little reliance on communication technologies. This is in stark contrast to the demands of twenty-first-century education that affirms the ability to use ICT confidently from a young age as an essential core skill. Teachers are now expected to rely heavily on ICT for teaching and learning to maximize student engagement and to develop students' ICT proficiency. Although ICT has revolutionized the way information is accessed and shared in the classroom, discussions with teachers and students suggest that it is also important to consider both the advantages and disadvantages of ICT use.

Journal entry, March 2005. Extract from Year 8 student Anna Bascomb.

> As we opened our French homework, I saw the worksheet that we were supposed to finish in the boarding house. It was a fairly simple task: translation of words from the textbook glossary. The list was long and my friend, Lara, insisted that we get a start on it straight away. It was not long before I came up with a brilliant idea. We would use our school laptops and find an online translating site to avoid having to search the whole textbook for words that the internet could translate for us. It wasn't long before I finished, and Lara was only just making a dent on hers after she insisted that she do it manually rather than cheat. We handed the task sheets in and received them back from Madame Vert the next day. As expected, my worksheet was covered with ticks the whole way down the page. I checked the bottom to see the compliment that I was sure would be written for me. To my horror, the comment was not what I was expecting: "Great work, Anna, but all of these words have been translated into Spanish, not French." All I could think was that this wouldn't have happened if I didn't have a laptop.

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My Personal Background

Growing up, I have certainly had a mixed bag of experiences. I grew up on a sheep station in South Australia that was 45 km from our nearest town, which had a population of 200 people. I grew up in a large family and was the youngest of seven children, with approximately 3000 pet sheep at one time. While growing up, we had no mobile phones, no computers and we also went without television. Being on a station, we did not notice that we were living without these technologies as we had never lived with them.

My first three years of schooling were undertaken by correspondence through School of the Air. My two brothers and I would take our lessons over a two-way radio and would speak to our teachers based in Port Augusta and the rest of the students who were spread all over the state. After Year 2, we began going to our local school. Our parents would have to drive us 20 km to catch the school bus, which would take us the rest of the way to our local town. While I was at the school, there was an average of around 60 students from reception to Year 12.

At the age of 12, I was sent to boarding school in Adelaide, where I finished the final five years of my high school education. I loved going away to school and found that it really opened my eyes to a life I had never experienced. I became more and more confident in myself and gained many leadership skills in my years there. Over my five years at boarding school, I became the netball captain during Year 12, I was the tennis captain for four years and was a school prefect during my final year.

Who Did I Think I Was?

Growing up without technology never had a negative impact on my life as a young girl. If anything, it had a positive impact on the way that we grew up. We lived on a farm with 30,000 acres to explore and would have always chosen that over sitting in front of a computer or an iPad. We would spend our afternoons playing sport, riding motorbikes and going on adventures that kids now would never even consider. We would have jumped at the opportunity to go swimming in the dam or to go yabby catching after school rather than use technology. During School of the Air, we thought it was amazing that we could speak to teachers over a two-way radio and get our education while staying on the farm each day.

We would colour in our books and create crafts rather than use an app to colour in with. We would practise our handwriting in writing books rather than letting the computer autocorrect every spelling error that we ever made. I am only 24 now, but I still remember the day that our parents brought home a record player and we thought it was the best thing since sliced bread. Alternatively, I remember the day that they brought home a PC, which we were allowed to use for an hour a week to play with clip art. We loved all of these new technologies, but we did not live for them like we did the fresh air of the farm. If we had a choice between them or helping dad move

sheep, we would always choose the latter. Technology and ICT were never on our radar as kids, and I think that was because we were so used to not having them, that we were able to survive without them. Would they have revolutionized the way that we learned at school? Probably. However, we did not think that we would need them in order to create a better education for ourselves. As far as we were concerned, we were too busy learning life skills like how to drive a manual car at the age of ten. When I ask my mum why we did not have any of these devices, she says that she did not want us growing up addicted to looking at screens and not being able to enjoy the simpler things in life. For this, my sibling and I will always be grateful, and we often say that we will be the same when we have our own children.

Who Do I Think I Am Now?

Having grown up without the use of ICT, it is scary to think how much I have come to rely on it as a pre-service teacher. Throughout each of my placements, I strive to make all of the lessons that I teach as enjoyable as possible for the students. As a result, I have turned to ICT in order to fulfil that goal. The use of ICT has completely changed the way that I teach and the way that students are able to learn when they are in my classes. My approach to teaching is extremely visual, as I believe it makes the most of each student's potential. I also believe that visual learning suits students who experience learning difficulties.

Nearly every lesson that I teach would include some components of ICT, whether it be laptop use, printers, photocopiers and so on. Often, I will search the Internet to look for teacher resources that I think will benefit myself and my students. ICT certainly makes my job easier and completely changes the way that I am able to deliver lessons to each of the students. The reason that I use so much ICT is that I believe that it enhances the lesson and makes learning more enjoyable for the students. Not only this, but students are able to get a first-hand viewing from professionals in each of the subject areas. Students are able to learn from other educators, which mixes it up for them and creates interest.

This Much I Know for Sure

Of this much I am sure: It is very clear that teachers and students both agree that the use of ICT has revolutionized the way that they teach and learn in the classroom. Cheung (2017) writes that information and communication technology (ICT) can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers' professional development and more efficient education management, governance and administration.

I investigated the opinions of both teachers and students about the impact that ICT use has in schools. The results were overwhelmingly one-sided, with the majority

supporting the use of ICT. However, it was noted that many of the students did not understand that ICT use included so many different aspects of their learning. For example, students did not understand that a printer was a part of ICT and could not comprehend that schools once went without them. Also, when having conversations with the students, they would tell me that they would be completely bored if there were no ICT use within the classroom. The majority of students said they would regularly use ICT devices once they got home from school, or before going to bed.

It was interesting to find that all the teachers I talked to said that they believed ICT use had revolutionized the way that they teach in the classroom, and all of them used ICT devices at least once per day. They all also told me that ICT enhanced their students' learning. As the results were so one-sided, I decided to talk to some older teachers who had been teaching for longer and had taught when not all of the ICT devices were readily available. Surprisingly, the results were still the same and were not swayed by the age difference. Many teachers verbalized that the only disadvantage with ICT devices is where there is some sort of error that prevents teachers from being able to use them. These issues included laptops crashing, power outages, simple failure to work, network errors and so on.

The results were also one-sided with students. All the students said that they enjoyed the use of ICT in the classroom. The majority of the students said that they think ICT use opens their eyes to the rest of the world. When asked about this, students said that they thought this applied mainly to geography, where they could experience what another country is like without leaving the classroom. Best (2011) explains that the range of ICT tools and Internet resources available to enhance geographical learning is bewildering—not to mention the wealth of software programs that can enrich schools' virtual learning environments.

We are now able to access every textbook made in the past ten years online and no longer have to wait for books to be ready or for them to get posted. McKnight (n.d.) writes that the way that we think of textbooks is completely changing. It is no longer limited to merely text and pictures. Today's textbooks often have web-based sites that include assessments, animations, additional materials, videos and other materials to support the learning of new content. This has been a complete game changer in how students are able to learn and how teachers are able to deliver content.

Conclusion

While my education began in the simplest way possible, it ended at the other end of the spectrum: a laptop school where everything was done online. Looking back, I realize that my upbringing was not the same as what the majority of students now experience, but it has shaped the way I live my life. I acknowledge that I have grown up with the least amount of technology possible, but I also understand that I need it in order to become the best teacher possible. I believe that I could go without it if I needed to; however, I know that it brings out the best in my teaching and the way that students learn. I use ICT in every possible way that I believe will enhance my

teaching. Moreover, to be honest, I probably have become too reliant on it. We can now visit another country at our fingertips and see what every street in the world looks like. We have the incredible power to be able to transport students into their subjects and teach them with resources that we never thought possible. What makes me most excited about ICT is the fact that, in twenty years, it is likely that it will be twice as good as it is now.

Undertaking this assignment has helped me to understand how teachers use ICT devices and the impact that it has on their teaching. I have always relied on ICT, which I figured came down to the fact that I was born into a generation where it was readily available. Through this study, I found that different generations of teachers have utilized ICT and found it effective in the classroom. The research also helped me to understand how students think they learn best. It was overwhelming to find that students all found that ICT helps them learn and has an impact on the learning experience.

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Chapter 19
Personal ICT Devices for Year 9 Students: A Tool of Engagement or Distraction?

Laura Catherine Checkley

Abstract I begin this paper by reflecting on how vital the use of ICT was in my own tertiary studies, in particular, online learning. I was thus excited to observe the use of ICT in my practicum experiences, but the first two of these led me to question its usefulness, particularly because of the issue of students using their devices to access "non-school content" during lesson time. However, my third placement offered a glimpse of the positive use of ICT applications which gave me a renewed belief in the possibilities of ICT enhancing learning and giving me a renewed feeling of excitement about the possibilities of incorporating ICT into my future teaching role. In following up on this, one thing I came to realise was that students often access inappropriate online content simply because they are bored with lessons. Thus their inappropriate use of ICT does not really represent disengagement, but rather a cure for disengagement, and the teacher's solution should be to provide better lessons. I also came to appreciate that such multitasking seems natural to Generation Z students, if not to their teachers.

Journal entry, Thursday 5th May 2016, during my first teaching placement.

> Looking around the room, it seemed that almost none of the group was on task for more than 60 seconds at a time. The laptops continued to be a distraction for students, as many spent a majority of their time on other websites, switching their screen back to the topic if they thought the teacher might see them on something else. However, hiding their actions seemed far more about avoiding the irritation of being reprimanded than genuine worry about getting into trouble.

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Introduction

In three week's time, I will finish my last teaching placement and complete my university study towards becoming a teacher. I am very keen for this time to pass quickly so that I can take the next step in my career, yet I am a little nervous. This will not be my first graduation from university, as I finished a Bachelor of Management degree nearly four years ago. This time I feel that there is much more pressure to find a suitable job and "start" my career. I want to be able to prove to myself (and everyone else) that I made the right choice in returning to study education in my mid-twenties.

Although this worry is still nagging at the back of my mind, I have been trying to remind myself that despite it taking me a little longer to decide on and achieve, I have truly found a role that I love and that feels like the right fit for me. At this point, I have only taught a limited number of students throughout my placements, but I already know that the joy and pride I have felt when students have succeeded makes all the time planning, marking and worrying worthwhile.

I have always had a love of learning, and I value education. I was lucky to have some inspiring teachers during high school with whom I formed good relationships. I attended a small school, with roughly twenty students in my Year 12 class. The time and effort that many of my teachers put into helping us during Year 12 are exactly what I would like to emulate in my future as a teacher. I know that if it was not for their support, I would never have achieved the grades I did during my final year or had the confidence to commit to studying two different degrees online, as an external student a little later in life.

Whilst I did enjoy school, I also loved working, and I started my first retail job when I was 15. When I finished high school, I was not sure what I wanted to do, but having received a high Tertiary Entrance Rank (TER), I applied for Law. However, I was also offered a job as a retail store manager and in the end, decided to defer study and take the job. Initially, I intended to only take a gap year, in which I would save money and then go to university. However, I enjoyed my work so much that after a year, leaving work did not really feel like an option. It was then that I decided I would study something online. Being only 2009, the online study was not the popular option that it is now and courses that were offered externally were far more limited. I could not study Law as an external student, so I decided that Business at the University of South Australia seem like the best fit with my job. I completed my degree over four years instead of three whilst working full time as a retail manager.

I was promoted several times during this period and also moved between a couple of different fashion retailers before I finished university. Whilst marketing and visual merchandising interested me greatly, and I was given the option of moving to Sydney to work in one of the company's head offices, it did not feel like this was the right path for me. After reflecting on my favourite aspects of management, I realised that I also really loved training and development of staff and that maybe this was an area to pursue on completion of my degree. I was lucky to find a graduate position as a Course Advisor with the Australian Institute of Business. This role allowed me

to combine my sales skills with the opportunity to advise students looking to study business. After one year working with students, I finally knew that the next step for me was to become a teacher. This decision again led me to study as an external student at Charles Darwin University.

I would not have been able to have achieved either of my degrees externally without the use of information communication technology (ICT). Having access to online study has given me the opportunity to learn and become a professional whilst also working and gaining other valuable life experiences at the same time. Honestly, if it was not for the options available through ICT, I may not have been on this professional journey or even realised that I wanted to be a teacher.

Who Was I?

As I have such a personal appreciation for the value of ICT in education, when I started my first teaching placement a year ago, I was excited to see that the school had a 1:1 ratio of laptops for students. This was also the case for my following two placements. When I was at school, students having laptops was rare, and they were never utilised as part of a lesson. I was keen to see how teachers had changed lesson structures, and how students could find value through online applications and tools, rather than simply word processing and Internet research. I figured that the options of online education would become far more accessible for students in later life, as it had for me if ICT was valued in their high school education as well.

However, after spending time in two schools, it became apparent that ICT did not really seem to be the tool of engagement that I expected. It was more a problem of distraction. The instruction "put your laptops away" at the start of a lesson became quite familiar, and when students did have their laptops out, I would often observe them gaming, shopping or talking to other students whilst the teacher was at the front conducting the lesson. This seemed to be primarily the case with Year 9 students, who appeared to lack the maturity to resist the temptation of ICT. I was disappointed and soon took on the same view as my mentors that ICT was a necessary evil, which had to be included in lessons to meet the cross-curriculum capabilities but was really a nuisance and a way for students to misbehave.

Who Am I Now?

However, through the process of writing this professional learning journey, commencing in Assignment 1 and concluding with this reflective report, my thoughts on the issue of ICT distraction have changed. The teaching practices of the school I am at for my current placement have also helped in developing my viewpoint. Students at this school still have their own personal SurfacePro tablets, but the teachers value their use far more than at my previous two schools. All staff plan and deliver much

of their lesson content through Microsoft OneNote application, which allows them to present lesson content, digital worksheets, presentations, videos from YouTube and website links to the students through a shared programme. Students can complete work in their own version of the teacher's OneNote page, which is immediately visible online to the teacher so that formative exercises can be checked without the need to hand up workbooks. OneNote also means that students do not need to keep track of sheets and that teachers have a place to provide students with helpful guides, such as vocabulary, sentence starters, formulas and templates which may otherwise be lost or forgotten. The students also seem to respond to this tool, with many of them choosing to work in OneNote rather than handwriting notes in their books. With their SurfacePros, they can either type or write with a stylus pen. However, despite ICT being more integrated into lessons at this school, it has been apparent that many students do still become distracted by other functions on their tablets and access non-lesson content when they think teachers will not notice.

Evidence of this was presented at one of the professional development (PD) days that I attended at my placement recently when teachers were discussing student behaviour. A recent example was given of a student who is a consistent A and B grade achiever, who had been found to be online shopping and checking American basketball scores for all but 17 min of the school day. This information had been obtained from tracking his Internet history. I found that about 95% of my current Year 9 admitted to accessing non-lesson work during class, occasionally or during most lessons. The most popular non-school content that they access were games and online shopping. When questioned about what a teacher could do to inspire them not to use their tablet for non-lesson work during class, over half of my students suggested teachers make lessons more fun and interactive.

Of This Much I Am Sure

Taneja et al. (2015, p. 141) suggest that students are often influenced to engage in what they term as "cyber-slacking", due to "student consumerism, escapism, lack of attention, … and distraction by others' cyber-slacking behavior". Although the authors' findings are based on research into the actions of college students, when comparing these results to my own investigation, I believe these influences are still relevant to Year 9s. The idea of student consumerism is closely linked with the fact that students themselves have identified online shopping and sports as the main types of non-lesson content that they access. Similarly, when asked why they usually access non-lesson content in class, the most popular response was boredom. This aligns with the author's proposition that students use cyber slacking as a way of escaping the lesson through entertainment, due to students lacking the ability to focus their attention for extended periods of time. These results would suggest that students most often access non-lesson content during classes when they have already disengaged from the lesson. Therefore, their distraction is not caused by having access to laptops but instead their behaviour is a remedy for the lack of focus that they are already feeling.

This notion is supported in the results found when students were asked which lessons they would never feel tempted to access non-school content. Answers to this question included Physical Education, Home Economics and Music, which are arguably practical lessons where students are likely to be highly engaged in the activity. Moreover, students say that they are most likely to turn to games and Internet surfing during the subject of religion, which through observation seems to be the subject that most students feel is the least relevant to them.

From this evidence, it appears that if a teacher can engage all students for the entirety of a lesson, even with access to ICT students will be less likely to resort to content that they should not be viewing. Whilst this might be a simple recommendation, it is certainly not an easy one. Although student engagement is one of the main things, I try to achieve in my lessons when juggling students of varying cultures, ability levels, personalities, and learning styles, keeping all of them engaged all the time is an almost impossible task, which I have definitely not yet mastered.

Therefore, it is tempting to simply resort to the "laptops away" mentality to ensure students are not looking at the wrong content. However, this method of management does not ensure that students will not just become distracted by something else, and it does not help to teach students "social and ethical protocols of using ICT" in our increasingly "knowledge-based … moreover, technologically sophisticated society" (Australian Curriculum n.d.). By incorporating ICT in lessons, the writers of the Australian Curriculum (n.d.) contend that students will become capable of using technologies in an appropriate manner.

From my investigation, it would seem that there is a conflict between students' and teachers' perceptions of appropriate behaviour. Students were well aware that accessing non-lesson work during class time is the wrong thing to do according to their teachers, but they felt that it actually should be considered acceptable if they are still able to complete their assignments on time. For me, this was one of the most interesting results. According to Davies and Eynon (2013), teachers do need to consider that current Year 9 students have grown up in a technologically advancing era, which has taught them that technology is useful for a whole host of functions that can be performed at the same time. This may clash with the more "traditional and simplistic" view that many of today's teachers may have of ICT. Davies and Eynon (2013) further suggest that the ability to multitask with ICT is something that Generation Z has been taught from childhood and has become an instinctive behaviour by adolescence. Therefore, changing students' opinions about the appropriateness of "multi-tasking" during lessons may be a considerably difficult task. Chatham (2015) also addresses this notion, stating that social media and technology is heavily ingrained in students by this age. He proposes that teachers should try to accept this but also encourage students to discover for themselves that ICT is useful in varying contexts as it is a "powerful learning tool" (p. 8) for "communication, collaboration, productivity and organisation' not only a source of 'social media, games and videos'" (p. 2).

Conclusion

After investigating this topic for my professional learning journey and working at my current placement with the OneNote application, I have a renewed excitement about incorporating ICT into my future lessons. Although I do not think it will always be appropriate to allow multitasking between content during lessons, I can appreciate that this is something that Generation Z students feel is normal and that they do not necessarily engage with external content as only a way to "cyber-slack". When I look at my past experiences, I too have used ICT to allow me to "multi-task" between education and work, so this mentality really is something I can understand. Although my classroom expectations for appropriate use are still developing, and I would prefer to keep my students engaged with lesson content, I now believe that many students are closer than I realised, to valuing the opportunities provided by ICT.

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Chapter 20
Approaches to Teaching on the Tablet: Why Australian Public Schools Might not Be Rushing to Introduce Tablet Computing to Classrooms

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Abstract Technology was influential in my childhood and early career, and thus on professional placement, I expected to see novel and innovative ways to engage students in learning via technology: this was not to be the case. I decided to investigate the barriers to integrating tablet computers into education and the educational value of integration. From conversations with teachers, it was apparent that the majority of them were indeed using tablet computers. They indicated that tablet computers were an important component of inquiry-based learning using a collaborative approach. From my observation of teachers' use of tablet computers with students, it was apparent that they lacked the pedagogical expertise and appropriate applications to use the tools to full potential.

Journal entry, 7 May 2015; 2 November 2015:

> This morning two of the most difficult and distracting students in the class, C and B, were given iPads seemingly to distract them and allow the other students to work in a more focused way on their morning maths and writing tasks. Interestingly, I observed this pattern a number of times during my first placement with the Year 1 class I was placed with. There also appears to be a policy in the school where the more challenging students are rewarded for "on-task" behaviour with twenty-minute iPad reward sessions. (see Marsh et al. 2014, p. 212)

> Today Lisa suggested that I might like to include digital technology in the teaching of my festivals module. This was the first time that digital technology had been suggested as being available for use in our class. I felt intimidated by the concept of including technology in my teaching module as I had limited knowledge of their use and had seen no teaching practices upon which I felt I could model my lessons and pedagogy. In retrospect, using the iPads available at the school might have been a good approach.

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Introduction

My formative years were spent moving from country to country as my English father moved across IT jobs in the burgeoning technology industry. I was born in the USA, in 1971, when computing was just starting out. My father lectured in information technology at the University of West Virginia. Following my birth, we moved to several countries as new job opportunities arose. During the first 12 years of my life, we lived in Scotland, Iran and Germany. We finally settled in Sydney, Australia, in 1982, where I lived for the following 30 or so years.

In spite of the somewhat nomadic nature of my pre-teen years, one of the things that were ever-present in our household was the latest technology. It was important, given his employment, that my father kept abreast of developments in the world of electronics and information technology. Our family was the first I knew of to own a compact disc player. Indeed, we had one within the first week of public release. Computers were ever-present in our household, although there was never any real pressure to learn technology. However, we were always told when a technology-based solution might suit a situation or solve a problem we encountered. After finishing school in 1989 at Balgowlah Boys High on Sydney's Northern Beaches, I was convinced that my time was best spent working as hard as possible to fund my surf adventures and passions.

After about three years of working in retail, I reached the realisation that I was not cut out to make it as a professional surfer and decided to put myself through university, funded by continuing to work in retail. At this time, green screen technologies were beginning to appear in most larger businesses but were nowhere near as ubiquitous as computers are today. We only had two computer terminals in the whole store for many years during my retail stint, and those were only to be used by a select few office and management staff.

While studying for my statistics and accounting degrees at university, the expectation that we would be able to navigate digital platforms and technologies accelerated. Email began to become the norm and accelerated to the point it is today, one of the most useful widely used business tools of the current generation. Indeed, it is easy to forget, especially for younger people, that the Internet as we know it now is only 25 years old (Comm100 2016). In fact, Sun Microsystems researched how people were utilising the Internet in 1997 and found that the power of the Internet did not figure in people's minds at that time (Barnet 2001). This highlights the fact that the growth in the use of the ubiquitous technology of the Internet and emails as we know them occurred over the space of only about 18 years. This rapid change puts into stark relief the fact that future generations should expect to be able to adapt quickly to as yet unimagined technological changes.

During my 15-year accounting and business career, I experienced constant pressure to keep up with technological changes and to understand the way systems work and how to stay abreast of pending changes relating to security and system changes which are forced by evolving business practices. It is this requirement to be adaptable which lead me to question why more attention is not being paid to the latest

technological advancements in public schools. While I would not consider myself a "digital native" (Prensky 2001), my experience in the workforce leads me to the realisation that knowledge of technology and flexibility in its use are going to be crucial skills for workers of the future.

Who Did I Think I Was?

Prior to my placements, I thought that the teachers were going to be exposing me to a myriad of approaches to teaching through and with technology which was entirely novel to me. This did not end up being the case. I came into the placements thinking of myself as a relatively average user of technology. I had some trepidation about being shown up for my lack of pedagogy for teaching with and through technology. I finished my placements considering myself at least on par with most teachers at my placement school if not more knowledgeable about the potential of technologies to offer teaching efficiencies.

My perception of technology was that it was a tool I used every day and that my technological ability was innate and natural. I believed that if I could do it then everyone could. I observed my daughter and her peers were significantly more technologically savvy than I am and assumed that therefore all children at school would be similarly engaged and comfortable with technologies such as tablet devices.

During my two placements, I developed an understanding that the four teachers whom I worked directly with had varying levels of information technology competence. As a result of my experience working directly in a series of technology-based businesses, I had what I considered an average level of technological savvy. It became apparent during my placements that three of the teachers saw the simple things I undertook on the classroom computers as somewhat amazing, even magical.

Who Do I Think I Am Now?

I still think of myself as only an adequate user of information technology. I now consider it an imperative for me, in my future role as a teacher, to become better prepared to actively inform my teaching pedagogy to be built in a way that is more focused on the available technologies of the day. With current technology development appearing to lean more and more towards tablet computers and application development, I think that it is imperative for me to approach teaching differently to what I have observed. This will be a great challenge as my experience in placements and research highlight the challenges faced by teachers who have the best of intentions of including technology in learning and teaching scenarios.

I have become aware of the challenges facing teachers in adapting to the changing face of the world and the pressure to develop teaching approaches which address the

issue highlighted in the Information and Communication Technology (ICT) General Capability in the *Australian Curriculum*:

> To participate in a knowledge-based economy and to be empowered within a technologically sophisticated society now and into the future, students need the knowledge, skills, and confidence to make ICT work for them at school, at home, at work and in their communities. (ACARA 2016)

Through my experience working in business and observing the minimal amount of time devoted to directly learning the technology or even learning through technology, I now realise that it is imperative to actively seek ways which enhance teaching and seek to address the general capability goal of developing technologically savvy school graduates. I realise through my experience and research that this goal is likely to be a massive challenge. In my opinion, it is an important challenge to address to best position future school graduates to seamlessly integrate into a technologically fluid and reliant world.

Of This Much I Know I Am Sure

Originally, when considering the barriers to incorporating tablet devices and their potential power to affect learning outcomes in Australian schools, I anticipated that teachers would perceive tablet computers technologies as having a set of barriers which made developing learning programs based on them difficult. Experience during my placements informed the perception that the tablet devices were not used regularly or in a systematic way. I believed the hurdles associated with the lack of pedagogical and technical issues involved in managing the technology and the lack of specific and easily identified applications suitable to education would still concern teachers.

I had conversations with ten primary school teachers, mainly from a school in South Australia. Approximately 400 students attend this school, and more than 100 tablets are available for staff to use in their learning programs. The majority of the teachers have more than ten years' teaching experience, which might mean they are not "digital natives" and are similar to my digital status.

I am now confident that teachers are inclined to include tablet devices in learning experiences, as nine of the ten teachers used tablet devices in classroom learning. Of this much I am sure: there are positive education impacts of using tablets in classroom learning activities, such as increased student collaboration (Kearney et al. 2015), student motivation and engagement, and improved academic achievement (Milman et al. 2014). Most of the teachers indicated that inquiry learning is the biggest positive of offering technology to students to assist with learning. As such, it becomes clear that teachers can perceive benefits to teaching with and through tablet devices.

However, of this much I am also sure from my investigation: When contemplating introducing or developing teaching programs which incorporate tablet devices, currently teachers still lack either the pedagogical knowledge required to include the

devices in lessons or lack identifiable applications for the devices around which to build effective teaching pedagogies. This impacts teachers' efforts to include tablet computers in their classrooms. This result aligns with the reports from the recent studies (Ditzler et al. 2016; Kearney et al. 2015; Murray and Olcese 2011; Tamim et al. 2015) that either the lack of easily identifiable or appropriate applications or teacher training in device centred lesson planning are problems hindering the successful penetration of the technology into teaching pedagogy. Ifenthaler and Schweinbenz (2013) report that only two of their 18 participants felt comfortable introducing the technology into their classrooms in their research in Germany.

Conclusion

I believe that teachers have become more inclined to introduce tablet devices into their classroom environments and that they see definite benefits such as promoting collaborative learning and enabling students to undertake inquiry-based learning in a self-guided way. This is a promising attitude found in the current generation of teachers.

Whatever the great intentions and positive attitudes to incorporating tablet devices in classroom learning, there remains a significant philosophical and professional struggle to be overcome in order to fully actualise the potential of the tablet device in primary school learning. Teachers have identified the issues of lack of easily identifiable applications and lack of knowledge of how to integrate the technologies in their classrooms as real challenges. I believe the next step is to establish best practice teaching guidelines and a set of applications centrally to facilitate the movement towards teaching with and through this technology, as it becomes more prevalent in the home and our schools.

As such, I will continue to work towards noticing my own and others' practices and changing them wherever I feel it will benefit students' learning and my own or others' teaching efficiencies. The evidence I have garnered in my research indicates that there is a positive attitude to utilising tablet technology in the classroom; however, there is an identified gap regarding teacher knowledge of tablet inclusive pedagogy and identification of pedagogically appropriate applications for the technology. In the light of this, I will endeavour to make myself a teacher who remains current with technological developments and endeavour, for the sake of my teaching practice, to regularly investigate new offerings of tablet applications and pedagogies appropriate to my teaching situation.

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Chapter 21
The Utilisation of Virtual Reality to Engage High School History Students

Matthew Froese

Abstract History is often considered by students to involve the unstimulating memorisation of boring events, rather than the intriguing and dramatic narrative of our ever-developing cultural identities. Accordingly, I wanted to see if the use of virtual reality (VR) could more effectively engage students in history lessons, not only by showing them the places and events of the past more vividly, but by offering them access to the perspectives of those who experienced them. For this, I found a theoretical basis in the writings of Kolb and Dale. From asking four students to compare their experiences using VR and written sources, I found the former encouraged very high levels of engagement and the development of substantial interest in the content. VR thus appears to be powerful tool for helping students to develop connections with the past and firing their enthusiasm for historical inquiry and for students lacking the resources for gaining such experiences first hand through travel it also democratises students' access to a range of historical experiences.

Journal entry, Thursday, 16 June 2016

> Today's history lesson did not go well. The Year 9 students were not only reluctant to engage in the planned activity (which did not afford them access to their computers), but so too did they respond to the lesson's historical inquiry (into the events and significance of the Christian Reformation) with theatrically exaggerated boredom.
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> Many students indicated that they felt no connection to the topic and that they would work more effectively were they able to use the internet to conduct independent research. Whilst many students do work quite effectively in this respect (and technology itself often provides a measure of motivation), my concern related principally to these students' proclivity for truly independent use of technology, and the difficulty of structuring (or effectively supervising) their efforts to ensure that they remained educationally relevant.
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> As a practical measure, the use of technology to encourage student participation seems to be of immense importance (particularly as a remedial measure for those who are difficult to engage), and I, therefore, need to try and implement it more creatively throughout my lessons – though in a way which reduces the potential for student distraction.

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Introduction

As a child and young adult growing up during the pre-eminence of Nintendo and Microsoft, I have a (possibly overzealous) appreciation for the power of "video games" to heavily engage those who play them. For me, much of this engagement stemmed from the exotic places and events to which such games gave access, and the exploratory nature of the experiences they offered. Fortunately, the technology which facilitates such experiences has improved immensely throughout the past decades, and when commercially available virtual reality (VR) headsets hit the market a year ago, the latent child within me unilaterally decided to purchase one.

I also have a keen (and probably related) interest in history, specifically the ancient and medieval worlds, as well as those tumultuous, epochal periods which have so profoundly shaped the world in which we live today—revolutionary France, the colonial movements for independence, and the world wars of the twentieth century, to name just a few. Notwithstanding the general importance of historical education, I feel that these periods—often radically different to our own—offer stories and characters commensurate with the excitement or exoticism of any video game, and my decision to teach is in no small part due to the interest and enthusiasm for such things that I hope to inspire through my lessons.

However, it has become clear throughout my placement and studies that the lustre of these events is often diminished by the medium through which students access them, and that history is often considered by students to involve the unstimulating memorisation of boring events, rather than the intriguing and dramatic narrative of our ever-developing cultural identities. It is for this reason that I wanted to consider the use of virtual reality to more effectively engage students in history lessons, not only by showing them the places and events of the past more vividly but by offering access to the perspectives of those who experienced them.

Previous Views

Notwithstanding my enthusiasm for new technology, my extensive experience as a student has straddled the recent educational transition by many schools to what might be termed "technologically dependent" learning, and I retain an antediluvian fondness for the pre-laptop era. Indeed, it is perhaps now indisputable that the recent intensification of information available to students, characterised by the saturation of visual imagery and persistent access to digital devices, has dramatically reduced students' attention spans and stifled their imaginations (Gurvitch and Lund 2014, p. 8). However, it was during my most recent placement—amongst senior secondary students—that I came to appreciate just how limited students' motivation and capacity for paying attention could really be. Smartphones or laptops were ever-present distractions to which students could turn, and they frequently did so whether they

were tasked with listening to a central speaker, working in small groups or conducting independent research.

I have often heard these distractions dismissively described as "disengagement", but what they really represent is engagement with something other than the set task—something which, from the student's perspective, is more interesting. The obvious solution is to, therefore, make lessons more interesting by incorporating these technological aspects, but I had always been wary that this might encourage a limited form of short-term engagement, thereby depriving students of the longer-term benefits which come with developing and maintaining sustained focus on, say, a text. Further, the idea of pandering to students' conceptions of what was interesting or worthwhile seemed to imply an unduly consumerist approach to teaching, which I was (and still am) mindful of avoiding.

Nevertheless, my view prior to this study was that whilst the attentional freedom offered by technology is undoubtedly detrimental to students' learning engagement (and should therefore in some cases be limited), the multi-sensory and immersive aspects of technology need to be embraced to at least stimulate students' interest in curricular content more broadly (De Castell and Jenson 2004, p. 385). Virtual reality seemed to represent a good solution to this problem, because as a medium through which students learn, it both minimises the scope for technological distraction by immersing students in a structured environment, but also allows for a constructivist approach in which students use their virtual experiences as the basis for their development of knowledge. I also had considerable confidence in the enthusiasm with which students would embrace the exploration of virtual environments—based not only on my own enjoyment of virtual reality but on the universally positive responses of the many people to whom I had shown the system.

Current Views

My views regarding the utility of virtual reality (VR) in the classroom have not much changed following my investigation, though they have transitioned from a vaguely intuitive enthusiasm to more regulated confidence in the particular benefits it offers. This will be immensely beneficial should I attempt to implement this new technology within my classes, because it is not unlikely that many teachers and parents will be reluctant to embrace "video games" as a legitimate or worthwhile medium through which students learn (De Castell and Jenson 2004, p. 385). By identifying the specific benefits (and the pedagogical models which underpin them), I expect to have greater success in pitching the implementation of VR to other faculty members and curricular planners.

Quite apart from the motivational benefits of virtual reality (which formed the basis of my enthusiasm prior to this study), my views regarding its role in facilitating "experiential learning" have developed significantly, and the pedagogical models of both David Kolb and Edgar Dale have in this respect been most persuasive. Kolb's theory emphasises the transactional nature of students' interaction with their environ-

ment (that students do not simply absorb information, but learn through influencing the world around them) and the importance of this process to students' development of more efficient learning behaviours (Kolb 1984, pp. 34–35). Notwithstanding that students do not learn to "do" history in the same sense as, say, science, the participants in the study were very quick to adapt to the movements and controls by which they manipulated their surroundings or accessed information and were most effectively engaged when physically interacting with the objects and structures of the period in which they were immersed. This type of investigatory learning—which forms such an essential aspect of historical inquiry—demonstrated just how effectively students' simulated experiences of other times or places could be used to structure their thinking about the past.

Dale's theory is somewhat more intuitive and maintains that students retain more information when they are actively involved in a learning environment than when they are simply passive observers or listeners (Dale 1970a, p. 98). By encouraging movement and interaction, as well as the stimulation of students' audial, visual, and kinaesthetic senses, the virtual environments prompted students to actively explore their surroundings and pursue their own structured historical inquiry. Whilst greater retention of information through VR was not necessarily reflected in the tests undertaken by participants, these were largely concerned with factual information and did not attempt to gauge the more nuanced understanding which students appeared to achieve through their uniquely engaging perspective. Nor did they examine the longer-term retention contemplated by Dale's theory, and I strongly suspect that a more extensive study would reveal the retentive benefits of active student involvement within a virtual environment.

It is perhaps somewhat surprising that my consideration of such a novel technology has been informed by relatively old educational theories, but my research has in this respect also influenced my approach to teaching more generally. It has helped to refine my lesson planning by encouraging an emphasis on activity-based learning rather than the informational or "teacher-centric" learning which characterised my own education, and into which I often naturally slump when formulating my approach. Accordingly, I try to often be mindful of Dale's (1970b, p. 103) insightful summation regarding my role—that "teachers of the past were skilled in handling words, but the teachers of the future must be skilled in handling experiences".

Findings

The investigation itself concerned four-Year 12 students—two males and two females—whom each compared their experience in both virtual reality and textbook-based learning. The students' enthusiasm for virtual reality was very high, and they considered the interactive aspects of the experience to be the most enjoyable. Students particularly enjoyed such actions as wielding a Slavic axe to chop wood, throwing apples into the Bruges canals, and loading and shooting the iconic sub-machine gun of the Polish resistance, the "lightning". Though these interactive elements might be

characterised as trivial or frivolous (and indeed, the last quite obviously distracted students from the historical narration), they also appeared to constitute those important connections which students were making with the people of the past, and which formed the basis of their interest in the period more generally. The ability to *physically* engage with the environment seemed to create a more substantive connection and give the content a relevance, which students might not have accorded the same information accessed via a written or visual text.

A related concept which was perhaps not reflected in the students' responses, but in which I feel confident surmising from my observations, is the intense engagement occasioned by what might be termed the "grandeur" of the past. This is directly linked to the perspectival experience of virtual reality and the demonstrations of scale which characterised the experiences students undertook. Students sitting high atop the crow's nest of an ocean-going caravel or at the base of a towering medieval cathedral; the magnitude of these structures was demonstrated in a way that is simply not possible through conventional visual media. Indeed, this reminded me of the awe and curiosity which one might feel whilst looking up at the Egyptian pyramids or Roman Colosseum.

Of course, such motivating experiences are in reality readily available to many students throughout their lives but are prohibitively expensive for many others. Graphically, vivid virtual access to such sites is, therefore, a way of overcoming the financial or disability-related inaccessibility which limits many students' perspectives when learning about the past. This "democratisation of learning" (Tempchin 2016)—whereby every student has access to a broad range of historic sites and experiences—is for me perhaps the most important and exciting aspect of educational virtual learning and one which justifies its use within schools generally. Indeed, as Dale (1970a, p. 98) notes, "contrived experiences"—those which are specifically formulated to emphasise a particular aspect of the period or topic studied—are in many cases "better for teaching purposes than the real object or situation itself".

The one aspect of the study's results which surprised me was that students' retention of information from the written texts tended to be marginally better than with the virtual experiences. This contrasted with my expectation that greater immersion would result in closer attention being paid and that the multi-sensory nature of the experience would help students to remember the content more effectively. However, this may be a result of students' distraction from the content by the various interactive elements of the virtual experiences, as the information on which the students were tested necessarily concerned readily identifiable facts or concepts rather than the more nuanced aspects of their physical participation. This was because the same information needed to be replicated in a written (control) text to provide the comparative test results with which I was so surprised. Similarly, I suspect that the students, currently completing Year 12, were in any case predisposed to better retain information *in the short term* through reading, rather than through listening to the commentary (which was utilised heavily throughout the VR experience).

Conclusion

Though my investigation involved only several students, the participants' responses indicated very high levels of engagement, as well as the development of substantial interest in the content they experienced through virtual reality. Whilst VR is not soon likely to replace more conventional modes of learning within schools, it appears to be a powerful tool for helping students to develop connections with the past, and firing their enthusiasm for historical inquiry. Further, the sensory immersion it facilitates is emerging as a potentially revolutionary mode of content delivery—one which both heavily engages the "viewer", and democratises students' access to a range of historical experiences. Ultimately, then, this study has confirmed that the implementation of virtual reality would be of significant benefit to students' engagement with history, and my enthusiasm for the educational potential of VR within my own classes therefore persists.

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Chapter 22
The Inclusion of Technology in Mathematics: The Effects of Electronic Mobile Devices in Early Years Mathematics

Check for updates

Emily Jayne Ford

Abstract   After finishing high school, I did not feel ready to go to university so I embarked on the adventure of a lifetime as a governess to four Indigenous children on a remote cattle station in Far North Queensland. This and further similar experiences led to my interest in enrolling in a teaching degree. One element of schools today that greatly fascinates me is the incorporation of technology in the classroom. I have observed the use of technology to enhance many learning areas but question the benefits of such technology. My questioning was the result of my experience with such technology outside the classroom, where it is often used for play and entertainment. However I came to see that used in a meaningful context, rich learning could occur, and technology could enhance learning outcomes, particularly in Early Childhood Mathematics, which was the area of my focus.

Journal Entry, June 2015, Kowanyama, Queensland

> I quickly steal a glance towards the small group of prep students completing a mathematics rotation on iPads. Unlike the other groups, they are sitting quietly; happily and deeply engrossed in the task they have been set. What is it that sets the iPads apart from the other activities?

Introduction

I am a daughter, a sister, a wife and a mother. I am young, organised, cautious, yet carefree. I am a university student and a pre-service teacher. I am me. I am Emily.

My primary education was completed at my local public school which was filled with many challenges, opportunities and achievements before completing my secondary education at a private school in the neighbouring town. Whilst I thoroughly enjoyed school, I felt as though I was not ready to start university straight away. I needed a break, a chance to discover who I was, what I wanted in life and whom I

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wanted to become. Was I ready to move from the country to the heart of Melbourne to pursue a career in remedial massage? Would this be the move that shaped my life? Alternatively, would it become one that I would forever regret?

I yearned for a challenge, a change, an escape from my small hometown, so I embarked on the adventure of a lifetime—a governess to four Indigenous children on a remote cattle station in Far North Queensland. Whilst I lacked in experience, I made up for it in enthusiasm and passion. It was this decision that ultimately shaped the person I am today, and I could not be happier. It was the place where I met my husband, where I committed to furthering my education, and where I had my first child.

I spent an additional three years as a governess for families on remote cattle stations around Australia before spending a further three years working as a teacher's aide in both remote and rural schools. The experience of working in a variety of different school settings throughout Australia fuelled my passion for educating children.

One element of schools today that greatly fascinates me is the incorporation of technology in the classroom. In my personal schooling experience, we were fortunate enough to have a row of three or four computers at the back of the classroom predominantly used for typing up a final copy of a story or completing a project or a poster.

I have observed that in schools today, computers and their counterparts are utilised to enhance a subject, to allow a child to explore something in depth, to challenge them. Whilst I was and continue to be amazed at how far technology has come, I felt myself questioning the use of the devices within the classroom. In today's society, technology is constantly evolving and the ways in which they can be utilised are increasing. I feel as though this is impacting current and future teachers as they are compelled to incorporate technology within the classroom in order to assist students to effectively integrate within society. This paper seeks to explore the effects of electronic mobile devices in mathematics in enhancing early year primary school students' knowledge of number and place value.

Who Did I Think I Was?

I have always believed that my experience in education as a student was very modern and up to date with the latest technologies, and at the time, it was. It is amazing how significantly things can change in a year, two years or even three. When I enter the classroom now, I feel older, confused and not up to date with the latest technologies, their applications and effectiveness.

My personal experience and observations with electronic mobile devices such as iPads have led me to view them as a babysitter and a toy. iPads were filled with movies and episodes of television programmes to assist the passage of time on the long, arduous drives to town to prolong the inevitable question, "Are we there yet?" They were filled with games to maintain silence in waiting rooms or whilst out running errands and picking up parts for machinery. If a moment's silence was

required or you were too busy to entertain a child, the iPad would appear. A relative would constantly claim how smart their child was because they were able to write the alphabet before reaching school age. Although the child could trace the letters of the alphabet with their finger and be able to say them, did that knowledge transfer to the more traditional method of pen and paper? In this instance no, as they had always used their pointer finger to write the letters of the alphabet instead of a pencil.

I struggled to see how iPads could be effectively integrated into the classroom as an educational tool when they played such an opposing role outside the classroom environment. Was the knowledge acquired through the use of iPads transferrable? I was constantly hearing about how children in school and kindergarten all had iPads, but for what purpose? Were they being utilised as a baby sitter so teachers could work with other students? Alternatively, were they utilised as an educational tool?

My early observations of students utilising iPads during mathematics lessons led me towards the establishment of negative feelings towards their use but underneath that lay curiosity. I had heard many rave reviews about the use of iPads from teachers in classrooms in enhancing and supporting the acquisition of new knowledge and the understanding and the extension of current knowledge. Supporting teachers' opinions that the addition of electronic mobile devices is beneficial to students, Haßler et al. (2015) state that mobile devices can enhance, extend and enrich the concept of learning in a number of ways. Whilst the research may support this view; I still question whether students can enhance their knowledge of number and place value through the use of iPads.

From afar I observed students deeply engrossed in the application set by the teacher, I was amazed at how focused they were on the task. On closer inspection, I observed students guessing answers, tapping the screen wildly, flicking between different applications and repeatedly completing the same task. Was the teacher aware that the students were not completing the applications as intended? Why were students so eager to use the iPads yet appeared to struggle with the task? Was the task not appropriate for the individual student? Was it too challenging? Was it too easy? Was my observation a daily occurrence or was it a rare event which could be attributed to other factors?

Who Do I Think I Am?

As my time spent in teaching and learning environments increases, so too does my knowledge and understanding of effective teaching practices and tools in an ever-changing technology-dependent society. I feel as though the more I delve into the concept of the effects of electronic mobile devices in mathematics in enhancing early years primary school students' knowledge of number and place value, the more questions I have, and the more I have to learn. Observations and discussions with teachers of varying year levels have allowed me to view the iPad in a different light.

Observations lead me to see that utilised correctly in mathematics, electronic mobile devices such as iPads can enhance students' knowledge of number and place

value in the early years, but it is dependent upon the context and how they are incorporated into a lesson. As long as the iPad is utilised in a meaningful, purposeful and rich learning context, students will experience an increase in knowledge and understanding. Traxler and Wishart (2011, p.7) state that student knowledge is developed through "contingent mobile learning and teaching, situated learning, authentic learning, context-aware mobile learning, [and] personalised learning". iPads have the capacity to personalise student learning through the incorporation of applications which can be tailored to individuals needs. It is this capability that has allowed me to view them as an asset in the classroom environment as opposed to a hindrance.

Unlike traditional methods of pen and paper, iPads have the capacity to provide students with immediate feedback by correcting mistakes in real time (Lynch 2015). There are occasions when feedback is not valued as highly as it should be and can be challenging to provide to a large class of students working on a variety of different tasks, such as group rotations. By providing students with the immediate feedback, they can understand and retain content better (Kaur et al. 2017).

I was fortunate enough to observe students being provided with immediate feedback and delayed feedback. The individuals that were provided with immediate feedback were able to gain a deeper understanding of where they went wrong and were able to make suitable changes, thus increasing their knowledge and understanding of the concept. Students that were provided with delayed feedback appeared to struggle to understand the content, as it was not fresh in their minds due to having commenced another activity. Research and practical experience demonstrated to me the benefits of incorporating iPads into a daily routine, not only for students but also for teachers.

iPads are an effective alternative for students to utilise when revising previously taught concepts as opposed to the teaching of a new concept. iPads alone cannot be relied upon to teach a student. Instead they are best suited to support an individual's previous learning. A study conducted found that combining iPads with traditional teaching methods, thereby using them to supplement the main content, saw a vast improvement in students' conceptual understanding of numbers, the order of operations, expressions, and multiplication and division skills (Kaur et al. 2017).

The incorporation of iPads into the learning environment can be viewed as both a positive and negative experience, but through observation and lengthy discussions held with teachers, I have been able to solely view their inclusion as positive. When utilised in a meaningful context, iPads have the ability to supplement the main teaching content, personalise student learning and provide immediate feedback. I have found that they do have the capability of allowing the knowledge acquired through their use to become transferable.

Of This Much I Am Sure

Goodwin (2012) claims that when an electronic mobile device is deployed and embedded in an authentic and rich learning experience, the benefits are abundant.

Initially, I was sceptical given my previous experience, but after being given the opportunity to view the use of iPads in a different context and after conducting many informal discussions with teaching staff I was able to see how the Goodwin had come to make that bold statement.

In order to gain a thorough understanding, I held many informal discussions with teaching staff to gain an insight into their perspectives and experiences based upon the implementation of iPads into learning environments, specifically mathematics. Originally, I was unsure that iPads even held a place within the educational environment, mainly due to my previous experience of how they were utilised outside the school environment. The teachers surprised me with their positivity approach to the use of iPads in education, particularly mathematics, but were all careful to note that the benefits were only apparent when working in an appropriate and meaningful context. The iPad was viewed as a valuable resource especially for differentiation of the learning, for revision of prior content and for keeping students engaged.

The teachers all noted that responses from children when incorporating iPads in a lesson, particularly in the early years, were positive, as it was a great alternative to paper and pencil, but they were adamant that they not be to be used to teach the content alone, nor to be the only tool used to revise learning. I held a similar view that children were always eager to utilise an iPad, but I found it interesting and insightful how all the teachers were quick to point out that it is a tool to support learning as opposed to teaching content.

I previously questioned whether your gender impacted your experience with technology, but after discussions held with teachers, I was able to confidently conclude that there is no observable difference in the use of technology by either gender, male or female.

Of this much I am sure, positive effects from the implementation of electronic mobile devices in mathematics in enhancing early years primary school students' knowledge of number and place value can occur, and the knowledge gained is transferable but it is dependent upon a variety of different factors, comprising context, method of incorporation and purpose (i.e. supporting previously taught concepts).

Conclusion

I never anticipated writing a report on the effects of electronic mobile devices, such as iPads in mathematics in enhancing students' knowledge, as I had just come to accept their place in the classroom without ever questioning their purpose and the potential benefits to be gained. Without the opportunity to question and reflect on their purpose and existence, I do not believe my understanding would be as deep as it is today. I would have continued to question their purpose and potential. I experienced a complete change of opinion through this research paper and am incredibly grateful for the opportunity, as I believe it will assist me in becoming a better teacher as I will be more aware of how technology can be best incorporated into the classroom to benefit students. I can confidently conclude that students can utilise iPads to

effectively enhance their knowledge of number and place value with the knowledge gained also being transferrable.

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Part V
Well-Being and the Learning Environment

Chapter 23
Considering the Role of Well-Being in Education

Leigh Disney

Abstract As an early career practitioner, I was very much focused on curricula, pedagogy and behaviour management within my teaching practice. I believed that concentrating on those elements of teaching would allow me to walk into any educational environment and have the ability to ply my trade regardless of the individual personalities of the children I taught. I was aware of children's differing capacities and would certainly cater my teaching style to fit the needs of the child; however, it was not until I worked with a particularly challenging young boy in a child care centre that I realized something was missing from my understanding of how to best help children reach their potential. The child's primary educator taught me how to consider the child from a 'goodness-of-fit' model (Churchhill in Early Child Educ J 31(2):113–118, 2003), focusing on the child's *well-being* as a way to maximize the child's learning. Through a process of self-study, I was able to reimagine my educative practice within early childhood environments to move beyond the basics of what I had known and began to consider other holistic elements of children's development, namely well-being.

Introduction

The student chapters in this section of the book allowed me to reconsider the valuable lessons taught to me by the educator from the child care centre and the subsequent years of working with and studying young children. I will share with you what the caregiver taught me, how a moment of self-study combined with over 20 years of working within early childhood education has allowed me an appreciation of well-being, be it the well-being of children I taught or my own, as the quintessential element to achieving full potential.

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Who Was I?

When I made the decision to become an early childhood educator back in the late 1990s, I was very much focused on the 'what and how' of teaching. I believed that the appropriate curriculum and pedagogy, combined with well-considered behaviour management techniques, were the keys to a successful early childhood programme. Once I had the opportunity to implement this skill during professional placements and later within in my own early childhood workplaces, the fundamental elements I valued did not change, but rather became more refined and sophisticated as my own teaching philosophy became clearer. It was not until I encountered a particularly challenging child with behaviour that I found difficult to manage that I began to doubt my capacity to effectively teach all of the children in my care. The child was exceptionally strong-willed and I found myself getting into power struggles with him to conform to group norms and expectations. My co-worker, an educator by the name of Anita, observing the power struggle between myself and the child, offered what would become sage advice. Anita introduced me to a concept known as 'goodness-of-fit'. As Anita described, it was not about making the child bend to conform to expected norms of behaviour; rather it was the educator's role to provide an environment where we understood the needs of the child.

Trawick-Smith and Dziurgot (2010) describe in their study that there is a need within preschool environments for educators to provide a good fit for children, especially within play-based learning settings where environments are open and allow for great flexibility of teaching approaches. At the time, I found it difficult to consider that an individual child should be treated differently and that somehow their needs superseded the rules and guidelines set up to work for the group. However, after watching how Anita worked with the child, I realized that owing to specific personality and environmental factors, he was simply not able to conform to the rules set up with the environment. Rather, watching and talking with Anita, I realized it was a process of working with the child so that the child understood how he could maximize his own time and engagement whilst still partaking in group activities and routines. It was evident that not only had Anita created an environment whereby the child was flourishing, but Anita herself had a strong sense of flow within her teaching practices despite the presence of a challenging child; in my mind's eye, both educator and child had a collaborative sense of *well-being*.

What I did not realize in the moment, which is understandable as a neophyte educator, was that I was actually conducting a form of self-study within my practice. A self-study is an approach used in research which 'integrates reflection as a tool to view practice from varying perspectives' (Brandenburg 2008, p. 22). Within a self-study, there is a focus on 'I' within professional identity (Lunenberg et al. 2010). Identity is formed by how we are perceived by others, our relationships with those others, within a shared, socially constructed context. During my time with Anita and the child, I found challenging, and I was able to use a range of perspectives to engage within self-study. I used the perspective of Anita and the child to at first analyse my pedagogical practices. I built upon this using the goodness-of-fit model

to comprehend why and how I could begin to adapt my professional identity to effectively educate children. Then, with support from my colleagues within the caring and adaptive early childhood environment we had built, I continued to refine my practice and reshape my professional identity. Self-study allowed me to consider what I understood by a concept such as well-being and how I could integrate children's well-being within my own practices, to make me a better educator.

Well-being is not an easy term to define, and finding a specific definition to suit every individual and their circumstance is difficult. Welsh et al. (2015, p. ii37) provide a definition of mental well-being that sits well with me: They explain it as 'a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community'. I am pleased to say that, after following Anita's lead, I was able to work very effectively with not only the challenging child at the time but all subsequent children who did not 'fit' within the contextual environments I had set up. The pre-service teachers in this section of the book similarly share with us their own personal journeys related to the theme of well-being and how it is achieved within their contextualized settings.

What Impacts Our Well-being?

According to the Victorian Department of Health and Human Services (DHHS 2014), there are a number of factors that can directly impact well-being, including relationships with others, financial factors, personality traits and lifestyle choices. Both adults and children alike are subjected to a myriad of environmental factors which can ultimately impact well-being. **Fiona Curtis,** in her chapter, relates it to the advancement in technology, such as the use of mobile technologies and their effect on sleep patterns in adolescence. Fiona shares a pertinent warning regarding the sudden integration of mobile technology into the lives of young people and foreshadows the potential impact on health. This topic struck a chord with me as I have just completed a doctoral degree on the integration of digital technology into child care settings with a focus on numeracy learning (Disney 2017).

As educators, we often look to the bottom line for the potential cognitive benefits of using new and innovative technologies to enhance our teaching and improve student learning outcomes. Yet, there is a decided need to sit back and reflect on the broader implications of such practices. When I interviewed parents and educators in my study regarding the need for an integration of digital technology into early childhood, one of the most prevailing responses was to the potential negative impacts on young children's social and emotional development (Disney 2017, p. 120). There is no clear empirical evidence that can validate that concern; in fact, there is research that points to the positive effects on children's socialization within educational settings (Brown et al. 2012).

It is important to consider educational initiatives, such as the integration of emergent technologies and how they impact the students within our educational contexts.

In this way, we can consider how changes within the environment have the potential, unwittingly or not, to impact our own and children's well-being. As **Nadia Lelli** discusses in her chapter on the need to set up the classroom environment to help lower anxiety levels, educators have the capacity to create an environment that supports children's long-term well-being. Nadia's point resonates with a need to consider the individual personality of the children within our care, questioning current educational practice as well as long-held believe about what constitutes effective educational environments.

How Is Well-Being Supported in Educational Environments?

The question is then to ask how educational environments can actually promote well-being. In her chapter, **Meaghan Jones** investigates the National School Chaplaincy Programme (DET 2018) and its relevance within public education settings in order to support students' well-being. Meaghan questions why considerable funding is being allocated to religious instruction within public education programs when there appears to be a shortfall in the number of social workers and teacher aides within public schools. Meaghan's larger point brings into question how governments and educational settings choose to promote well-being and where the funding for such programmes align.

As I explained in my introduction, as a result of a period of self-study, my understanding of the importance of well-being became clearer, as did my search for how to achieve well-being and my awareness of the supports available to me. A number of initiatives have been set up to help early childhood educators understand the importance of well-being in education. An example that I have used and one prevalently used with children within Australian educational settings is KidsMatter (2018). An initiative to support children's mental health and well-being, they provide a number of state and territory 'resources and support for [early childhood education and care] educators and families, while fostering partnerships with health and community organisations' (KidsMatter 2018, para. 1). In the same way, educators need to be trained to support children's ability to read, write and do mathematics, and educators also need to be supported to assist children to develop and maintain well-being.

When reflecting upon the heavy emphasis placed on specific curricula domains such as literacy and numeracy, which is reinforced by the National Assessment Program—Literacy and Numeracy (NAPLAN) (ACARA 2018), it occasionally makes you question how much time can be devoted to developing children's well-being. In her paper on using arts-based pedagogies to develop emotional development in upper primary boys, **Rachel Platte** highlights a way that well-being can be fostered without losing sight of curriculum priorities. Rachel's chapter shows that, even within very busy and structured curricula programs, educators must find ways to incorporate an added dimension to enhance children's well-being; Rachel does this through the arts. Rachel's paper also touches on her own well-being and how the arts allow her an expressive outlet to channel her emotions and consequently improve her personal

well-being, highlighting that educators too must find appropriate programmes and outlets that allow for enhanced well-being.

Maintaining one's own mental health during times of stress requires educators and educational institutions to become proactive in promoting well-being for staff. Even within higher education, employers are critically aware of the importance of well-being (Henning et al. 2018; Monash University 2018). It is vital that, as adults, we do maintain our own sense of well-being and take advantage of the opportunities provided to us. For example, at Monash University, my place of employment, they offer a range of physical, mental, nutritional and occupational programmes and information to assist in promoting health and well-being (Monash University 2018).

Regardless of whether I am teaching two-year-olds in a toddler room in a child care centre or 22-year-olds in a university lecture theatre, my ability to provide learners with what they need to the best of my ability is directly impacted by my own well-being. I personally enjoy therapeutic activities such as gardening, walking the dog or playing with my children and take these moments as a chance to centre myself for times when I know I will be under stress and need to be at my best. During those times, I have a saying that I repeat to myself (and often to students I come across experiencing stress during their studies), which is, 'Do the best you can with the time, energy and effort that you have and be satisfied with the results'. Like many others, I sometimes feel as though I may not have achieved to my ultimate capacity, yet I reflect on my sense of self to consider what stresses I have in my life and my overall sense of well-being. As educators, we need to understand what works best for us to find well-being and know that there is not a 'one size fits all' in terms of developing well-being.

Relationships to Support Well-Being

When I take moments to consider my personal well-being, I often will reflect on the well-being of those I spend time with, including family, friends and work colleagues. The relationships we form and foster can go a long way to maintaining our own well-being (DHHS 2014). Whilst I certainly would not say that our sense of wellness needs to be connected to other people's happiness, I would suggest that when we are 'well' we can foster positive relationships with others that may go a long way to improving their own sense of well-being. The same can be said as educators for the children we work with. As **Jeremy Appleton** points out in his chapter relating to the need for empathy when working with students, educators are in a privileged position, getting to share and play such an impactful role on the lives of so many families. Educators need to act with empathy and consider the challenging time that many students go through during their schooling. These bonds we foster will go a long way to assisting students to emerge through childhood into adulthood as healthy and productive with a strong sense of self.

Childhood is a time of constant growth and development (Berk 2013), which can often be very confusing and confronting time for children and their families.

Taking their perspective and considering what children may be going through will allow educators to provide the goodness-of-fit given the educators understanding of every child (Churchill 2003). Furthermore, we understand that there are relationships between educator and student and learning (Hattie 2009). If we want children to achieve their potential, as educators we can go a long way to achieving this by fostering relationships and strengthening well-being in the process.

It is not just the relationships we form with children, but rather, as **Hannah Young** discusses in her paper, there are also strong relationships formed with parents. In Hannah's example, she discusses the pre-formed relationships she had before beginning university training to become a teacher and how, in a small country town, this impacted her ability to communicate with families about sensitive issues related to their children. Similar to Jeremy's paper, Hannah analyses the close social and emotional bonds that are formed between educators and children and their families. During times of stress, this bond and familiarity can test and stretch professional boundaries and educators must be equipped with skills and training to handle such situations. The ability to maintain positive working relationships with families is vital for children to achieve their potential and for educators to maximize their own well-being.

On my very first placement experience as a TAFE student, just entering the early childhood industry, I was given a valuable lesson in the importance of well-being and relationships. I was placed in the babies room of a child care centre, and as a male working in early childhood, this was an experience in and of itself. On my very first day, a 12-month-old girl would literally scream every time she caught sight of me! I did my best to be non-threatening and bond with the girl and the team leader in the room did a good job of supporting both the child and myself to connect. Essentially though, the screaming did not stop for the entire day, which made me wonder, 'Have I made a mistake entering this profession? Am I cut out for this?' My well-being and that of the child was being sorely tested!

It was with great trepidation that when the child's mother came to pick her up, the child stared at me and then the mother did too; my heart sank and I feared that the mother would question my capacities and reason for being in the service. Instead, she looked at me, looked at her child and said, 'Wow, I can tell she really likes you. She only uses that look with people she really likes!' To this, the team leader and I laughed and told the mother of the events that had taken place all day, to which the mother laughed and exclaimed, 'She is just testing you. Don't worry, tomorrow, you watch, it will be all good'.

Tomorrow was better and the day after that even more so. There was no magic switch that created this connection. I learned a great deal from the child's mother, and I would ask questions regarding her daughter's care practices and routines. In this way, I was building a relationship with not only the child but, through open and honest communication, a bond with the parent as well. I was finding a fit within my environment and felt at ease with my chosen career pathway. Welsh et al. (2015, p. ii37) describe well-being as a state 'in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and

fruitfully, and is able to make a contribution to her or his community', I was finding my well-being within education.

Conclusion

Reading through the pre-service teachers' chapters in this section of the book high-lights a number of issues related to well-being: how it is fostered both through internal processes of introspection as well as specific instances of teaching moments within educational contexts. At times, we can overlook well-being when confronted with the escalating expectations placed on us as educators. It is at these moments that we should take stock of ourselves and, as Anita showed me, the students we work with, in order to ensure we are all reaching our potential, regardless of what that may be. I hope you enjoy reading the chapters in this section as much as I did and give consideration to your own well-being and how to achieve it.

This chapter is dedicated to the memory of my dear friend Anita, a valued colleague, wonderful mother and someone who could always make me laugh: thank you, lovely lady.

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Chapter 24
Student Well-Being: Teaching with Empathy and Staff Collaboration

Jeremy Appleton

Abstract   During a recent student placement, I observed a teacher criticize a student for being late, with the result that the student left the class in tears. This teacher had not realized that the students' grandfather had been ill and had just passed away the day before. This reminded me of a time in my own schooling when I was summoned to the Principal's office for standing up to bullying, and one of my teachers went out of her way to come with me and explain my situation to the Principal. The present chapter discusses my research into student well-being and how teachers and students might work together to achieve the best academic and social outcomes. I do this in terms of four key concepts that relate to working for the betterment of student well-being, namely understanding diversity, empathy, professional development and staff collaboration.

Journal entry:

> In my most recent student placement, I was confronted with a situation that took me by surprise. As a mature aged student, I have had much experience out in the work force and especially in school settings, as sports coordinator at two different schools for seven years. However, this experience was quickly put to the side when a situation occurred that I had never confronted before.
>
> A Year 6 student walked into class a little late, only for the teacher to express their disappointment to the young child; the boy walked out of class in tears. The child in question had been a little disruptive throughout my first two weeks; however, I had built a bond with him as he was a talented young soccer player, a sport of interest to me. In building this relationship he had mentioned to me that his grandfather had been sick and was in hospital. He was from a European background and very close to his extended family.
>
> Unfortunately, the morning the student was late to school and received an angry response from the teacher was the morning after his grandfather had passed away. His teacher was unaware of that fact; however, the teacher was also unaware his grandfather was even sick, which may have assisted the teacher in the first instance.

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Introduction

Personally, teaching has long been a passion of mine; even during my studies at high school, I always thought I would be a Physical Education (PE) teacher. Later in my high school years, my ability to transfer my passion for teaching into a discipline with study began to wane and, unfortunately, I completed my Year 12 certificate with minimal effort, and I was not eligible to attend tertiary education. The drive was lost in amongst many other commitments and general teenage life.

The fascination with teaching fell upon me during quite a tumultuous primary schooling life. I moved from Victoria to South Australia when I was six and went to a new school as an outcast of sorts. I was constantly bullied, verbally and physically, and really battled to establish myself amongst other children.

It was not until Year 5 when I clearly remember a teacher, Mrs. Johnson, taking an interest in me and my situation. I had by this stage established some friendship groups and was going well academically and athletically. On one occasion, where I finally decided to stand up for myself, I was noticed by another teacher and marched straight to the Principal's office to await my fate.

Before I even got into the office, Mrs Johnson came running down the hall and quickly put her arm around me and asked what had happened. 'I stood up to them, Mrs. Johnson. I think I did the wrong thing', I said sheepishly. Mrs. Johnson could not have been more proud of me. She entered the Principal's office with me and explained everything that had happened over the past three years of my primary school life.

Mrs. Johnson, out of all the teachers in the school, took an interest in me and helped me through some really tough times, whilst still assisting my academically development. She was the key reason for me wanting to become a teacher because she cared, and she was empathetic and understanding. She knew me outside of the classroom.

I am a great believer in positive education through positive psychology, whether this is about engaging in professional learning in certain areas or based upon my willingness to apply these principles to help my students build relationships and develop grit, growth mindsets and resilience.

I have had diverse professional experiences, and my pedagogical approach, whilst malleable, is beginning to centre on relationships—care and empathy as the cornerstones of my approach to all situations. I have seen school settings in so many different lights and have advanced knowledge and vast experiences that have given me a great set of interpersonal and organizational skills that lend themselves to engaging in meaningful relationships that do not blur the personal and professional boundaries that teachers must abide by, such as duty of care, ethics and mandatory reporting.

My Investigative Journey

I will be discussing my research into student well-being in relation to my personal–professional practice. The question I will ask is, 'How do teachers and students best work together for the best academic and social outcomes'?

The investigation I conducted helped me understand real-life experiences and concepts related to the topic of student well-being in relation to my professional practice. This allowed me to clarify my opinions based upon my personal investigation and experience. Throughout my journey, which included reading books, face-to-face meetings and personal experience, I have found four key concepts that continue to arise in regard to teaching with empathy and working collaboratively with staff for the betterment of student well-being. Below I have gone into more depth about each of the following concepts: understanding diversity, empathy, professional development and staff collaboration.

Understanding Diversity

Teacher and student relationships are often a very awkward conversation and discussion point. However, to effectively teach students, I am a believer in the importance of understanding them prior to assessing or questioning them. Much like pre-assessment in a classroom, a teacher getting an understanding of a student's knowledge of a topic is a way of understanding how to teach a unit of work, so why not do the same for understanding a student's background?

Milner suggests that teachers need to take into account the geographical location of their school, whilst also taking into account students' backgrounds. Rowe (2013, p. 2) describes Milner as saying,

> Many teachers do not consider the community where the school is located a relevant factor. They feel that teaching science, for example, should be the same no matter where the school is located. By ignoring the community aspect of students' backgrounds, they are missing out on a valuable resource. Teaching should not look the same in all schools. The communities where the students live should be a relevant factor in the teacher's planning process.

This allows a student to feel comfortable in their environment and have the ability to succeed socially and academically. Students feel a sense of justice and that they are being judged fairly, as confirmed by Adams et al. (2007), who stated that diversity and social justice are intimately involved and interrelated. If teachers do not value diversity, how can teachers effectively address issues for certain students? Without addressing social justice, teachers cannot effectively engage with the issue of diversity.

Empathy

For Dewey and Findlay (1907), the complexity of our society requires us, as people, let alone as teachers, to attempt to be sympathetic. Education is a key means for in portraying this to the next generation. However, not only should we teach the methods and processes to empathize, and the knowledge of why humans empathize metabolically, we should also be central to their understanding. Jewell et al. (2011, p. 8) suggest that:

> Whilst good intentions are necessary for ethical actions, they are not sufficient in themselves.
> If people want to do the right thing, they need to know how to decide what the right thing is.

This goes hand in hand with the requirement for people to not only feel like they are empathetic but brings it to the next level, to understand why they are empathetic and what ethics should be held close to ensure we are making good choices when situations confront us.

If we, as educators, can be empathetic in our approach to teaching, then students will want to strive to succeed and be more engaged in lessons. In the classroom, motivation drives many behaviours, and it is important to understand the importance of motivation in an educational environment. Motivation is described as a state that energizes, directs and sustains behaviour (McDevitt and Ormrod 2006).

Professional Development

Professional development was a common theme throughout my interview process. Teachers are required to commit a certain amount of time a year during which they must engage in professional development. Staff and school leaders were collective in their thoughts. All agreed to develop school policy based upon professional development and collaboratively work towards making their school the best it can be.

At the core of most definitions of leadership are two functions: providing direction and exercising influence (Leithwood et al. 2004). Potentially, staff has differing opinions on differing topics, and it takes the school leadership to provide direction for the legacy a school wants to leave behind.

A willingness to learn and continue to improve is paramount to teachers, students and others becoming the best they possibly can. A study suggests that teachers need to integrate theory with classroom practice. They need time and opportunities for exploring knowledge about the nature of (new) learning and how it might be implemented in different domains. There should also be opportunities for teacher inquiry and collaboration, strategies to reflect teachers' questions and concerns and access to successful models of (new) practice (Darling-Hammond and McLaughlin 2011).

Staff Collaboration

Staff collaboration must be driven by the leadership teams at schools. Leadership is second only to classroom instruction amongst all school-related factors that contribute to what students learn at school (Leithwood et al. 2004).

School leaders can communicate effectively with their staff to improve outcomes for staff and students. School leaders combine the school values, beliefs and ethos to create a passionate, enthusiastic and vibrant learning environment. They promote the concept of transformative pedagogy, which is defined as an activist pedagogy combining the elements of constructivist and critical pedagogy that empowers students to examine critically their beliefs, values and knowledge with the goal of developing a reflective knowledge base, and an appreciation for multiple perspectives (Smyth and McInerney 2007).

Working together and engaging as a collective allows for many varied opinions to be heard, listened to and discussed. Allowing people to be heard can increase the opportunities for development. Listening to the stories of students and novice teachers can improve our understanding of the processes these teachers will undergo when they begin teaching and constructing their own professional identities (Schatz-Oppenheimer and Dvir 2014).

Conclusion

From my investigation and the evaluations made above, it would be easy to get bogged down in trying to reinvent the wheel. However, as mentioned, I am a true believer that relationships can be the cornerstone of good education and allow for empathy and collaboration to be imparted for the benefit of schools, staff and students.

Using relationships in alignment with targeted pre-assessment to differentiate the classroom environment and tasks for students ensures their best chance for success. I also believe that the future of education is about providing holistic teaching of the student and does not necessarily mean that students have to fit the mould but that they need to be given opportunities to flourish, and opportunities to 'fail' and learn from mistakes but explore as well. School leadership can be the driving force behind change, and professional development is at the forefront of that change.

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Chapter 25
The Right Response!: Discovering Necessary Skills for Teachers and Parents to Collaborate Positively to Benefit a Child's Education

Hannah Young

Abstract Having grown up in a small town and having strong ties within the community, I found it a challenge to balance the personal/professional balance needed by educators when dealing with children and their families inside and outside of the school context. By observing my mentor teachers, I slowly began to identify key principles needed to handle the teacher/parent relationship, which led me to investigate further regarding this process. I conducted interviews with parents and educators to ascertain the keys to maintaining an effective working relationship. Educators identified that the majority of them had felt threatened by parents during their time at work, with varying degrees of threat dependent on role and position. During these times, it was identified that remaining calm and seeking support were the most effective methods to settle the situation. Both parents and educators stated that the primary key to developing relationships is the continued practice of clear communication.

Journal entry, September 2015

> My third placement has been a real whirl wind of emotions. Being at a challenging school has most certainly had its ups and downs. I am in my final week in this small country school, and I am finding that I am exhausted, and so are the kids! Thank gosh it's almost school holidays. There have been so many big events over my four weeks: sports days, drama productions, behaviour a issues, PAT-R testing and so on.

> I sat in the staff room this morning talking to my mentor teacher about the day ahead. We were doing what seems to be a morning routine of welcoming other staff members walking in the door. A young teacher walked in as her usual happy and bubbly self and greeted us. (She is the one organising the school drama production).

> Soon after she walked in, the staff room fell dead silent, as we heard the front office door open and slammed shut. Someone was yelling at the top of her lungs "where is Miss …" The young teacher's face dropped as she walked towards the front office. By this point, the abusive female parent had walked into the entryway of the staff room. She was almost nose to nose with the young teacher, hurling abuse and raising her fist at her. She was threatening to report her to the Department of Education. The parent would not let the teacher talk. The school counsellor heard the commotion and came running and stepped in between the young

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teacher and parent and then told the parent to go and cool off. I sat there frozen, tense and I honestly didn't know whether to cry or run. I could hear the parent leaving the school yard but still yelling abuse with horrific language.

The Principal, who was in another building, heard what happened and quickly called a meeting with the counsellor, the young teacher, and my mentor teacher. I sat in my chair in the staff room with a student support officer (SSO). The bell rang and I panicked as I had the whole class to take inside to start the day and no idea how long my mentor would be in that meeting. I asked the SSO to help me bring the class in. I felt sick in the stomach as the abusive parent had two children at the school. One in the young teacher's class and one in mine. By the time I got to the classroom, word had got out and the children were asking me millions of questions. I responded with "We will wait for your teacher to get here to discuss the situation."

Later that day I found out that the whole reason the parent had come in and abused this young teacher was over a misunderstanding. The teacher made a phone call home, and the phone was crackly and hard to hear, so the teacher kindly hung up on the parent. I could not believe how little that teacher had to do to aggravate the parent.

The thought of this makes me wonder what on earth I am getting myself into …

Introduction

I grew up in a small country town three hours north of South Australia's capital city, Adelaide. I consider myself to be extremely lucky. I was brought up in an extremely loving and caring family environment. I was fortunate to travel overseas as a child to Hong Kong and America. This was such an eye-opener for me as I visited places such as Mexico, which are in places less fortunate than us here in Australia. I saw other children in my age begging for money. Through this experience, I live each day feeling incredibly blessed.

I lived in a house where honesty and trust were an expectation. Most of the time, I was very open with my parents about school. I only had a couple of rebellious streaks, but besides that, I would consider myself a pretty good student. I struggled with maths in school, and when I reached year 4, it was affecting my behaviour. My teacher recognised this and called a meeting with my mum and dad. They worked out a strategy to help me get back on track with my maths. I stayed behind a few nights with my teacher and mum to work through some maths problems. Once I understood how to solve the problems, I loved maths. This was an example of positive communication, listening and problem solving between a parent and a teacher, and this is the type of educator I strive to be.

I have lived in a small country town for 22 years. There are only four small schools in the area, so it was common to "hang around" a mixture of kids growing up. I played three different sports and attended singing/music lessons. I worked at the local shops in high school and am now part of a farming community. Having this experience with different aspects of the community, it is fair to say I know a large population of my home town. This makes working in a school system tricky, regarding knowing a lot of the parents on more than a professional level. I work as an SSO and holiday

carer. If I go to the supermarket, out for tea at the pub, for hairdressing or for a coffee at a café, I guarantee I will run into a parent or a child from my local school.

I have been approached out of hours by several parents over the years. These encounters include discussions about school policies and their child's progress to asking about how nits are invading the school! On my last placement, I had two students and one parent trying to add me on Facebook (which I denied). I also taught two students whose parents I had worked with prior as my mentor teachers on a placement. One of these parents was having issues with their child and had a meeting which I sat in on. The parent repeatedly apologised to me throughout the interview for getting upset; it was an awkward feeling.

This is my final university assignment, and I am so fortunate to have opportunity to investigate my last piece of the puzzle. This piece is a big one though, and it will only start to fit with experience. However, I hope to gain some tips and tricks to understand and better prepare me for dealing with difficult parents to positively benefit the student's needs.

Who Did I Think I Was?

Throughout school, I had multiple leadership roles and put on a brave front for public speaking and talking to "important people". It was not until I left school that my confidence took a knock and I could no longer put up those bravery barriers. When I began working at a school and holiday care, I suddenly found parents the most intimidating part of the job. When I had to make phone calls home, I found I choked up and over-analysed every word that comes out of my mouth. I would dwell on the conversation all day and wished I have said a bigger fancier word to them. I listened to experienced teachers' talk to and about parents and their experiences, and I would think "wow" that was a great response to that issue.

Who Do I Think I Am?

I now believe that I have come a long way regarding dealing with difficult parents. That is largely due to my fantastic mentor teachers over the years and my encounters at work. I know I still have much work to do, but I feel as though that comes with experience. I love this particular quote I found regarding a parent/teacher relationship:

> A miscalculated response can backfire; it can fan the flames of parents upset and even burn bridges we have worked hard to build between school and home. That is when we use techniques aimed at extinguishing fires before they develop into full-fledged infernos. (Hopkins 2007)

I feel as though I am slowly but surely beginning to learn those techniques aimed at extinguishing those fires.

Of This Much I Am Sure

A parent's attitude, values and behaviours are the most important influences on a child's early learning, development and educational outcomes. When you are positively engaged in your child's education, they are more likely to do better and stay in school longer (DECD 2016). This statement highlights that I know for sure I do not want to be a teacher that thinks it is too hard to contact a parent because they are intimidating or difficult. I want only the best for my students, which means communicating with parents. To find out how to develop this relationship, I spoke to both educators and parents, and the findings were astonishing; I certainly feel more knowledgeable about my topic due to this.

I spoke to two parents; the first has three children currently in primary school and the second whose children have both completed their schooling and moved on to university. Both parents stated the most important item when it comes to parents and teachers is communication. They expect to be kept in the loop, honesty, frequent communication via phone calls, meetings, as well as verbal or written feedback on their children. The first parent also explained that she expects a copy or outline of the teaching programme and to be told immediately if her children are falling behind. This confirmed to me that most parents will not be difficult if you are constantly communicating with them.

I also investigated the topic of creating positive educator–parent relationships and dealing with difficult parents with ten educators, including teachers, SSOs, administrative officers, a counsellor/special education worker and a principal. The SSOs indicated that they had experienced a low level of threatening behaviour from parents, and as SSOs do not generally have a lot to do with parents, this was to be expected. The administrative officer and the general classroom teachers all expressed a mid-level of threatening behaviours from parents. However, the school counsellor and principal experienced the highest level of threatening behaviours from parents. It really saddened me that all teachers had expressed at least a mid-level of threat from parents. It got me wondering: Is it just accepted that parents could be that highly intimidating?

While seeking what tips and advice educators have for dealing with difficult parents, the school counsellor stated a common theme in the responses was to stay calm and not to be alone with agitated parents, and say things like "I can see you're angry; that would have been difficult/upsetting, and I would like to help you". She went on to suggest that when meeting with parents, ask for support from leadership or other teachers. The school counsellor reinforced the importance of not raising your voice and inviting them to your classroom or the office to discuss the matter and then make an appropriate time to discuss any issues when they have calmed down, and you can get support.

I found the school counsellors' response was indicative of other staff members. One area that was addressed by educators was the importance of listening to parents. When researching relationships with parents, I reflected on the importance of considering how you like to be listened to when you have a problem or concern. We do not like to be dismissed; we like details and solutions. We like to feel we are being supported and we can trust the other person (Ponsford 2015).

Many educators had been approached by a parent out of school hours about a school issue; thus, it is fair to say that I have had to quickly adapt to knowing parents and how to respond to these kinds of questions. There were lots of mixed responses as to how individuals dealt with the situation. However, the common conclusion to the situation was to tell the parent to make time to see them in school hours. One of the teachers, however, said to chat to them briefly about the situation; another said to answer their questions and deal with the issue if you can. The school principal indicated that she would ask them to make an appointment unless it was an emergency. My conclusion from the responses is that it is inappropriate to discuss school matters out of hours; there would be some exceptions, but they would have to be judged by the educator at that point in time.

Conclusion

In conclusion, for dealing with difficult parents to benefit a child's education, I believe there are several key factors to apply to any situation or type of difficult parent, whether they are the overly involved, absent, demanding, defensive or uncooperative parent. The first is communication, communication, communication! Keep parents in the loop, make them feel important in their child's education, try to break down those difficult barriers, and build a positive relationship, because the better the relationship between the parent and the teacher, the better off that child will be. Whether it is a note home, a short phone call, a meeting or a discussion, it is greatly appreciated by the parents, especially if they are the absent parent. In tense situations, stay calm, do not raise your voice, and listen. You do not always need to solve the problem then and there. If you are unsure, respond with "Thank you for your concern. I will take that on board, can we schedule another meeting after I have had some time to observe or discuss it". Last but not least, work in partnership and harmoniously with parents. You are not enemies: one simply cannot work effectively without the other.

At the end of the day, all parents (no matter how they may show it) want the best for their child, and so do we as teachers. I still feel nervous about my future encounters with difficult parents. However, I now have some tips under my belt ready for those situations and am more excited than ever to get out there and start teaching!

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Chapter 26
Understanding the Impact of Mobile Phones and iPads on the Sleep Patterns of Adolescents in the Twenty-First Century

Fiona Curtis

Abstract In this paper, I examine the issue of sleep patterns in middle year students, specifically how a lack of sleep might impact on attendance and learning with early school start times. The context for this examination is Darwin in the Northern Territory, where school start times are from 8:00 to 8:30 a.m. I have memories of my schooling experience in Ireland where student tiredness did not seem to be a problem in the early part of the school day. In my placement experience in a Northern Territory school, however, I was struck by the number of students coming to class late or looking tired and not ready for learning. The issue is complex, and I look at what the research says about this issue as well as undertake student surveys to find out possible factors affecting sleep patterns for teenagers and whether schools should consider more flexible school start times for this age group.

Journal entry, 18 April 2017, Darwin, Northern Territory

> As the bell rang at 8:00 a.m., I watched students arrive to class dragging their feet and looking bleary-eyed. Lesson one was interesting, to say the least, students came in, sat at their desks, slumped onto their bags and tried to focus their attention on what was being taught. Throughout the lesson, five students arrived late, one or two arrived five or ten minutes late, and the others arrived 30 or 40 min into the lesson. At 8:45 I went with the Year 8 class to their next lesson. I was surprised to see another two new students join the class in lesson two. My mentor informed me that it is normal for 30% of students to be late to lesson one or miss it completely. As students settled into lesson two, I saw a drastic change in their behaviour. Students noticeably became more alert and actively participated in the lesson. I wonder, what is the benefit of lesson one if most students spend their time staring into space and disengaged? Why are students so tired? Are they getting enough sleep? Is their start time too early?

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Introduction

I am a mature student in the final semester of my teaching degree. I grew up in Ireland in the 80s and 90s, and I had a strong Catholic upbringing. Once I finished school, I went to university and completed a Bachelor of Science, mastering in biochemistry. Two weeks after my final exam, I left Ireland to see the world. I planned to return to Ireland following a year or two of travelling and enrol in a Master of Teaching, but life took me down a different route. Two years ago, the stars aligned and I leaped to share my passion for science. There are many challenges that I have faced as a pre-service teacher, but one of my daily struggles is to engage students that attend lesson one. In this chapter, the issue of sleepy teens in the middle school classroom will be discussed, a challenge that most middle school teachers face in lesson one each morning. The goal of this approach is to examine many extrinsic factors to find common themes that may be impacting the sleep patterns of middle school students in the twenty-first century. My aim is then to use this information to promote students', parents' and the school community's awareness of healthier sleep habits.

Who Was I?

As discussed, I grew up in Ireland in the 80s and 90s and spent most of my school years in Catholic schools. I remember strict rules, teacher-centred classrooms and a great deal of homework, all of which I have an aversion towards. Back then, we lived in a simpler world: there were no mobile phones, no access to computers at school, no computers at home, and in order to complete a research assignment you spent hours in the school or local library reading the encyclopaedia. At the end of year 9, mobile phones and dial-up Internet connections were introduced, and although the dial-up Internet connection tested my patience, it was so amazing that you could connect with the world at the click of a button. I did not use the Internet very often back then as only a couple of students in my class had Internet access at home and, for those that did, it was very hard to hide the noise of the dial-up connection from your parents when you were meant to be sleeping.

Throughout my middle and senior secondary years, my school day started at 9:15 a.m. and finished at 3:30 p.m. Some days, in lesson one, I would struggle to keep my eyes open, but only when I had little sleep the night before due to staying up later than normal, listening to music. On those mornings, I would arrive exhausted and unmotivated, and it would take half way through lesson one to "snap out of it", as the teacher used to tell me. There was always an odd student in the class that struggled to keep their eyes opened in lesson one, but it was not the norm.

When I stepped into a local school in April 2016, there were many things that differed from my school days, but one thing that stood out and puzzled me was the amount of exhausted and unmotivated teens in lesson one. I originally thought this was down to the earlier start times. Therefore, when I arrived home one afternoon

in April 2016, I spoke to my Australian partner and asked him if 8:00 a.m. was too early for children to start school. He said,

> No, children are used to it. It has always been this way in Australia: Children get up early, go to school and then finish early. I never had a problem with it but my parents made me go to bed before 9:30 p.m.

Researching for my assignment, there seemed to be a general consensus that there are many intrinsic and extrinsic factors that could be affecting middle school students' sleep patterns. Early start time was one such extrinsic factor, addressed by Zuckerman (2015). Zuckerman and his team of sleep researchers suggested that a delay in school start times would improve students' sleep, mood and behaviour. However, although the research is encouraging, such a big change nationally is hard, and school districts are set in their ways; therefore, I did not feel that I could conduct a thorough research of this area without changing the school start times.

Another area of interest was intrinsic factors and delayed sleep onset in teenagers. Carskadon et al. (1993) conducted research on intrinsic factors affecting adolescent sleep patterns and focused on the association of puberty and delayed phase onset in teenagers. This research proved that intrinsic factors do impact the total sleep hours of teenagers, and research conducted by Owens et al. (2010) suggests that delaying school start times has a positive impact on adolescent sleep, mood and behaviour. On reviewing the article from Keyes et al. (2015), it seems that intrinsic factors have always had a part to play in the change in adolescence sleep patterns and reduced total sleep hours. During the last 20 years, adolescence sleep patterns have noticeably decreased year after year possibly due to environmental factors.

I then started to reflect on my own journey over the last twenty years, and this leads me to think about other extrinsic factors. One such factor that comes to mind is the use of electronic devices in bed. Mobile technologies were not developed or very limited to the general public up until the late 1990s. Advances in technology have come a long way since the 80s and 90s. Most students today have a mobile phone attached to their hand, and 70% of households in Australia have access to an iPad or tablet (Moses 2013). With this rapid growth in new technologies and Web 2.0 in the twenty-first century comes lots of benefits for learners of today but also lots of distractions, which may result in students having difficulty relaxing and switching off from smartphones and electronic tablets at bedtime. Personally, I felt that using my mobile phone in bed contributed to a reduction in my total sleep hours; therefore, I conducted a student questionnaire on fifty middle school students from years 7, 8 and 9 to learn more about the potential impact of mobile technology on the sleep patterns of students.

Whom I Discovered

I did my investigation with fifty middle school students. About 86% of students indicated that they used their mobile phones/tablets in bed. The majority of these
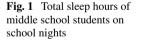
students used their phones for social media and games. The average time spent on these applications in bed was 28.5 min each night. Interestingly, the majority of them felt that the use of mobile technologies in bed affected their sleep patterns, about half of them felt consistently tired in lesson one, and one in three felt tired all day. The reason claimed by the students who were late to one or more classes a week was "too tired to get up". Overall the average total sleep hours were 7.5 h among this group of 50 middle school students. On average, the year 7 students were achieving 8.5 total sleep hours a night, year 8 students were achieving 7.5 h and year 9 students were achieving between 6.5 and 7 total sleep hours (Fig. 1).

There were noticeable links between mobile phone use and decreased total sleep hours, especially with year 9 students, with 45% of year 9 students spending 30 min to over an hour on their phones in bed compared to 25% of year 7 students and 23% of year 8 students.

Sleep researchers suggest that a delay in school start times would improve students' sleep, mood and behaviour; however, although the research is encouraging, such a big change nationally is hard and school districts are set in their ways (Zuckerman 2015). Many students indicated they would like to change the current start time from 8:00 a.m. to 8:30 a.m. or later. However, it was noticed that one in two students does not have breakfast, which may contribute to low energy levels of some students, as most of the students do not consume energy drinks or caffeine.

This Much I Know for Sure

In 2007, Van Den Bulck conducted research on the adolescent use of mobile phones for calling and for sending text messages after lights out and found that 62% of students in the study used their phones for calling and sending text messages after lights out with 35% of the cases attributing tiredness with mobile phone use. In addition, of the students that use their phones in bed, only less than 10% used their phones

Fig. 1 Total sleep hours of middle school students on school nights

for calling and sending messages, while the majority used their phones for gaming, social media use and watching movies. This is not surprising with the emergence of different kinds of smartphones.

Of this much, I am sure: currently, middle school students are not getting enough sleep. Teenagers need 9–9.5 h sleep a night to function at their best (Mindell and Owens 2003). It was interesting to see what I found was also in line with the result obtained from Carskadon's (1990) research that tells us that, from the ages of 12–15, students' total sleep time decreases due to a combination of later bedtime and earlier start times. In 1993, Carskadon et al. continued researching but focused on the association of puberty and delayed phase onset in teenagers. This research proved that intrinsic factors also impact the total sleep hours of teenagers. This is something that I did not assess directly. However, more than half of the students in my investigation went to sleep at various times because they felt tired at that time. This was also evident at the weekends. Weekend bedtime was also later than school nights, with a higher number of year 9 students staying up past midnight on weekends and sleeping in after 9 a.m.

However, 40% of the students were still waking up between 8 and 9 a.m. on weekend mornings as they felt awake at this time. This may suggest that there may be a need to change the school start times to accommodate teenagers' sleep habits.

Conclusion

Prior to completing the data analysis, I predicted that the use of mobile technology in bed would have an impact on the sleep pattern of some students. It is clear from the data obtained that more students than ever before are using their phone in bed for a variety of reasons. In turn, this is having a noticeable impact on students' behaviour in the first lesson and throughout the day. I am sure that there are other factors that also come into play but that the main one is mobile technology use in bed as over the last twenty years mobile technology has had rapid development and now more than ever children have easy access to phones, tablets and applications. I have become aware of my own mobile phone usage in bed and how it is affecting my sleep patterns. I have currently conducted one week of no phone use in bed, and my total sleep hours have already improved.

Phone use in bed is becoming a daily habit for some people, and in order to retain healthy sleep patterns, mobile technology needs to leave the bedroom due to the endless distractions that it possesses. In relation to the classroom and where to from here, I have started to incorporate more hands-on activities and brain teasers to help the students become more active and alert in lesson one. A positive change has been seen, but students are still hesitant and some seem so sleepy that they need the first lesson to wake up and adjust to the day ahead. In addition, I have planned to conduct a sequence of lessons on healthy sleep patterns in my pastoral care and guidance subject to inform students of the importance of having enough sleep, and the impacts of not having enough sleep. There is not one solution to this issue; however, the

Chapter 27
Physical Classroom Environment and Anxiety: Primary School Teachers' Consideration of Their Physical Classroom Environment

Check for updates

Nadia Kristen Lelli

Abstract As a young child, I suffered from anxiety so that even a classroom with walls that were covered with academic work, the ceiling with artwork and the floor with blocks would set my mind off into a panic. As the classrooms became more structured and bare in secondary school and at university, I thought I was over this, but on my fourth practicum, the classroom environment was so 'noisy' that my problems with anxiety returned, and I found that one of the students seemed to be affected in much the same way I was. This led me to examine the literature on the significance of the physical classroom environment and its effects on student outcomes, leading me to hope that my experiences can encourage readers to self-reflect and reconsider their beliefs about physical classroom environments and how they may affect the students in their classrooms.

Journal entry, 4 April 2017, Darwin, Northern Territory

> I walked into the classroom, and all my senses were overwhelmed with noise. It was so loud! "How can students concentrate in here?" I thought. I looked around the classroom more to see posters covering every section of the wall; couches, pillows, carpets in a clump on the floor; the roof had items dangling everywhere. I had to take a moment to try hearing my own thoughts. "OK," said my mentor, "The children will be coming in soon."

Introduction

For as long as I can remember, I have suffered from anxiety. From the earliest years of transition, I would immediately become physically sick if I had left my homework at home. I would beg my mother to drive back home with my baby sister to get it, often resulting in a 1 h round trip. She would go and get it every single time, as she knew if I did not have it I would be sick with migraines for the rest of the day. My mind was always thinking of how I could be better, smarter, faster and funnier from

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an extremely young age. I just always wanted the teachers to think I was the best. My mind has always been filled with ideas, buzzing at all times of the day and night.

Whether a young child might have anxiety was not even considered by teachers when I was younger, and unfortunately, is still not a major priority for them. Walking into a classroom where the walls were covered with academic work, the ceiling with artwork and the floor covered in blocks would set my mind off into a panic. Whilst there was not a single sound, the room would be so loud I could not stand it.

This chapter will aim to look at how primary school teachers consider their physical classroom environment when teaching, and whether the potential effects on students are understood.

Who Did I Think I Was?

Even in my earliest memories of primary school, I knew I was extremely different from my peers. I struggled on a daily basis to get myself to school, scared of the unfamiliar: 'What subjects would I be doing today? What would I be learning? Do I know about this topic already? Everyone else will think I'm stupid if I don't know about it'. These thoughts occurred on a daily basis from the age of about 4 through to 12. I dismissed them thinking it was just who I was, and thankfully as I went further into high school, my anxiety and fears slowly diluted into nothingness. When I got into Year 11, I was completely fine; nothing bothered me anymore. What I did not realize at the time was that as the classrooms became more structured and bare, so did my mind. The clarity in the classroom duplicated itself in my head, and the university was the same.

After my first three practicums, I thought I would be able to complete my final one without concern, and I was wrong. As described previously, I entered an environment, which would end up having a dramatic effect on my mental health. All the issues I had as a primary school child came back with a vengeance. In my third week at the school, I completely fell to pieces. I tried to force my mind to not hear, not to see and not to feel the chaos, but it was more difficult than I ever thought it could be. I began to suffer severe panic attacks where I could not catch my breath, I would cry every day before I went to school, I stopped eating, sleeping, and eventually had a complete meltdown. I began medication in an effort to control my anxiety, and had to start seeing a psychologist once a week.

When walking into an early primary school classroom, it is typical to see student work covering the room, displays of the alphabet, numbers, words and various other resources and visual displays (Martin 2002). These elements comprise a classroom's physical environment. The environment that I entered on my fourth practicum was completely new to me. It was that of a play-based classroom which did not have enough desks or chairs for each student. There were two coloured desks with six chairs around each of them for the class of 25. Along the walls, there were posters, student work, student drawings, words, letters, numbers, data, student levels, calendars, learning scales and just all-round stimulation. The classroom had yellow, blue

and green chairs sitting on a pale blue floor with a bright orange, red and green carpet. My teacher described it as 'welcoming and developmentally appropriate', however, all my brain was able to process was noise. It took me at least five days to begin hearing my own thoughts whilst I was in the classroom.

I would spend my recess and lunch times outside with the students just to get some air and headspace. Moreover, it was every recess and lunchtime I spoke to one of my students, John [the name has been changed]. John was a Year 1 student in my class who I immediately got along with. He sat with me at recess and lunchtime every single day of my practicum and would talk to me about various things. He was highly articulate and extremely intelligent, particularly in mathematics. His father was a high school mathematics teacher, and it showed dramatically in his abilities. John was capable of Year 2–3 work, and he could grasp mathematical concepts almost immediately. His literacy and reading levels were not quite as high as his mathematics, but he was still achieving above average results.

In class, John would sit by himself and practice mathematics whilst the other students were building, painting, arguing or chasing each other. He would practice addition, subtraction or, his favourite, skip counting. He would do this every single day. Once a week the students were tested on their reading levels, and he would all of a sudden become a recluse. He sometimes refused to complete the tests at all and would be unable to 'skip' words he could not read. He had to be told what the words were.

One day after school, his father rang my mentor teacher and told us that John felt as though he was 'failing as a student' because he was not advancing high enough in his reading levels. Then it finally dawned on me. I realized we got along so well because we were the same student, the overwhelmed, anxious and nervous student that kept to themselves and suffered in silence. I began to look at his relationship with his classroom and realised he was easily distracted by the visual elements around him. Observing him, I could see his attention shift from the teacher to the walls, to the carpets or to the windows almost every 30 s or so.

Hannah (2013, p. 1) describes classrooms as 'where [students] will learn the various skills deemed necessary and proper for them to achieve success in the global society' and that the classroom 'is where they will gain an understanding of their place in the world and the gifts they have to offer it'. The importance of students' classrooms is emphasized in these words. However, teachers' consideration of its physical elements is often given much less attention. Fisher (2011) attributes this lack of consideration as a flaw in the teacher education system, stating that 'environment-behavior research and evidence-based design with regard to educational settings is not ordinarily part of teacher education, and is unlikely to be a factor when districts undergo strategic planning processes to improve outcomes' (p. 10). Unfortunately, these holes leave students like John and myself vulnerable, with little help available to us.

Who Do I Think I Am?

At this point, I am a few short weeks away from finishing my final practicum. I am still seeing a psychologist, and am on medication to help me settle my anxiety. Whilst my final placement has been one of the hardest hurdles of my life, it has taught me a lot about who I am, and who the students are that are quietly suffering. Whilst we, as teachers, focus heavily on inclusivity and embracing differences. Unfortunately, there are often students that can go 'under the radar' and will deal with their symptoms in isolation. My anxiety was evident in my first year of schooling at age 4, but it was dismissed as my 'being a perfectionist', causing it to become an untreated time bomb. Costello et al. (in Ruocco et al. 2016, p. 29) state that 'estimates of anxiety disorder prevalence for children aged between 2 and 8 years range from 6.1 to 14.8%' Ruocco et al. (2016, p. 29) describe these children as 'at greater risk of academic underachievement, social withdrawal and school refusal', and state that untreated anxiety places these children at a 'greater risk of developing future mental health problems such as depression'. They furthermore agree that early childhood is an extremely important target for intervention.

In my own experience, I found that the environment around me would affect my anxiety levels either positively or negatively. Walking into any room would dictate my emotions for the duration of my stay. My fourth practicum truly opened my eyes to the dramatic need for teachers to consider their physical classroom environment for all their students. Baker and Bernstein (2012) discuss the physical classroom environment and its effects as becoming a growing topic of research. The need for continuing research regarding the interconnectivity between physical classroom environment and student outcomes is also highlighted by several researchers with Hensley-Pipkin (2015, p. 115) stating that it 'holds the potential to positively impact student skill and engagement levels, and therefore, academic achievement'. Hand (2014) furthermore underlines the need for teachers to consider their physical class-room environment and the gap in teacher education for its lack of emphasis on the topic. She also states that physical classroom environment needs to be a 'key part of [teacher's] overall thinking and practice' (p. 14). Martin (2002) also argues this point, stating that teachers who fail to acknowledge their classroom environment do not 'prize wisdom above ignorance' (p. 153).

Of This Much I Am Sure

I am a person who reacts to what is around them, and so are many other students. In particular, I react to my physical environment. In order to fulfil my dreams of becoming a primary school teacher, I understand that my anxiety is not ideal. However, I am lucky to have got a mentor teacher willing to support me through difficult times. Despite my troubles, it has been interesting to witness the effects that the physical classroom environment had on me. All this time was it my environment

that had caused my anxiety? Can I control it now? What can I change to make this environment better?

Of this much I am sure, I had a breakdown. I became physically ill, and I am still on medication to overcome it. However, whilst this has been one of the most difficult times of my life, it has been one of the biggest lessons of my life. It has taught me who I am, whom I want to be, and how there are others exactly like me. More than anything it has taught me about a teacher I want to become, and the classroom I want to have. I want to be the teacher who can create a calm environment for my students that can allow them to come in and relax. I want to have a more holistic approach to the classroom, not one where students are constantly bombarded with visual, verbal and physical stimulation. We, as educators, need to remember that each child has a different interpretation of their environment, and we need to cater for these children, particularly when they cannot vocalise their feelings. As their teachers and mentors in life, we need to be there to carry them through their journey in education.

To fulfil my desire of becoming a primary school teacher, I need to finish my education and be open to different learning environments and the requirements of other schools. I also need to be more accepting of the varied methods and pedagogies of these schools. However, I also believe that teachers need to place more of an emphasis on their physical classroom environment. Its impact is still not considered to the extent that it should be.

Conclusion

The discussion surrounding the physical classroom environment and its effects on me were illustrated to provoke thought and consideration among teachers. I never expected that a school practicum would have such a dramatic effect on my physical and mental health, but hopefully, my experiences can create a catalyst in the minds of readers to self-reflect, and consider their beliefs about physical classroom environments, as well as about the students in their classrooms. This will not only benefit the students and their mental and academic outcomes, but it will also provide an opportunity for teachers to enhance their practices through self-reflection and evaluation. As well as this, teachers can develop a deeper consideration of students who may be sensitive to over-stimulation, and the possible harmful effects of this.

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Chapter 28
The Effect of Arts Pedagogies on the Emotional Intelligence of Middle to Upper Primary Age Boys

Rachel Platte

Abstract I came to write about the issue of emotional intelligence through the experience of mental health issues in my family life. At secondary school and after finishing school, the Arts was a way I found to express myself and understand myself and connect with others and my family. Arts helped me to be positively engaged in life and achieve a level of emotional intelligence. Through my school practicum experience, I became curious about the relationship between middle to upper primary aged boys' emotional intelligence and their learning in school and well-being. I came to see that the emotional intelligence of teachers had links to having effective relationships with students, which in turn would affect achievement. I found that boys, who are having problems in school, can sometimes be more comfortable expressing themselves through the Arts. Teaching through the Arts can help develop children's emotional intelligence.

Journal entry, 29 April 2016 in Darwin, Northern Territory:

> When coming in from lunch, I had the responsibility of bringing the students into class. As I waited for the music to finish playing and the students to line up, I noticed Elijah Johns [not his real name] was very upset and crying at the back of the line. I went and crouched down with him and asked if he was okay. He said someone was being mean and bullying him during lunch. So I asked again, "So you are not physically hurt, but your feelings are hurt?" He agreed. I said he could have 5 min to cool down once we walked into class. My mentor was back by then, and she dealt with him. Later, she mentioned that, with boys at this age, it is common that when they are emotionally charged they either fight back physically or break down crying. Wow, my mentor hit the nail on the head there. Now my understanding of this demographic has deepened, and it makes sense as it is quite close to home with memories of my brother.

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Introduction

I grew up in a little satellite town south of Cairns called Edmonton, in the beautiful state of Queensland. I have a mum and a dad who divorced when I was in Year 4. I also have an older brother. Mum provided a solid home environment, and Dad was there sporadically. My mum tried her best to support my brother and me, but I always felt I needed more guidance in intangible emotional aspects. Despite the circumstances, they always made sure we got what we needed for school and sports, and family and friendships were the foundation for everything. However, nothing could prepare me or my family for the devastation of loss from suicide.

I would not be here writing this today if it was not for my older and only brother who, in May 2009, chose to end his life. Everyone has probably experienced the type of person who overreacts or acts out his or her emotions. I saw it at home and in the classroom setting. This was him. He was a headstrong type of person who always thought he was right. I got to know his behaviours very well, and I would look on at his behaviour and that of his peers and think that does not seem like the right way to go! There was only so much my parents could do to reach him, to help him learn. Around the time my brother ended his own life, I could count on two hands the number of youth who had done just the same, all within the same Cairns region. They were mostly male, but also a few females, which is reflected in national statistics of youth suicide. This speaks volumes to the way youth are growing up and the world they are growing up into. I certainly had some apprehension as a teen about growing up into the world. I was bewildered by the intensity of emotions that had a real impact on my actions. I wondered if they would ever stop or if I could teach myself to deal with them. To this day, juggling work, university assignments and placements is very trying on my emotions and thankfully I have developed strategies to help me through it.

Who Was I?

Before the moment my brother made his fateful decision, I knew there was one career that I did not want to follow—teaching. Being out of school for only two years, the experience was still fresh, and I knew what teaching was like (I thought I did). Throughout primary and high school, my observations from the quiet spot in the room elicited teachers' constant efforts to deal with unwanted behaviour. Although I consider myself to have had an excellent education, the downside of the teacher's role did not appeal to me. I did not think I could ever demand so much of myself to be responsible for so many other human beings. From what I felt, there was not much about me that children would engage with or learn from anyway.

Throughout my schooling, I always aimed high in everything I did and achieved excellence academically and in the sport. I could apply myself to control these outcomes; however, it was less easy to control the unseen emotional struggles within.

After finishing school, that aspiration for achievement fell away and made way for pursuing personal interests that helped me deal with and understand my emotions. While I worked in multiple low-key retail and hospitality casual jobs, I concentrated on further study in Visual Arts. I expressed myself through the Arts in drawing, painting or sculpted artworks. My brother expressed himself through music and so too did our whole family. The Arts had a big impact on how I connected with others and myself, including my family.

The Arts were a way for me to stay interested, enjoy and be positively engaged in life. I gained the confidence to develop my own relationships in a field that interested me. I came to understand the world through art and music as well as the impact it had on my emotions. This was apparent when a feeling could be evoked by viewing artwork and again when I created artwork with the intention of conceptualizing an emotion. It was comforting to know that my artworks also resonated with others in similar ways; even if, at times, I thought I could not relate on a personal level. This reveals how much the arts impact others too.

Where Am I Now?

Less than one year after my brother passing, I was invited to apply to teach pottery classes at a local pottery club. It was for adult clients who would participate in activities such as pottery as part of their mental health rehabilitation programme. Well, I got the job despite my fears and reluctance to be further involved in an emotional space I had come to know well: experiences with mental health. Amongst other activities, I taught clients to vent their anger with the clay, kneading and pounding it to change its shape. Conversely, my gentle nature allowed them to see the calm and fragile ways of clay too. Most of all, our actions controlled the clay, and the clay did not control us unless we let it. Metaphorically, we could control our behaviour and sometimes our emotions, rather than letting it control us.

I was teaching what I loved to do and was one step closer to paving a creative career for myself. The club was also looking to begin children's pottery classes, so I took that on too and never looked back, eventually enrolling into university a year and a half later. Word had got around the Cairns area, and I was teaching pottery at schools too. I involved myself in club committee duties and felt a real sense of passion for my community and giving back in many hugely meaningful ways. It was part of my emotional healing: developing responsibility and experience. I had dedicated my life to being a positive influence in the lives of others as a response to my prior experiences of feeling other-than-positive.

Children came to my after-school pottery classes like it was their weekly sporting activity. Most of them wanted to be there; some were directed by their parents. Either way, they had a particular aptitude towards working creatively and producing something from expression. I wondered if they were not getting enough Arts experiences at school or if they simply could not get enough of the Arts. Children found joy in the experience while learning a variety of skills.

I did not realise how little I knew about the link between art and emotions and emotions and learning until I studied education at the university. Both theoretical and practical knowledge experiences have presented situations where children are dealing with emotions associated with unfavourable circumstances either at home or in peer groups. Coincidently, I observed such children to use the Arts as a form of expression. However, there were also instances where they expressed their emotions by crying—in similar nature to the key idea expressed by my mentor in the journal reflection. My curiosity led me to find a relationship between middle to upper primary age boys' emotional intelligence and their learning in school and more generally. I hope that in their learning about and through emotionally sensitive strategies, there may be lasting positive effects later in life.

Of This Much I Am Sure

Friedman (2014) states that the emotional intelligence (EI) of teachers has links to effective student relationships, which may have effects on student achievement through a number of factors (Costa and Faria 2015; Rust 2014). So, my investigation parallels my learning of EI to have an optimal effect on my students' learning in general and of their own EI. I have come to learn through personal experiences, placement and work that teaching through the Arts creates access to the emotional field in order to develop children's EI.

Of this much I am sure: no matter how hard I try to help others in this area, change and growth come from within and require personal effort to participate. However, once a child is willing it may be possible to actuate help, keeping in mind that EI develops with age (Billings et al. 2014). Meanwhile, I must remain impartial to students' issues and acknowledge them with empathy. I acknowledge that no matter how much I try to assist students' learning in an emotionally responsive way, it might not prevent any future issues with mental health. Nor will it seek to rectify or erase the past events in my experience. Nevertheless, the presence of some form of positive action is surely more beneficial than an absence of such action.

Salovey and Mayer (as cited in Rust 2014) define EI as involving the ability to perceive accurately, appraise and express emotion, the ability to access and/or generate feelings when they facilitate thought, the ability to understand emotion and emotional knowledge and the ability to regulate emotion to promote emotional and intellectual growth. This translates to a four-part model of identifying, using, understanding and managing emotions. My investigation dealt with two aspects: identifying one's own emotions and how they are managed. I conducted my investigation by surveying 19 middle to upper primary age boys through a relatively short activity. The group of children ranged from 8 to 12 years old at an after-school care setting. I did not test for differences in EI ability or trait, nor for comparisons between the range of different Arts pedagogies as this was beyond the scope of the project.

The results indicated that some students, who have previously been observed to have a reaction of crying or fighting back, do have an attraction to drawing to describe

and express those emotions. For example, Samuel (8 years old), chose to draw his responses to questions about emotions he knows of. However, his worry regarding the task was clear as he began to cry because he did not understand what he was supposed to do. He also mentioned he felt scared. At the suggestion of drawing, he suddenly became excited by the task and was able to compose himself. Evidently, his ability to express himself through drawing made the task more intrinsically rewarding for him to complete, which Amorino (2008) illustrated in his study of the integration of Arts pedagogies across all curriculum areas. Interestingly, Samuel's self-reported action towards unfavourable emotions such as anger was to fight, which is contrary to previous observations.

Perhaps one of the most salient results was that a few eligible students, Jake and Kobi, who chose not to complete the activity were the ones I had in mind to fit one of the purposes. This absence of participation in a school environment is worrying and what researchers identify as the critical point of the teacher's role is to create relationships that engage students' emotional interest, so they want to participate (Friedman 2014; McInerney and McInerney 2010; Rust 2014). Jake (8 years old), who would usually engage in an Arts activity with me, did not want to participate in the survey at all despite having the opportunity to draw. This is understandable considering the child's current family circumstances (similar to my own experience) and accompanying emotions.

Having artistic preferences may not necessarily equate to higher EI, which would make boys better able to understand and regulate their emotions at this age. In contrast, Mason and Tobias (both 11 years old), who had previously not been observed to be artistically inclined, were highlighted as being more attuned to their EI, quite possibly correlating with their increased age. Furthermore, research suggests there is no definitive link between higher EI of young children and gender (Billings et al. 2014). However, in studies of pre-service teachers, there is evidence to suggest higher EI amongst females (Perry et al. 2004). So, there is a link between gender and EI, especially as age develops, and, therefore, a need to emphasize the learning of and through EI for boys.

Nevertheless, the conversation results did not reveal clear data because the method was not conducive to providing clear results. However, it gave the opportunity for boys to discuss their answers in a group setting instead of being singled out or put on the spot in a one-on-one interview situation. They naturally grouped themselves with friends to support each other in answering the questions. Queries regarding the questions were addressed in a group situation, which worked well with the time restraints for the activity. However, this was at the expense of gathering in-depth data from a few selected individuals. Quality over quantity is preferable. Other factors affecting the gathering of results included being in children's after-school play time and possible peer relationship dynamics. Therefore, a firm conclusion regarding the topic across the whole group was not reached.

Conclusion

Innate artistic ability does not automatically mean having emotional intelligence; however, participation in the Arts may have positive effects on EI. The Arts are part of differentiation strategies for all students and enable access for participation. The basis for any teaching with the Arts is the social foundation it emerges from so the importance of teacher EI to positively influence teacher–student, and student–student relationships are pertinent to learning and EI. As research emerges in the field of the relationship between EI and teacher–student relationships and student learning, I am led to begin to question the role of the teacher.

Further, discussions from this research include the following questions: Is it beyond the role of the teacher to take on EI teaching strategies or should it be left to the school counsellor or be included in a mental health programme? Is it going to complicate the teacher's role or add a positive complexity, likened to adding another tool in the belt of differentiated teaching to meet student needs? It seems that given a population with growing mental health needs, schools offer one way to address children's emotional development when it is emerging, at school. The flow-on effect is that there are likely to be positive impacts on academic achievement, social–emotional relationships and an increase in students' interests and learning preferences.

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Chapter 29
The Benefits of Yoga for Primary Students: A Mindfulness Programme

Claire Gitzel

Abstract In schools around the world, "mindfulness" is being implemented in classrooms at a great rate. The literature claims that mindfulness in the classroom can reduce stress, improve the teacher–student relationship, increase student confidence, reduce the negative behaviour, improve behaviour management, promote classroom engagement and increase concentration (Willits 2015; Arthurson 2015). Prior to this investigation, I had a few experiences with mindfulness programmes: during my placements as a pre-service teacher; while attending a professional development conference; and through my employment as an Educational Assistant. Through reflection, I realized the proposed benefits of mindfulness could have been highly beneficial to myself as a student in the past and even now as a teacher. Yoga is just one programme used to increase mindfulness, and it can be conducted in the classroom for students and teachers to gain the benefits of mindfulness practices. It was proposed that yoga as a mindfulness programme, once implemented in the classroom, can increase student engagement, well-being and confidence. This chapter explains how students in my class experienced a range of benefits from yoga as a mindfulness programme.

Journal entry: Term 2, 2015, Newcastle, New South Wales:

> I have had the opportunity this week to observe other teachers and their classrooms, which I always find highly beneficial to my learning. When I went into a Year 1 classroom, I found the students focused on the smartboard out the front. The students were spread across the room, in their own spaces, concentrating hard on the instructions being given from the YouTube yoga instructor. I was surprised to find every student engaged in this activity. Cosmic Kids yoga (Amor 2016): This was not the first time I had seen teachers use this program to promote "mindfulness". At my place of employment, I had previously floated through a few classrooms while the class had been using this program. The students of this class were thoroughly engaged, calm, and focused. This certainly wasn't the case every time I saw this program being used, but it was working well today. I wondered how long it would last. I wondered about the benefits of this program. Was it just to give the teacher a much needed ten minutes to catch up on emails or marking? Is mindfulness really beneficial to the students and how so?

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Introduction

I am a mature age student currently completing my final semester of the university as a primary education pre-service teacher. I am a sister; I am a friend, an educator, a wife and a mother. I currently live in a small town in New South Wales and have done so for many years since meeting my husband many years ago. However, during my school years, I moved often with my parents and brother. Every few years my family was relocated, and this meant starting at a new school, making new friends, and adjusting to various curriculums. The schools I attended were spread across New South Wales, the Australian Capital Territory and overseas in North America. I felt like I was always "the new girl" and my self-confidence as a student in this situation was not the best as I was shy and reserved.

Over the last six years, I have had many different roles while being employed at my local school. Most recently, and for most of my employment, I have worked as an Educational Assistant, which I have thoroughly enjoyed. I often work with students who need extra support, and I find assisting them with their education is very rewarding. I have found that these students often benefit from specialized programmes and differentiated activities that address their personal needs, learning needs and individual qualities. Along with my employment in classrooms, I have also completed three practicums in a variety of educational settings. During these experiences, I certainly noticed the stress levels of students, their self-confidence, concentration levels, engagement levels, the student–teacher relationship and student behaviour. These are all issues that can be addressed by introducing "mindfulness practices" such as yoga.

Who Did I Think I Was?

A few years ago, while working at my local school, I attended a two-day conference for professional development where the term mindfulness was introduced to me by a guest speaker. Mindfulness refers to the process of observing, participating and accepting life moments from a state of kindness or equilibrium (Albrecht et al. 2012). This state can be achieved through meditation and contemplation and by paying attention to everyday activities (Albrecht et al. 2012).

My role as an Educational Assistant did not require me to explore this theory any further, but I was aware that mindfulness quickly became the theme for the year with colleagues learning more about it and implementing it into their classrooms through a variety of programmes. My understanding was, there are many ways to implement mindfulness, with overall benefits to both student and teacher well-being, increased student engagement, reduced negative behaviour, reduced stress, increase in student confidence and improved teacher–student relationships.

Reflecting on my years as a student, I can see how mindfulness programmes could have benefited me. Moving and changing schools often as a child had a huge effect

on me as a student, emotionally, socially and academically. My teachers would often refer to me as self-conscious, and this was very true. I was a worrier, and I lacked confidence. I never had an all-time favourite teacher because I was always moving. Looking back, maybe I did not want to form strong relationships because I did not think I would be there for long. I can see lots of links between my experiences as a student and how I might have benefited from a mindfulness programme.

This reflection has lead to an interest in mindfulness programmes in the classroom: in particular, yoga and what it could do for student well-being and engagement. I wanted to see if yoga could really have these positive effects on students or it is just a way for a teacher to get ten minutes of much-needed catch up time.

Who Do I Think I Am?

As I get closer to finishing my degree, I am becoming more confident as a classroom teacher. As a teacher, I strongly believe in addressing the curriculum but also providing students with programmes to look after their well-being, including ways to manage classroom behaviour and student engagement that allow students the best chance of learning. Some students can experience stress, low confidence, low engagement or disengagement with the curriculum (Willits 2015; Arthurson 2015) during their school years. Mindfulness and yoga, as a mindfulness programme, have been proven to be a way to combat these issues that some students experience. I am now also a teacher who reflects on my own school years, and I use this reflection to relate to my students in the classroom when I teach. I have a better understanding of what they may experience, and am now equipped with a strategy that can benefit many students.

Of This Much I Am Sure

At the start of my learning journey, I had some experiences with mindfulness programmes. I was intrigued by yoga in the classroom as a mindfulness programme and wanted to explore the benefits. Research showed it could benefit students by reducing stress, increasing confidence, increasing engagement, reducing the negative behaviour, bettering classroom behaviour management by the teacher and improving the teacher–student relationship (Willits 2015; Arthurson 2015). I wanted to explore the truth of these remarks and see it in action for myself. After completing my observations of the effect of yoga in my classroom, I can now say I have the experience and results to confirm the benefits of yoga programmes in the classroom. Of this much I am sure.

While doing my investigation, I wanted to focus on two particular benefits of a yoga programme suggested by research. My focus questions were "Can yoga increase student confidence?" and "Can yoga increase student engagement during

the following lesson?" I used the programme Cosmic Kids (Amor 2016). Each yoga session ran for about 5–10 min, and these sessions were held once a day for three weeks in a Year 2 classroom. The classroom consisted of nine female and 11 male students.

Did the yoga programme increase student confidence? I answered this question by observing students, discussing results with the teacher and asking the students to provide visual feedback after each lesson on how confident they were feeling. As a class, we discussed the definition of confidence and how the students could identify their feelings by gesturing with thumbs up to indicate feeling "confident" and thumbs down for "not so confident". Most days, 16 or more students would report feeling confident after completing the yoga programme. During the final week of this programme, at least 17 students reported feeling confident each day after completing the 5-min yoga lesson. Please note that some days, there were student absences. Sometimes there would be a correlation between the students who reported "not feeling confident" and the students who we, I as a researcher and my classroom teacher, would consider to be the students who sometimes lack self-confidence or who were often reserved during the yoga lesson. Over the three weeks, the majority of the more reserved, quiet and less confident students became much more involved in the programme. It was noted that these students were smiling during the programme, more engaged with the programme and looking less uncomfortable. The classroom teacher agreed with this, stating, "I have noticed greater self-confidence in many of my students, not only during yoga but also in other KLAs [key learning areas]". In a similar study, which implemented a similar programme, Willits (2015, p. 70) also noted that students displayed "joy" and "eagerness" towards the programme. Yoga, as a mindfulness programme, can have a positive effect on student confidence. Of this much I am sure.

Did the yoga programme increase student engagement in the following lessons? During my investigation, I counted how many students were on task, focused and completing work or engaged in classroom discussion, and how many students were off task. I took this tally 15 min into the following lesson after completing a yoga lesson. There were some limitations to this method, as some students were in the grey area between being on task and off task. Similarly, each student was observed for 30 s and although during this time, they would be on task, they could be off task not long afterwards, and vice versa. Drawing a conclusion was difficult as I did not know what the level of student engagement may have been without the yoga programme. Considering these factors, the overall data did confirm students were engaged with the lesson following a yoga lesson. On 11 of the 15 days, yoga was used, 14 or more of the 20 students were engaged in the following lesson when tallied. My informal observations correlated with this, I noted many students were active in the discussion and focus while completing class work. I also noted students effectively collaborating together. The research, despite its limitations, does relate to the current literature. When questioning how yoga as a mindfulness practice can increase attention to learning, one source claims,

> Yoga practice, a mindfulness exercise that promotes physical and emotional well-being, may create a cooperative environment or situation where internal distractions due to different learning styles and external disruption such as negative behaviors are minimized. (Arthurson 2015, p. 11)

Yoga as a mindfulness programme can contribute to student engagement. Of this much I am sure.

Conclusion

In conclusion, I would recommend using yoga as a mindfulness programme in the classroom. The literature claims a vast range of benefits for students including reduced stress, improved teacher–student relationship, increased student confidence, reduced negative behaviour, improved behaviour management, improved classroom engagement and increased student concentration levels. Through my learning journey, I have found several of these claims to be true. For example, over three weeks of including a yoga programme, students claimed to feel increased confidence, and this was also noted by my observations and by the classroom teacher. Also, students were engaged with lessons following a short yoga lesson with the teacher noting increased concentration levels. Similarly, I found this to be true while investigating my research question. In the future, I hope to continue using yoga as a mindfulness programme in the classroom.

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Chapter 30
The National School Chaplaincy Programme: An Itch that Can't Be Scratched: Politicians Satisfying the Church by Exploiting Public School Needs at the Expense of Its Students

Meaghan Jones

Abstract When I learned about the National School Chaplaincy Programme (NSCP) I did not like it, but it did not affect me. But now, in my final year of a Bachelor of Education, I need to understand it better so I started to read more articles and reports, speak to people in schools that engaged a chaplain, listen to radio interviews with principals of schools in the programme, and I sent out a survey to parents asking about their experiences and opinions of chaplains in public schools. The more I investigated, the more complex the situation got. Numerous responses came back with valid opinions and concerns but concluded with a countering one. The general consensus was one of submission: the line of religion and education should not be crossed, but it was too late to change it. The only material fully supportive of the NSCP was that of the National School Chaplaincy Association (NSCA). A chaplain may be good for the school's dwindling finances, good for politicians and a bridge between the community and the school, but they are foremost a religious representative in a secular institution that is supposed to be without religious persuasion.

Journal entry:

> Matthew Knott, the Senate and education correspondent for the *Age* and the *Sydney Morning Herald,* had an article published on 14 January entitled "Malcolm Turnbull should axe Tony Abbott's school chaplains program", which I subsequently read with much interest on a Saturday morning. Such a succinct title is encompassing the current and previous Australian Prime Ministers' names with the blend of religion and education just screamed to be read while hunched over the newspaper, coffee in hand and bated breath.

> The program Knott spoke of is the National School Chaplaincy Programme (NSCP) that the Howard government launched in 2006. It promoted the engagement of a chaplain, who "would have to be associated with a religious organization" (Knott 2017), by public schools which would then receive annual federal funding of $20,000 for up to three years. Eleven years on and the scheme continues to be scrutinised, criticised, justified and challenged by every party involved: public and private schools, students and teachers, politicians and religious leaders included.

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"In its current form, the scheme should go", Knott (2017) stated with, it turns out, overwhelmingly support from high-court decisions (Williams vs. Commonwealth 2012), investigative reports (Thielking and MacKenzie 2011; Phillips 2014; Isdale and Savulescu 2014) and Ombudsman findings (Richards 2010). So, if there is so much agreement to this statement, why has there been eleven years of debate?

I had never given much thought about chaplains in public schools, mainly because the program was implemented post my high school graduation and I was never directly involved; also because a cause to investigate further was never there; thus, I remained naïve. I am now in my final year of a Bachelor of Education, in which I am to complete a total of 20 weeks of in-school placement before re-entering the public school system as a teacher. After reading Knott's article, a moment of realisation occurred for me: My future (and previous) students of public schools will be of various faiths, practice at different levels of commitment and have diverse understandings of God. I will rarely if ever, have to discuss this with them because my role as a teacher is to teach them how the moon affects the tides, the process of germination, the importance of pi and the correct use of commas and full stops. It is not my place to impose one religion above others. That is the individual's choice and constitutional right. So where did I stand regarding the NSCP? Was it for the greater good? Was it hypocritical or just controversial? Whatever it is, it has been a campaign slogan; a support system for schools and a selling point for the religious arm.

Introduction

School funding and the best education possible for Australians has always been a political soapbox and, as far back as 1962 when a Goulburn Catholic School could not get funding to fix a toilet cubicle, public and private schools have needed to cooperate and compete for government financial support. The line between education, religion and politics has been blurred for decades, thus leading to an ongoing debate on who should be responsible for what, and at what cost.

Recently, federal school funding has again been the centre of the government's attention, with the Minister for Education, Senator Birmingham, announcing need-based funding of $19 billion being provided over the next ten years. This will involve high socio-economic Catholic schools receiving a funding cut, so money can be allocated elsewhere: for example, to public schools with high enrolment numbers that need more financial support. The Chairman of the NSW Catholic Education Commission, Bishop Peter Comensoli, stated that this major policy change was made "… without consultation with the second-largest provider of education in the nation" (Oakes 2017).

It is a difficult picture to paint. Governments are not to be influenced by a religious arm, but without Catholic and private schools the public education system struggles to satisfy communities' demands. Australia needs a private school system. Public schools (government funded) are engaging in the National School Chaplaincy Programme (NSCP) to receive additional funding and support, but this, in turn, comes with religious engagement. Chaplains can be engaged from any religious entity; however, there is an overwhelming 98% majority of Catholic chaplains.

A chaplain is a non-denominational spiritual representative in a secular institution. There are chaplains from every faith, and they are engaged by non-religious establishments for the purpose of "… providing impartial, unbiased support in an ongoing manner." (Hughes and Sims 2009, p.28). However, despite their intended neutral attendance and Good Samaritan actions, just being there gives credence to a religion that many families might not agree with. Knott (2017) says it perfectly: "Public schools … are secular by nature and must be open to students from all faiths or those who are non-religious".

Who Was I

I am a student of the public school system, more of a worker than an academic but never shy of a learning curve. I would like to think that my personal religious stance did not affect the path my investigation took. I am an agnostic on most days but lean towards atheism. My father was raised Catholic, my mother Protestant, my daughter attends a Christian school and here I am with a good education and no god. My public schooling gave me a great launch pad into my life, though when I reflect on the few religious experiences I had in primary school, I specifically remember furrowing my brow and scrunching my nose. Why was I writing a prayer to a god I didn't know when I was eight years old? What did this have to do with the seven times table I was learning an hour ago? Or, when I was twelve and got put in another room with six other peers while the rest of the class went to Religious Education, why was I still doing math and English work when so many others were reading the Bible?

As far back as I can remember, when religion entered the public schooling system it confused and segregated me. I had friends who would tell me they went to Sunday school, but this was to learn the Greek language and Greek Orthodox culture, subjects that are culturally important and not offered during school hours. Other friends went to church on Sunday and told me about it at recess on Monday. That was fine; I understood that. However, when I was at school, I was there to learn, not be isolated or told to write my dreams in a letter to God, and that only ever happened when religion was involved.

When I learned about the National School Chaplaincy Programme, I did not like it, but it did not affect me. I was four years out of my high school graduation and had no direct ties to the public school system anymore. However, now that I'm in my fourth and final year of a Bachelor of Education, a degree and career that will place me back in the environment in which the NSCP is thriving, I need to understand it better. Since 1955, when the first voluntary engagement occurred in Victoria, a steady, annual increase of 27 chaplains was engaged nationally in public schools. Between the NSCP launch in March 2007 and August 2009, 1221 public schools decided to source religious representatives, as if they were never previously readily available and were as rare as hen's teeth. In 2014, the Federal Government extended the NSCP for an additional four years to 2018 to "… assist over 3000 schools to

engage the services of a school chaplain" (Department of Education and Training 2017).

Was the NSCP started, with the full support of the church, as a political ploy for votes? With such a rapid increase in school participation, it certainly appears as if the schools volunteered under duress, with desperation for resources and funding. Whether student needs were even considered during the development and implementation of the NSCP remains to be seen.

Where Am I Now

I started to ask questions. I read more articles, and I read reports, spoke to people who attended schools with an engaged chaplain, listened to radio interviews with principals of schools that had volunteered to be part of the programme and who sent out a survey to parents asking their experiences and consequent opinions of chaplains in public schools. Did their opinions affect where they sent their children to school?

The more I investigated, the more complex the situation got. Numerous responses were coming back with valid opinions and concerns but were concluding with a countering one. A general consensus was one of submission: No one thought that the line of religion and education should be crossed, but it was too late to change it. All the responses sat balanced on the justice scales with the word "but" hovering above. The only material discovered that was fully supportive of the NSCP was that of the National School Chaplaincy Association (NSCA).

In a 2014 press release, the NSCA spoke of the spiritual, social and emotional support that is provided by chaplains. National spokesperson for the NSCA, Peter James, said, "Those opposed to chaplaincy are not basing their opposition on the facts but on ideology and misinformation." (Mercer and Gorogh 2014). James claimed that, "Chaplains are qualified, don't discriminate and operate in the best interests of all students irrespective of their beliefs or backgrounds." and that independent studies showed chaplaincy "… directly contributes to students' well-being" (Mercer and Gorogh 2014).

I discovered the qualifications that James spoke of are a Certificate IV in Youth Work that was a requirement implemented by the Labour government in 2011. The qualification takes a maximum of 18 months to complete and can be held by civilians, not just those of the cloth. Labour also broadened the NSCP to include secular welfare workers as well as chaplains if that was preferred by the volunteering school. In 2014, Tony Abbott removed that option, returning the next four years of the scheme to strictly religious representatives being recruited once more: another controlled push from the coalition to integrate religion in schools.

The discussions I held with parents, colleagues, and students over a six-week period concluded that it was the immediate association with religion that was the itch that couldn't be scratched.

Respondents wanted their children and family to have access to counselling services, but the connotations that came with chaplaincy were boundary-baring, unfa-

miliar and unpalatable: a plea that could be heard loud and clear across the nation. Moreover, yet the federal government continued to exploit the under-resourced schools by offering them money only if they took the church with it.

Of This Much I Am Sure

The NSCP was launched by the Howard government to gain favour amongst constituents following a tumultuous fourth term in power in which they lost confidence following the introduction of Work Choices (to the displeasure of 65% of the nation), the Northern Territory National Emergency Response (five years of Federal control of Aboriginal land and communities) and the reduction in investment in the environment.

The scheme was implemented with great speed and little planning, as reflected in the NT Ombudsman's 2010 scathing report that concluded it was only so popular because of the identified common theme that schools needed additional resources (Richards 2010). Public schools volunteered to be part of the scheme so they could receive financial support and extra assistance, while parents weren't consulted to a satisfactory degree (Richards 2010) and found themselves conscientiously objecting to having their children participate in religious activities (Williams vs. Commonwealth 2012), which unintentionally isolated the students from one another. Students were getting guidance and counselling from a church representative, and the agreed line between proselytising and offering unbiased advice could not be proved as being abided by.

Following six weeks of investigation and reflection, it would appear that at no point were the students' needs ever a priority and yet it was they that were directly affected.

A chaplain may have been good for the schools dwindling finances, good for the politicians, a bridge between the community and the school but they are, first and foremost, a religious representative in a secular institution of which is supposed to be, resolutely, without religious persuasion.

Conclusion

My last placement had me teaching students of Aboriginal, Greek Orthodox, Muslim, Sikh and Christian faiths. Their parents all enrolled them in the school with the understanding that their religious persuasions would not be influenced by a foreign body. The harmonious nature in which the school ran is something to be aspired to. The multicultural, multi-faith environment in which these students were educated can only be one that represents a better future as we grow to understand one another and our individual beliefs.

I say with confidence that the recent federal budget allocating $19 billion on a need-based system may indeed be the solution that public schools so desperately require. Whether the Turnbull government will extend the NSCP again is still to be announced, but if a need-based approach is going to be taken, perhaps consideration should be made to social worker engagement and teacher aids rather than a church-affiliated guidance counsellor.

I feel this is the general consensus of those who attend public schools and, if thought were put towards the educational needs of students, the financial support that metaphorically itches as each bill is received could finally be scratched.

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Part VI
Education and Society

Chapter 31
Reflection on Education and Society

Yoshi Budd

Abstract   The relationship between education and society is complex and fraught with contesting beliefs about what should be taught and how. In this chapter, I will explore this complex relationship from the perspective of my own and my pre-service teachers' personal and professional experiences: experiences that have shaped personal values and relationships, as well as professional beliefs and teaching priorities. In this way, I hope to make visible not only the ways in which education shapes society but also the ways in which society shapes teachers' understandings of the means and ends of education. I begin by sharing my own memories as a learner, reflecting on how my personal and educational experiences have shaped my values and beliefs as a teacher educator. Next, I discuss the ways in which the following chapters in this section also offer unique perspectives on the relationship between education and society.

Introduction

When I hear the word "education", I don't think about any specific educational institution or even my own educational experiences. Instead, I wonder about the many contexts in which education takes place. I wonder, "Whose knowledge and for what purpose?" I believe that knowledge is produced through social and institutional relationships: an outcome of generations of cultural traditions and practices that frame and order human relationships with each other and with the natural world. Knowledge is also personal; uniquely shaped and interpreted through individual experiences and one's social position. Consequently, all forms of knowledge are inherently political as they reflect the social, personal and material conditions in which they are produced.

The more closely one's lived experiences align with the forms of knowledge and behaviours valued by the society in which they live, the stronger one's sense of identity and belonging. However, as the material conditions and background experiences of individual members of a society can vary greatly, for example, in terms

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of (dis)ability, religious beliefs, socio-economic conditions or ethnicity, the forms of knowledge promoted by education systems may not resonate with all educational stakeholders. Education can serve to ameliorate these differences to some degree through the promotion of a common curriculum. However, at times, both learners and teachers may find themselves questioning the relevance or appropriateness of educational content and practices.

Who Was I?

My first memory of Australia is of me hiding in a bush. My mother said she had dropped me off at the pre-school, but when she returned to collect me she was told that no one had seen me arrive. I must have been found, however, because my mother described me as being wet and covered in mosquito bites when returned to her care. Perhaps this experience coloured my expectations of adults' ability to communicate effectively with each other. Indeed, I have retained many memories of unsettling incidents related to miscommunication: usually involving my mother. To be fair, my mother is Japanese so English is not her first language and, even after fifty years in Australia, English phonemes continue to be a challenge. I recall finding containers in the kitchen labelled "Prums" and "Plunes", and then there were her misadventures with mnemonic strategies, such as the time she called her golfing partner Chestnut instead of Hazel, or the time she complained that a loud noise hurt her "drumsticks". As the only Asian girl in the primary school, I wanted desperately to fit in. I also tried make my mother fit in by constantly pointing out her inadequacies: "Mum! It's 'W'!, 'wool', not 'ool'. Look at my lips. 'W'!"

Perhaps those petty agonies of my youth were instrumental in promoting my interest in languages and my obsession with correct language use. I found the study of high school French to be particularly satisfying as the end goal of learning another language seemed to be relatively transparent: learn new vocabulary and apply recently taught grammatical principles in writing to demonstrate effective communication skills. This confirmed my belief that the goal of education is to "get it right", with a "ten out of ten" being its own reward. With this end in mind, I learned how to learn by memorising new vocabulary and sentence structures; reconfiguring sentences to communicate in various, commonplace social scenarios; and confirming progress to myself and others through test results. This technique worked well for me during my primary and secondary years of schooling. During my years at university, however, I began to question my assumptions about the value of "ten out of ten".

As a young child, I wanted to be understood. Being understood meant that I was "normal" and that I belonged in the small country community in which I lived, even though I was constantly reminded of the ways in which I was different: for example, when I saw my Asian features in a reflection; when teachers constantly mispronounced my name; when people voiced their surprise at my "good English"; when asked, "Where do you come from?". Over time, I learned that that we don't

communicate to others who we are and where we belong through language alone, but also through our physical appearances and behaviours.

Who Am I Now?

If I look back to my past, I can see how my early experiences have shaped my interest in language education. Nevertheless, my beliefs, behaviours and priorities have changed over time and, as a result, I no longer ask myself who I am. Instead, I ask, "What do I need to achieve and who do I need to be in order to achieve it?" My identity is, therefore, inseparable from my priorities which are, in turn, shaped by my social and material conditions. Haraway (1998) makes the point that, "The only way to find a larger vision is to be somewhere in particular." (p. 590), and this is certainly true in my case. The way I view the world depends on who I am at a given point in time and space. Who I am is not an immutable condition, but an ever-changing state depending on who I'm with, where I am and what I'm doing. This is the paradox Haraway refers to when she notes the interdependency of a personal standpoint and larger, social vision.

As a teacher educator, I believe that education represents the larger vision of a society and is, therefore, like the concept of social justice (Gale and Densmore 2000, p. 74) in that it is not a "given", but an abstract concept shaped by prevailing material and political conditions. I endorse the educational goals of social equity and cultural diversity, but I have also experienced the ways in which institutional practices can be predominantly directive (Giroux 2003), through its emphasis on a common curriculum that privileges some forms of knowledge over others.

As a teacher of English and Languages Other Than English (LOTE), I have experienced the inequitable delivery of these two, mandatory learning areas: through the length of study time allocated and through timetabling, when LOTE often clashed with maths or science or was taught on a Friday afternoon. I have also experienced the marginalisation of LOTE through testing regimes, when LOTE time was sacrificed in preparation for national literacy and numeracy testing, and through behaviour management practices, when a LOTE student in detention was released by a sports teacher who needed the student to play in a match. Schooling, therefore, as the instrument of education, tacitly communicates social and cultural norms including values and behaviours, and hierarchies of key learning areas (KLAs).

Education and schooling are different sides of the same coin and represent the paradox of education in Australia, where efforts to create a more equitable society and "close the gap" between high and low achievers have simply reproduced patterns of inequality. Physical and cognitive (dis)abilities, gender, race, age, culture, ethnicity and socio-economic background all impact on teachers' and students' experiences of and engagement with schooling. Even as education aspires to moral and intellectual transformations, the practices of schooling reinforce traditional forms of knowledge, reward ethical and intellectual compliance and rationalise social stratification. Apple

(2008) explains that schools are "… part of the cultural apparatus of society … They are key mechanisms in determining what is socially valued as 'legitimate knowledge' …". (p. 254).

As a teacher educator, I promote a critical pedagogy: a stance that empowers pre-service teachers by developing their understanding of authorised forms of curriculum and pedagogy while at the same time developing their capacity to question the broader, social values and practices that overlook or silence alternative ways of knowing or being in the world. This is not to say that anything goes. Instead, a critical pedagogy explores the standpoint of both teachers and learners to question the neutrality of what is taught and how it is received by learners. Mackenzie (2011) makes the point that, "Teachers don't just deliver a curriculum, rather they develop, refine, transform, interpret and prioritise …" (p. 324).

In the following paragraphs, I share pre-service teachers' standpoints as they reflect on pedagogical issues they experienced during their time in schools. These issues are diverse and include teacher pedagogy in the early years; the effect of NAPLAN testing on teachers, parents and students; the importance of empathy; the relationship between culture, gender and student engagement in learning; and ethical dilemmas faced by parents and teachers of students with a disability.

Education and Society

In Chap. 32, **Demi Cubillo** reflects on recent changes to the Australian early years curriculum that now authorises play as an authentic and holistic approach to teaching and learning. As a teacher, I have used play to engage students in learning at all year levels but there have been times when the classroom layout or school policy has not been conducive to play. Demi investigates the factors that influence teachers' decision to use play-based learning or direct instruction and explains why pedagogical decisions are not black or white, but influenced by the age of students, administrative and curriculum requirements, and physical environments.

In Chap. 33, **Rebecca Wood** reflects on the factors that influence students' and teachers' experience of standardised testing and questions its social ramification. Rebecca notes the moral dilemma of standardised testing, which stigmatises those students who are not required to sit the test. I have also experienced the ways in which aggressive accountability measures can pressure teachers to engage in teaching and assessment practices that work against the educational goals of inclusion and diversity and understand Rebecca's concerns about high-stakes testing processes. I see the disconnection between education for inclusion and education for sifting and sorting students into "those who can and those who cannot".

In Chap. 34, **Elizabeth McGuire** explores the relationship between national literacy testing and cross-curriculum priorities such as creativity, problem-solving and personal and social capability. Like Elizabeth, I see the irony inherent in the testing of discrete skill sets that reduces learning to a narrow range of prescribed responses.

Elizabeth demonstrates her agency as classroom teacher by re-envisaging external testing regimes as opportunities for creating a collaborative and empathetic classroom culture. It is evident that, like Rebecca, Elizabeth considers education to be first and foremost, an ethical and moral social enterprise.

In Chap. 35, **Blake Watherston** explores ways to integrate Indigenous knowledge into his teaching of curriculum content. The African proverb, "when lost, go back to departure point" (Cherinda 2015, p. 1), seems relevant here, because Blake retraces the steps of his own journey that has led to a growing understanding of the complex relationship between culture, community and knowledge. As a teacher, Blake endorses an alternative curriculum: one that draws from the knowledge of Aboriginal Community and Liaison Officers to recognise cultural diversity.

In Chap. 36, **Casey Ellis** also questions the relevance of mainstream schooling for students who do not identify with the behavioural norms and knowledge practices promoted by Western cultures. Casey's early memories of primary school bring into sharp focus the ways that competing definitions and meanings of culture and social life also represent the struggle of competing world views. Australian culture is not monolithic (Groundwater-Smith and Sachs 2002). It is rich because it is diverse and, like Casey, I hope all teachers strive to create safe teaching and learning environments in which children can share their concerns, their interests and experiences without judgement, and listen to the voices of others in turn.

In Chap. 37, **Jack Burton** investigates ways to engage girls in physical education. Jack's use of tropes, such as "combat" and "tackle", signals the aggressive nature of engagement in physical education: a perspective that does not align with socio-cultural constructions of femininity (Cockburn and Clarke 2002). Furthermore, a number of studies (Porter 2002; Coakley and White 1992; Orme 1991) confirm girls' concerns over body image and support Jack's observation of girls' general "lack of confidence". Although the gendered norms of Western society are not addressed, Jack's willingness to change from mixed gender teams to all-girl teams allows girls to engage with a greater sense of freedom.

In Chap. 38, **Jing Weng** investigates the difference between teacher–parent relationships in Australian and Chinese schools. What may be construed as excessive parental interference from an Australian teacher's perspective can be explained from a Chinese perspective as a parent's right to be actively involved in, and supportive of, their child's education. My own experiences of misunderstandings between teachers and parents reinforce my belief in the importance of establishing and maintaining open lines of communications with all parents and avoid assumptions based on cultural stereotypes or social norms. This is exactly what Jing has done, engaging in open dialogue with parents and adjusting her classroom practice in response to their expectations.

Finally, in Chap. 39, **Kathryn Hamilton** reflects on the nature of inclusion by asking what kind of school is best for a child with a mild intellectual or physical disability. Kathryn's discussion with parents reveals how what is best for the individual student becomes entangled with social and institutional infrastructures: educational policy, the cost and availability of transport systems, staff support, the availability

of professional services and the concerns of family members regarding the child's need to feel safe and supported by the school community.

Conclusion

Education means different things to different people (Biesta 2016). Although "…current views of education and society have stressed the centrality of diversity and tolerance" (Burbules 1997), references to equity and social justice are undermined by the ways in which schools operate as meritocracies, where students, competing for unequal outcomes, are sifted and sorted. In addition, curriculum design, assessment practices and behavioural expectations are all part of institutional structures that reinforce hierarchies of "difference".

The following chapters in this section raise questions about the relationship between education and society and explore the ways in which markers of difference, such as gender, (dis)ability and cultural background, can shape students' experiences of, and engagement with, education. Institutional systems and environments strongly influence pedagogy, and this is why I find it inspiring to read about the ways in which pre-service teachers engage proactively and sensitively with the issues they have encountered in schools. They think critically about institutional practices and adjust their own teaching practice to meet the needs of students and to respond to the concerns of parents. These teachers are reflective practitioners.

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Chapter 32
It's Not All Fun and Games

Demi Cubillo

Abstract   After relying on a pedagogical approach of direct instruction over play-based learning as my own teaching philosophy before beginning my undergraduate degree, placement experience began to alter my thinking. While I viewed play-based learning as having limited educational value for young children when I started my undergraduate degree, I decided to investigate the perceived value of play with others in the field of education. I found that educators had very definite perceptions of which pedagogical approach was appropriate for their learning environments and teaching philosophy. In particular, the physical learning environment influenced educators' decisions to utilise either direct instruction or play-based learning. My own opinions of the value of play-based learning have altered over time and with experience, and I can now see the great importance of play in children's learning.

Journal entry, 20 June 2014, Darwin, Northern Territory:

> It is still early days into my first placement, and I'm still getting used to the routine. I'm really happy with my mentor teacher and the way things are going, but there is something that is really starting to bug me. I know in transition there are a lot of play-based activities, but it feels like they play all the time! I'm finding it hard to see what the students are actually getting out of this experience. It's not like they play all the time, but it seems like they play a lot! I was under the impression that all of the play-based activities were left in preschool. Watching the students play does get boring sometimes but I guess it's part of the job.

> However, the students still do their work, I have been able to plan lessons and get them to use their thinking, which is nice. I find it so rewarding when doing a lesson with students and they understand what I'm talking about. This rewarding feeling is one of the reasons I wanted to be a teacher. At the end of the day, this is my first placement of my degree, and I'm sure I have a million things to learn. I would definitely like to learn more about the benefits of play activities because right now all I see is just children having fun while playing.

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Introduction

My name is Demi Cubillo, I am 22 years old, and I am in my fourth year of studying towards a Bachelor of Early Childhood Teaching. I grew up in a very sport-oriented family. I am the oldest of three girls, and my childhood was always about going to sporting events to either play or support my family members. My patents and sisters have all grown up loving sports, which is what has made us so close. I also have a passion for music and art. I love that you are able to express yourself in so many different ways through all types of methods.

My love of teaching and interacting with children developed at a young age. When I was 13, my father passed away, leaving my mother to look after all three girls under the age of 14. It seemingly became part of my responsibilities to be there and help out as much as I could. This very structured role during my early age, caring and teaching my sisters, was the start of my ambition to become a teacher. In addition, I worked at the Royal Darwin Hospital School as a teaching aide for four years, and it has given me a whole new perspective on teaching. This learning environment is unlike any school I have experienced previously.

I try to show a helpful nature in life. I believe that treating people the way you would like to be treated is one of the most important behaviours you can practice.

Who Did I Think I Was?

The quote from my placement journal was taken from my very first placement back in 2014. As you can read from my response, I didn't recognise nor understand the importance of play in education, which may be due to me being used to being a "teacher" for my sisters. My outlook on the play was that it was very bland, and ultimately I did not think it would benefit my future educational goals. Hence, I neglected to study more deeply this form of learning for children.

I can see from my journal entry that I was impatient and arrogant when working with children because I thought it was boring. Observing children during play, I did not think that any actual "teaching" was occurring and primarily I would be just "watching" children play. During my placement, I attempted at first to feign interest, but as the placement went forward my observation of children during play began to change and challenged my thinking about teaching. I was observing happy children engaged in their environments, rather than children "at work". According to Entin (2011), excessive amounts of work can lead to anxiety, nausea and stress on children, with play-based learning reducing anxiety and stress levels, making a better learning environment. This is something I had no concept of when I began this placement. The gradual knowledge and practice that I would attain in the future would change my opinion of play in schools altogether.

Who Am I Now?

For much of my early journey on the road to becoming a trained educator, I believed that direct instruction (DI) was the most appropriate form of education for children. Direct instruction has been used widely in teaching history and was developed in the late 1960s as "a step by step plan following a sequence of lessons for pre-determined skills" (Luke 2014). Louden (2014) highlights how DI is used to promote the teaching of reading and is considered an effective strategy, in particular with remote Indigenous students Thus, DI is a method commonly used within many subject areas and appears to have successfully fostered learning.

My understanding of DI throughout my learning journey has influenced my teaching philosophy. However, after observing a play-based learning environment I began to question my own philosophy, asking myself: "Does direct instruction create better literacy learning than play-based activities in early childhood?" I decided to investigate further and had conversations with four educators, a preschool, transition (foundation), year one and hospital teacher, each having a different opinion towards play-based learning to teach literacy. The preschool teacher explained that:

> Our preschool incorporates play as its main source of learning. We like this way of teaching because of how responsive the children have been to this method. There have been some cons but nothing that is of concern. We incorporate some direct teaching into our program which allows us to interoperate other subjects, which works well.

The transition teacher explained that:

> Our transition class uses a combination of play-based and direct instruction. We are primarily a direct instruction class that incorporates play-based learning for transition purposes. We have cons when teaching direct instruction because most of the children are used to play-based activities, but we see results with our method.

The year one teacher highlighted that:

> We like to use both play-based learning and direct instruction as one whole method in our classroom. We like to use these methods to increase the benefits of student literacy learning. We use direct instruction to target the major areas like maths and writing, and play-based for our communication and social fundamental skills.

Finally, the hospital school teacher explained that "at our hospital school, we do not have the option to use play-based learning in our classroom. Everything we do is direct instruction teaching, and it is what we have worked with for years".

These differences in opinions confirmed some of my own ideas in relation to play-based learning and direct instruction. I hope to be able to cohesively integrate both methods to make a more successful learning environment for my future students. The knowledge I gained from these educators will help shape my teaching philosophy moving forward.

The hospital school is an interesting example of how play-based was not implemented to help student learning. Being familiar with the hospital environment owing to my work as a teaching aide, it is a very small environment, where the play is

viewed as not an option due to size constraints. This is an example where the physical environment interferes with the perceived pedagogical approach. The teacher has worked in the hospital school for more than ten years, so her experience with direct instruction is very dominant. A challenge I see for myself is how to reconsider environments to challenge which pedagogical approach is best suited to my students and my teaching philosophy.

The preschool teacher has been teaching in the field for seven years, with her dominant approach being play-based learning. This learning environment is a completely different environment to the hospital school. This learning environment has been crafted in a creative way to incorporate and use play as a tool to encourage learning and meet learning outcomes.

The two different environments are in stark contrast to each other, yet each provides their students with what he or she needs. I have had the opportunity to work extensively with both educators and in both environments. This experience has strongly influenced my views on play-based learning and direct instruction, considering how to integrate both methods within differing contexts cohesively.

Play-based learning has become increasingly popular within early childhood education (Wallace 2015). The overwhelming benefits that play encompasses have given children the opportunity to learn through a range of different approaches. Play can be developed into all aspects of learning, from the programmes to the classroom environment. Morrow and Rand (1991, p. 401) explain that "the classroom environment can be changed to promote play, in turn, may increase and promote literacy activity among students".

The links between curriculum and play-based learning have become more evident with the passing years. The Early Years Learning Framework (DEEWR 2009) is Australia's early year's curriculum that promotes play-based pedagogy as the preferred method of delivery. The support that the curriculums give play-based learning is proving to create more and more success in student learning.

Of This Much I Am Sure

Of this much I am sure when comparing my old views to my new views, I can see a dramatic change on how I view play in education. I have taken key points from my previous placement journal from 2014 and looked at those in comparison to the view I have today. The key points will be the basis on which we can identify who I was and whom I have become.

The points made in my placement journal shows how little I knew about the play in education. I couldn't see or understand any of the benefits that play could have on children's learning. I was not yet aware of all of the planning and understanding that goes into play-based activities. I was at a stage where I was just sitting and playing with students. However, now I am able to see, understand and plan for play activities to increase student learning. Now when play-based activities are being implemented, I am always testing for learning, asking questions and quietly checking

for understanding. I now know that play is not always just fun and games; it is a beneficial learning experience.

An element that has not changed since I started my university degree is that I still hold the same values towards children that I always have. I still find teaching students new and exciting things a rewarding experience. Now that I am able to incorporate play into my teaching, I am able to deliver new experiences for children that develop the same rewards, but in an adapted manner that suits their needs and learning styles. I am nearing the end of my degree in teaching, and I still think there are so many things to learn. I will be learning after I finish my degree and throughout my teaching career and life.

Conclusion

After looking at this journal entry, I can say that my outlook on play within education has dramatically changed. My thoughts on play-based learning in early childhood has moved from not seeing the point of play and thinking there is too much of it, to highlighting and emphasising the importance play has on children. I now attempt to incorporate play into my teaching pedagogies whenever I can. During my preschool placement in 2016, the play was used as a dominant part of everyday teaching. I learned different ways of implementing play to target specific learning areas. This placement was a turning point in my views and beliefs on the play. This method of teaching will now be used in my future teaching style. The evidence that I have seen in both theory and practice has changed my views on a play in education and has encouraged me to incorporate it into my teaching philosophy. Children who engage in play increase their memory skills, language, cooperation and problem-solving (Barblett 2017).

The interviews with other educators on the preference of play-based learning or direct instruction saw a mixture of opinions as well as views determined by classroom environments. The effect that these interviews have had on my personal views makes me want to use both teaching methods cohesively. My views and learning journey have been linked and looked at through different perspectives. My views have changed considerably and will continue to change throughout my teaching career.

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Chapter 33
NAPLAN Negativity: The Effects that NAPLAN Has on Teachers and Students

Rebecca Alice Wood

Abstract   The school I myself attended was academically orientated and had no special needs students; I developed the belief that NAPLAN was a vital part of education. This changed during my practicums when I had to work with special needs students who were singled out and treated separately because they were exempt from NAPLAN. They found this experience very distressing, and at the same time, I saw how teachers were very stressed and rushed as they tried to prepare other students for the test, at the expense of covering another curriculum. At the same time, the results of NAPLAN do not come back quickly enough to affect teaching, and the results of this single test cannot be as reliable as a portfolio of all the student assessment throughout the year.

Journal entry, 4 May 2016, Kersbrook, South Australia

> NAPLAN testing is coming up, so my mentor teacher Lisa [not her real name] has asked if I wanted to help out by taking out three different students to work with them on their maths whilst the rest of the class prepared for NAPLAN. This week has been very muddled, and Lisa seems stressed. We have diverted from the curriculum and put normal learning on hold whilst they practice revising their maths and literacy skills in the last effort dash to the test next week. The three students I have taken aside to practice their maths have some sort of intellectual disability each so they won't be sitting the test. I feel bad for them because they seem to not be happy about the fact that they are singled out.

Introduction

I am a very passionate teaching student with lots of experience behind me. I love to work with children and find the world through their little eyes extremely fascinating. Whilst at school I completed my Certificate III in Children's Services, then as I finished school I jumped straight into university as I was keen to get out and become a primary teacher. For the past three years, I have worked at two different primary

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schools as a Schools Service Officer (SSO). I worked in a curriculum-based role in the classrooms with the students and also running my own reading support programme. The other area, which was my favourite, was working with students with special needs. I would assist them in their work and then help integrate them into being able to work as a part of the mainstream classrooms as best they could.

As a child, I hated school with a passion! I enjoyed the academic side as I was quite bright, but I was always bullied and in turn would forever feel uneasy about going and would do anything to keep the attention off me. Because of this, I have found that in the classrooms and schoolyard I am a lot more empathetic and aware of the students' struggles and emotions. I feel I can relate when someone does not want to be singled out or is struggling and embarrassed. For this reason, I have noticed more and more students becoming uneasy when it comes to certain situations, one of these being around the time of NAPLAN particularly those who are singled out as being exempt, showing the class that they are not capable. This became a clear issue for me when the autistic boy that I worked with was embarrassed and confused, asking me as to why he couldn't sit the test with the other students, and there wasn't one for him as he was part of the 5% of students that did not participate from that year level (NAP 2016).

Who Did I Think I Was?

For the duration of my schooling, I attended a very prestigious Christian college. At this college, they were very much interested in academics. I was always at the top of the class, so for myself I did not struggle in this aspect. Special needs students were zero to none. When NAPLAN came around, I was never worried or concerned as academics were my strong suit. We were always told that NAPLAN was extremely important because we were representing our school. There was a high emphasis on preparation both at school and for homework.

When receiving back the results, the school would make a big deal out of your scores when they found out how well students had performed. For me this meant that I always believed it was a vital part of our education because this is how the school made it seem. Because it was quite an academic school and very formal, I never saw anyone having issues with the test or really complaining. This gave me a very biased view of the test. Even the teachers did not seem stressed because they were confident in the students' results as a whole. This biased opinion I then took into my first practicum believing that it was a very vital part of the testing system and that there was nothing for the children to worry about. I did not see it yet from their perspective.

Who Do I Think I Am?

My views on NAPLAN now have been based on two quite prominent points in my recent experiences. The first was a practicum last year where I was asked to take three students aside and complete a different activity with them because they would be exempt from the test. In the lead up to NAPLAN, there were quite a few practice sessions, so my three ended up sitting out on their fair share of lessons. When they first got called and told they would not be doing NAPLAN, they seemed quite confused. The other students were asking questions to both the teacher and among themselves: "Why can't they? Don't they know how?" and so on. The class seemed full of questions, and in turn, so did the students who were singled out. One of the students did not seem to mind at all, but it was clear that the other two felt left out.

The second incident was when I was working with an autistic boy. At the time he was quite aware that he was below level, but he was always pushing to try his hardest. His common phrases at the time were "I am too dumb" and "Everyone treats me like a baby". He would say these when he got angry, frustrated or felt left out, so we strived to involve him in everything the class did, but just at a different level.

This was the issue when the NAPLAN test came around: he was asking why he could not do it and if he was too dumb to take the test. This sparked a range of emotions and made a whole week of anger and frustration as he was continually reminded that he simply could not sit the test. We are constantly told that all students are individuals and should be treated as such, but are we now standardising them all and putting them into one big category so that they can be judged and critiqued?

Students do not seem to be the only ones affected negatively by NAPLAN either. After working in a school and on practicum, I realised how stressed and rushed teachers are and that there are a lot of students below year level. Teachers are so stressed in trying to explain each part of the test and give practice, so students get used to the style, along with recapping what they have previously learned. This made it hard for teachers to fit in all curriculum content, with about one to two weeks wasted on preparation. New learning and teaching should not be interrupted because of this, but it is clear that this is the case. When I was having a conversation with some teachers around the topic of the test, a Year 5 teacher stated with sarcasm, "I think it is great that I can finally start actually teaching the kids; feels like the first day of term again".

This was at the beginning of Week 3 of the term. Learning should not be put on hold for NAPLAN. Teachers have admitted to skimming through a certain unit. It can also be a big stress on teachers as they can be pressured by leadership, and although they might have taught the students well, some students might not be as good as others from previous years. I believe that students should be subject to only their school assessments, and in the case of ensuring that schools are up to standards and teaching correctly, I believe that the money used for NAPLAN could be better used in getting assessment pieces moderated as a whole portfolio to determine the standards, rather than to base it on one test.

Of This Much I Am Sure

The negatives of NAPLAN far outweigh the positives. There is an emphasis on schools to be inclusive of all, embrace individuality and cater to all different student learning styles, but then along comes NAPLAN which scraps this whole idea and decides to standardise all students and assess and judge both the students and teachers on one assessment piece.

How about Fleming's VARK theory, where each child learns and expresses themselves differently (Fleming 2001). This is the fact for all the students who are better verbal communicators or those who have put in amazing efforts through other assessment pieces but cannot handle pressure. They then get judged and put down from one test. This can affect their self-esteem and have negative effects on their schooling.

I also had conversations with some students from two separate schools. Only one of ten students expressed their confidence in the test before they sat it. The results are out too late to be effective in so far as changing of teaching. Teachers have this extra pressure to push students to quickly familiarise themselves with the content of the test and wear the extra stress and anxiety that the students have from this.

After discussions with both public and private school teachers, they all admitted to being more stressed and anxious around the time of NAPLAN. These views align with Greg Thompson's (2013, p. 64) statement that:

> there is growing research evidence that suggests that there has been a raft of unintended consequences that are most likely having a negative impact on student learning … These unintended consequences … teaching to the test, narrowing the curriculum focus, increasing student and teacher anxiety, promoting direct teaching methods, a decrease in student motivation and the creation of classroom environments that are less, not more, inclusive.

Conclusion

Thus, the negative outcomes of NAPLAN by far out weight the positives. I personally cannot understand how our whole country is placed under one umbrella and put under pressure to complete this test that runs for three days just to see a few months later how well the school has done and supposedly what needs to be improved. Class teachers already have this information on hand through their formative and summative assessments throughout the year and by working with these students. The information from NAPLAN is not released quickly enough and secondly not reliable from just this one test. If we could rely on one test to understand the students, then why bother with the rest? The students are put under pressure and made anxious for no reason, and I do not believe it is productive at all.

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Chapter 34
Letters to Max: Errors with Empathy Enabling a Growth Mindset for Exams

Elizabeth McGuire

Abstract This chapter examines the importance of empathy and resilience in the context of Australia's National Assessment Program—Literacy and Numeracy (NAPLAN). Having taught English in various locations and diverse cultural contexts around the globe, I reflect on important personal qualities that enable teachers and students to navigate and overcome the challenges of teaching and learning in Australian schools. One of these challenges is to ensure that, in view of rapid technological and cultural change that draws the 'unknown future' ever closer, the repeated testing of basic literacy and numeracy skills does not overshadow the importance of developing a growth mindset. Through these reflections, contradictions, and paradoxes are brought to light: The need for correct answers must be balanced by the ability to ask the right questions; the ability to succeed at a task requires a willingness to fail at a task; the most important educational outcome is one that cannot be measured; and the more one learns, the less one knows.

Journal entry: Tuesday, 9 May 2017.

> Handing out the NAPLAN tests to students sitting in neat rows, pencils poised for a Year 7 writing task, I considered the impending "day of judgment", even though it would be ten weeks till the results would be in. Mutters and murmurs came with the kids' submission after 45 minutes of scratching with increasingly blunt pencils on lined paper. They were lucky, in many ways, these kids: private Catholic school, compliant cohort, a pleasant venue with floor-to-ceiling windows looking out to a leafy, sundrenched atrium. The cohort included around 10 percent English as an Additional Language or Dialect students, 10 percent Indigenous.

> The scene contrasted strongly with this time last year – a different middle school in the same town – a public school with a much larger percentage of Indigenous students, closer to 65%, with a lower socio-economic profile (SEP). The difference was quite stark - a dark, cavernous space, kids shouting to one another across the room, pencils snapped to shards before the test had begun. Hopelessness for some of the kids, and defiance for others. For these kids, grit and resilience were needed just to attempt the test – or maybe their resilience meant flipping the bird to the whole system, which had failed them and kept rubbing their noses in it.

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The writing prompt for NAPLAN 2016 was a series of signs – also weirdly and ironically apt. The signs to me were that many kids at this school were unable or unwilling to address the task requirements. Not good signs at all. So how are teachers to fix the immediate issues – test preparation, skill development, students' confidence in their abilities – How can NAPLAN assess what the ACARA curriculum recognises as central to our education system: creativity, problem-solving, and personal and social capability?

Who Did I Think I Was?

My career in teaching has been happening for two decades. A belief in justice led to a start in law studies. I graduated in journalism in 1995, yet I felt I had no right to be creating a 'record of our time'. That and work experience at Channel Ten illustrated perfectly my lack of suitability for commercial news ("… So you do not like the Broncos. What? You do not like sport?").

A friend whom I had worked with in a jazz club was over in Japan teaching English. I signed up too, and so began a very curious journey, with three years spent teaching diverse language students, ranging from a three-year-old prodigy to an 80-year-old retired firefighter in the Tohoku region in Japan, followed by a Master of Education (TESOL) and four years teaching General English, TOEIC, and Cambridge English exam preparation in private language colleges in Brisbane and London. Next was a year at the University of Queensland and subsequently five years living in Papua New Guinea, where I completed a Master of Arts in Writing and Literature via distance education through Deakin while informally working with adult literacy groups and NGO educators, and formally contracted to a mining company's media and human resources departments. I then taught in the academic bridging course at the University of Western Australia, working with adult graduates who were preparing for post-graduate study.

One could call it a chequered career. I prefer to think of it as laying the groundwork for a future as an educator, as I felt I finally had a broad enough life experience and knowledge to do justice to teaching History and English to middle schoolers. I had also built my skills in communicating with diverse people in cross-cultural contexts and reaffirmed my faith in myself and the world I lived in. I could meet the students where they were. I had built my capacity to cope with change and relate to empathy. I was ready, or so I thought.

Resilience, creativity, empathy and a growth mindset had got me through. Teaching—pedagogical strategies wrapped in content and knowledge and shaped through informed improvisation—is an ever-changing terrain, as policy, technology and curriculum evolve. My job will primarily be to engage, challenge and motivate. Learning is a collaborative effort between students, their peers and their teachers.

My aims for study in secondary education were deceptively simple: to prove to myself I was worthy of the career of high-school teaching and to gain the skills and knowledge to make a difference to the students in the classroom. I soon realised that teaching is one of the great intersections of our society where community,

politics, technology, philosophy and human achievement meet, and that I was woefully underequipped with the multitude of skills needed to do the job properly: inclusive education, student motivation, dealing with classroom behaviour and students' personal issues, marking, report writing, incident management … I had a tremendous amount to learn and so many significant reasons to do it.

Then it dawned on me: if I find this situation a little daunting, then how might the students feel about it? Moreover, how can I provide the right environment for us all, with the right perspective and enough scaffolding for everyone to reach his or her objectives in learning? The students needed to be safe, challenged, satisfied and motivated, while simultaneously meeting learning objectives which prepare them for a future involving life events and career choices that have not been thought of yet.

Who Do I Think I Am?

My mentor teachers have all come from different backgrounds but all share certain traits: meticulous organisation, endless drive, substantial general knowledge, inherent fairness and controlled and targeted empathy. They can enter a classroom and immediately 'read the room', moving students to the right desk to ensure they concentrate and learn, planning and choosing activities and learning aids that serve each student's purposes, and guiding each student to achieve the learning intentions of the lesson. Empathy—the ability to understand and share the feelings of others—is a large component of what makes successful, effective teachers, because through empathy, a student's challenges and strengths become more evident and teachers can then scaffold tasks accordingly.

My mentor for year seven English and History mentioned that the class was reluctant to respond to questions or volunteer contributions to discussions. It subsequently emerged that around half of the class had identified learning needs, including ADHD, auditory processing disorder, ASD, social-emotional challenges and EAL/D. This may account for some of the challenges faced, but it was not an insurmountable problem. What was needed was inclusive planning for differentiated tasks, a scaffolded instruction to assist all students with their learning, explicit teaching of content and skills, visible learning objectives, and ICT support for particular learning needs (AITSL 2015).

Despite receiving these supports, the class remained hesitant, and I wondered if perhaps what was affecting them might be something else—uncertainty as to the climate of the class, and whether they were safe to make mistakes and experiment in their learning. I concluded that I would need to establish a means to check this. They were a relatively unfamiliar cohort, with some having attended the same school the previous year, and others from a range of other primary schools.

At the end of my third placement, I feel paradoxically a great deal less wise than I did at the beginning of my first—I now know what I do not know. Empathy is not one of my deficits, however. My challenge is knowing what to do with that empathy, and managing the behaviours of students in the class who might not have as much

empathy and personal and social capability as others. The challenge also lies in knowing how to scaffold and differentiate for all the learners in the class. What I am really aiming for, however, is to 'strengthen the empathy muscles' of my students, so they can collaborate better and also grant themselves some forgiveness at times when they are under pressure from their learning, such as during the NAPLAN test or other assessment.

I believe 'rich tasks' are the best way to teach with both emotion and intellect being used. A 'rich task' is a productive pedagogy that involves cross-curricular elements and some real-life connection to the school's community. The productive pedagogy approach creates tasks that have intellectual quality, recognitional difference, connectedness and a supportive classroom environment. The application of this kind of pedagogy has an explicit requirement that learners should not only 'learn the curriculum' but 'feel the curriculum' (Gabbett 2011). Such a pedagogy chimes with the general capabilities in the Australian Curriculum: Personal and Social Capabilities (ACARA 2014).

In the third week of my placement, the NAPLAN test was held, and I was involved in some of the preparations and the invigilation of the test. This meant that my time with the class was focussed on NAPLAN-style lessons for around a week prior, including practice tests, strategy building, writing workshops and grammar lessons. Although this is not officially recommended or recognised in the Australian Curriculum, NAPLAN preparation took, on average, one week of English allocation, seven periods in the week prior, and around half that amount for the administration of the test the following week. This did not seem to be outside the average amount of preparation—but it did seem to replicate the levels of concern that greeted the test's rollout across the country. The ACARA website issued a press release which was titled, 'NAPLAN 2017 finishes without the world ending' (Randall 2017), echoing the rather defensive tone of the subtext of 2017 writing prompt (see my journal entry).

After realising that in the course of the placement I would be the only teacher for the class, with my mentor taking an observational role, I decided to ask students to do some writing activities. This would be in the form of a letter to another, possibly hypothetical, NAPLAN candidate, giving them some advice on their performance on the NAPLAN writing task and suggesting some ways in which they can improve their writing.

Writing practice, including legible handwriting, planning, and brainstorming content, comprised one component of the preparation. I decided to attempt to make the NAPLAN preparation a rich task, and one that could not only provide the students with a reflective and emotionally engaging task prior to participating in the NAPLAN tests but which could also be used in later years to show the candidates that they are not alone in the experience of sitting NAPLAN, and that they are entitled to their effective responses to the exams.

The letter-writing activity was dovetailed with a metalinguistic task in which the learners were asked to correct a sample writing response from a NAPLAN practice test. They were then shown a letter from the author of the piece who was saying that he/she was not satisfied with his/her writing skills and was asking the class to write a letter back to the author of the piece, outlining their attitude to errors and

Table 34.1 Three examples from students' comments

I hate NAPLAN, but some advice I could give you is to do whatever you do to make yourself happy. Do not give up
I hate writing because I have to, but don't say, "I can't do it." Say, "I will try."
It does not matter if your teachers correct you, they are just trying to help by telling you what you need to fix; known as "constructive feedback."

NAPLAN and how to address these issues. This exercise met the criteria for a rich task through its analytical, comparative and descriptive components, as well as in the recognitional connectedness of having to write to another student.

It was hoped that supporting the recipient of the letter with advice and encouragement would contribute to the safe and supportive atmosphere of the class by raising awareness of the importance of empathy. This process explores my students' attitudes to making errors, learning from them and taking the NAPLAN test.

I have cross-referenced the advice given by students with an error analysis to see if the letters which provided more positive feedback might have displayed generally fewer or more errors than their counterparts with less positive feedback. The majority of students' comments come from a 'growth mindset' frame, in which the learning is prioritised over the criticism (Table 34.1).

This shows that the classroom culture is developing into a more positive and robust one, which can allow the learners to take risks and support one another through their learning and experimentation with new ideas and approaches to writing. It also shows that a rich task provides a more positive framework for learners to apply their skills and knowledge and that a real-world connection inspires the learners to do better on the tasks.

Of This Much I Am Sure

A substantial part of what makes up a classroom is emotional energy, particularly a class of new students or one facing a challenge such as assessment deadlines looming. An effective teacher must acknowledge the curriculum descriptors that relate to the subject and cross-curricular priorities when planning classroom assignments. They must also harness perhaps one of the most important qualities that each learner possesses in different amounts—the capacity of the learner to empathise with other people, even those whom they have never met before, or fictional characters. This part of human consciousness is a powerful motivator and can drive not only charitable acts but also effective writing and imaginative tasks.

Since the writing task described above, the Year 7s have been integrating much more effectively, as well as applying themselves less reluctantly to their assessment tasks in class. It is not possible to determine how much of their performance is due to the simple letter task that I gave them to do some weeks ago, but as with all classroom

activities, it can achieve results greater than the sum of its parts. The atmosphere in the room has been commended by the mentor teacher as well as other teachers and school leadership who have passed by on walk-throughs, so it can be said that, if nothing else, it has not had a negative impact.

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Chapter 35
Will Culturally Relevant Content in Mathematics Improve Engagement of Indigenous Students in the Regional and Urban Context?

Check for updates

Blake Watherston

Abstract   When I now reflect critically on the outcomes of my lesson, the explanation given by my mentor teacher might have been a legitimate reason for the disengagement of the two boys. However, I could not help but feel that they were not enthusiastic about the activity due to the nature of the content and how it was presented in the activity. Their attitude and body language spoke more of two students who could not see any relevance between their everyday lives and the activity, leading to a situation where they were shut off from the task altogether. This moment led me to consider my research question which involves the difficulty of making mathematical content relevant to the lives of Indigenous students living in a regional or urban area where cultural, family and personal beliefs may not be as readily identifiable as that within an Indigenous community located in a remote context.

Journal entry, 18 September 2015, Port Lincoln, South Australia.

> Today during the year eight mathematics lesson that I was teaching, as part of my first teaching practicum at Port Lincoln High School, the class had been working through the theory and exercises around the calculation of perimeter and area of different shapes. This lesson being the second to last lesson on a Friday, I had planned for students to conduct a practical activity to utilise and demonstrate the skills they had developed over previous lessons. The activity involved students estimating, measuring, and drawing a rough plan of their own bedroom at home, showing all walls, windows, and doors. Students were required to estimate the height and length of the interior walls, along with the measurements of any windows or doors, in order to determine the maximum amount of paint that would be required to re-paint the walls of their bedrooms. Straight away the class was extremely engaged in the activity and were working well together as individuals and small groups, drawing their plans, estimating and calculating measurements with the assistance and guidance of myself and my mentor teacher.

> The two Indigenous boys of the classroom, Harry and Phillip [altered names] were disinterested and disengaged from the task and assistance and prompting offered by my mentor teacher and myself only resulted in statements from the boys such as, "This is boring." and "What's the point?" After the 45-minute lesson had finished, I queried my mentor teacher

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about the two boys and their complete disinterest in a task that was actively engaging the rest of the students of the classroom. My mentor teacher put it down to the fact that it was late afternoon on a Friday and that they have checked out for the day with their minds elsewhere.

Introduction

When I now reflect critically on the outcomes of my lesson, the explanation given by my mentor teacher might have been a legitimate reason for the disengagement of the two boys. However, I could not help but feel that they were not enthusiastic about the activity due to the nature of the content and how it was presented in the activity. Their attitude and body language spoke more of two students who could not see any relevance between their everyday lives and the activity, leading to a situation where they were shut off from the task altogether. This moment led me to consider my research question which involves the difficulty of making mathematical content relevant to the lives of Indigenous students living in a regional or urban area where cultural, family and personal beliefs may not be as readily identifiable as that within an Indigenous community located in a remote context.

I grew up in and still work and reside in Port Lincoln, South Australia—a regional town with a population of around 16,000 (ABS 2015). My schooling in the town was completed in two extremely different contexts—from reception until the end of primary school; I attended the local government primary school before completing my secondary education at the local private Catholic school. I feel that this gave me the experience of both educational settings and is a situation that I would not change. During my time at the local government schools, I was very good friends with a number of Indigenous students that attended the school. Port Lincoln has a large Indigenous population and I feel that attending school and socialising with people from an Indigenous background gave me an excellent insight into the local Indigenous community.

Looking back now, these experiences were extremely beneficial and the cultural awareness I had the opportunity to develop is something that the new friend group that I established once I began attending the private school did not have the opportunity to experience or understand growing up, as very few Indigenous students attended this school. My best friend at primary school was Indigenous and Jon (altered name) also made the change from the public to the private system at the same time as me and we completed both our secondary and primary schooling together. Although he lives in Western Australia now, we are still best friends who see each other regularly and consider each other and our families as our own family.

Who Did I Think I Was?

Growing up with a best friend who is Indigenous, I thought that I had an excellent understanding of what is important to the local Indigenous people of Port Lincoln, including an awareness of the powerful aspects of the culture that frames the daily lives of the Indigenous people of my community. Being involved with Jon and his family, along with attending primary school and socialising daily with many members of the local Indigenous community, both male and female who were of similar age to me. I feel that I had a unique opportunity to absorb knowledge of the interests, beliefs and issues that affected the broader Indigenous population of my hometown.

I began my first teaching practicum at Port Lincoln High School, a school with a student population of which 17% identify as being Indigenous (Port Lincoln High School 2014). Teaching at this school requires careful consideration of the learning needs and abilities of these students within each classroom, along with the requirement to differentiate content and learning activities to ensure successful learning outcomes for all students. I felt confident when starting my first teaching practicum that, even as a completely inexperienced teacher under the guidance of a veteran mentor teacher, I would have the assurance and skills to be able to relate to, interact with, and motivate my Indigenous students.

In general, throughout my teaching practicums, I felt that I was able to develop meaningful relationships with the Indigenous students that I worked with, even given the time constraints of a limited teaching practicum length. However, I did notice that it took a considerable amount of time for Indigenous students to interact with me. This could be explained by my literature review conducted prior to my research, which explained that often Indigenous students respond and engage better with content that is delivered by teachers who are Indigenous themselves (Hyde et al. 2014).

This seemed the likely explanation for the engagement difficulties I experienced with the two Indigenous boys so, as part of my research, I contacted my mentor teacher, who I worked with during my second practicum at Port Lincoln High School, to inquire into strategies that he or other teachers may have employed to combat these difficulties. He spoke of the importance of developing a strong relationship with students: something that is extremely difficult to do during the short time that student teachers have on their teaching practicums. Additionally, in the case of Port Lincoln High School, Indigenous students are often teamed with an Indigenous teaching aide, who will work closely with the Indigenous students of the class and act as a conduit between the students and the teacher.

Prior to my first two teaching practicums at Port Lincoln High School, I thought I was a person who had developed a good understanding of the culture of Indigenous people and be able to relate and interact successfully, due to my fortunate upbringing. This definitely held true, but through my experiences and discussions with my mentor during teaching practicums I became aware of the importance of developing strong relationships with all students and how this can be very difficult within the limited time frame of a teaching placement.

Who Do I Think I Am Now?

During my final teaching practicum, and as part of my research, I had the fantastic opportunity to speak with a teacher who worked for three years in the remote Indigenous community of Palm Island in Queensland, who mentioned to me the importance of being aware of a culture that is continually changing and evolving over time. This was an important piece of information that hit home for me instantly: I was basing my knowledge of what might be relevant to Indigenous students at school today on my personal knowledge and experiences of more than a decade earlier. It was clear that during the time that I had left school, worked and studied in another industry I had lost touch with what the Indigenous community of Port Lincoln considered relevant and important in their dynamic and ever-changing culture. Speaking from her wealth of experience, the teacher explained that the development of strong relationships with students is critical in establishing connections with their culture in order to then utilise cultural knowledge when planning and conducting lessons to achieve learning outcomes. As a beginning teacher working with Indigenous students, this is something that I will focus on.

When conducting a literature review, I unearthed information that speaks of Indigenous culture being much more blended and less visible within a regional or urban area, as opposed to the culture of Indigenous people living in remote communities (Dudgeon and Ugle 2014). Consequently, I identified a limitation of my research, which is the difficulty of identifying and developing content that is relatable to the culture and everyday lives of my students who live in a regional or urban context. I had the chance to query my second mentor teacher regarding this problem and he told me of the Aboriginal Community Liaison Officers program employed by Port Lincoln High School, in which local, respected members of the Indigenous community are employed by the education department to work with the school to ensure that the relationship between the school and the Indigenous community is a positive one. These officers work at the school to assist teachers to understand local cultural nuances; give the Indigenous community an active voice within the school; and act as role models for Indigenous students. As a beginning mathematics teacher who might struggle to form positive relationships and understand local cultural differences and issues, seeking out the assistance and guidance of such officers will be crucial in helping me tap into what might be relevant content that I could adopt to assist engagement and ensure successful learning outcomes for Indigenous students in my classes.

Of This Much I Am Sure

In this chapter, I reflected on my own personal experiences in working with Indigenous students during my practicums; my researching of numerous scholarly articles;

and my formal and informal discussions with teachers and others who are extremely experienced in educating and working with Indigenous students. Relevant literature exposed me to the many factors that need to be balanced—particularly learning content and Indigenous students' cultural values—in order to create a learning environment in which Indigenous learners can thrive. Before completing this chapter and working with Indigenous students as part of my three teaching placements, I thought that I had a good insight into the culture of the local Aboriginal people, but the depth of my prior knowledge did not reach as far as I initially assumed. My previous knowledge did, however, provide a solid base and I have since come to realise and appreciate the many complexities that are associated with engaging and motivating Indigenous learners.

I sought to establish whether adopting culturally relevant content within the regional/urban school context will assist Indigenous learners, as it has been identified as doing so for those in remote communities. All the experienced educators I spoke to highlighted relevant content as being essential to achieving successful engagement and learning outcomes for Indigenous students. Some of the strategies I discovered in my literature review included developing positive relationships with students, community involvement, and seeking support from Aboriginal Liaison officers to help to identify culturally relevant content and delivery.

However, all those I spoke with, both informally and formally as part of my research on this issue, mentioned that the Indigenous students they have worked with have sometimes struggled to see the relationship between mathematics and their everyday lives. All agreed that an essential pedagogical strategy to increase engagement from primary to secondary level is to involve students in determining the method of their own learning with the maintaining of high teacher expectations of students and student's expectations of themselves also important factor. This involves the teacher asking students which topics interest them personally and allowing students to develop their knowledge and skills in mathematics through learning experiences to which they have had the opportunity to contribute. Reflecting on the situation from my journal entry, the two Indigenous students were given a task in which there was no direct link to their social and cultural background: a problem which could have been avoided had I adopted successful strategies for engaging Indigenous students; had I been armed with the knowledge I have recently gained.

Conclusion

This chapter has identified some important teaching principles for student engagement in learning. Although I was lucky enough to grow up with an insight into the local Indigenous culture, my experiences on my teaching placements have shown me that culture is never static and is constantly evolving and changing over time. Differentiating mathematics content and learning activities for Indigenous students also means recognising cultural relevance. This is a difficult and complex task in regional or urban school environments where cultural beliefs and sensitivities are

not easily ascertained. My investigation, through discussions with educators experienced with working with Indigenous students in a regional context, has unearthed to me numerous strategies that have been proven successful in improving engagement of Indigenous students. These discussions highlighted to me the importance of meaningful and relevant content to improve the learning outcomes and engagement of Indigenous students, along with providing me with information that will be enormously advantageous to me as a beginning teacher.

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Chapter 36
Breaking the Cycle: What Influences Do Families Have on Lower Primary School Students' Attendance in Remote Communities?

Casey Ellis

Abstract   Although parents and families have a significant influence on their child's school attendance, teachers' adoption of more culturally appropriate methods of engagement with the community is necessary. I do think the people of the remote Indigenous communities need to work in collaboration with their local schools (and vice versa) in order to make progress and positive changes to lower primary school students' attendance.

Journal entry, 29 April 2016, remote community, Northern Territory

> I watched on as the school bell sounded to signal the start of the school day and 5 out of the class of 19 Year 2 students walked into the classroom. I noticed that some of them looked tired and were wearing the same clothes as the previous day. Some students went to lie down on the classroom mat. As the day progressed, more Year 2 students arrived and joined the class. By lunchtime (students receive free lunches), 12 out of 19 students had joined the class. The school day concludes at 2:30 pm. After school, I had a discussion with my mentor about student attendance. Later in the afternoon, I perused through the children's workbooks and folders to gain an understanding of the various levels they were at for their literacy and numeracy learning. I found that the majority of the class were well below the Year 2 expected PM reading level and the same for their mathematics level.

Introduction

I grew up in Horsham, Victoria, 300 km northwest of Melbourne. I completed all of my schooling at the local Catholic schools. When I was five, my parents adopted my cousin, so he came to live with us. He was still a baby, but what interested me the most was that he was part Indigenous. His mother (my aunty) was an Aboriginal woman. I had not yet learned about Indigenous or Torres Strait Islander culture at school and was intrigued by his skin color. I wanted to know more about him and his family history. This is where my desire for learning about Indigenous culture began.

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During my secondary school years, I began to notice more Indigenous people were moving to Horsham. Many of them attended the public secondary school, but I would see them at the bus exchange. In Year 11, I trained to become a sports coach as part of the Active After School Care Program. My friend and I coached children from North Primary School. This was the school that many Indigenous students attended.

Throughout this paper, I will discuss some of the influences that affect lower primary school students' attendance in remote communities. The objective of this paper is to create some recommendations for student attendance based on the research I explore and the responses to my abovementioned focus question.

Who Did I Think I Was? An Outcast with My Cousin

As mentioned previously, I grew up with my cousin as part of my immediate family. It took my older brother and me some time to accept the situation and the fact we now had a new family member. I was young and naïve to the situation at the time, which resulted in me being slightly withdrawn from social interactions with him. I thought people would start to treat our family differently because of my younger brother's (cousin's) presence and the unhappy story of why he came to live with us. Initially, my thoughts were correct. Because my hometown is small many people find out other people's business. Some of our family friends started to shy away from us.

It came time for my younger brother to begin primary school. He was the only Indigenous child at the Catholic school. This is the time when other students began to judge him. It wasn't only him. Some students also began to judge me, based on our family connection. In response to the teasing, my younger brother was receiving he began to miss some school days. As he moved through primary and secondary school, he would say he was not feeling well, or he was sick. Due to the factor of us living out of town, we would catch the bus to and from school. Sometimes he would go to the bus exchange, then spend the day in the shops instead of school.

Along with this response he would also misbehave when he did go to school. I have negative memories of kids and teachers constantly coming to me saying he did this, he did that; could I go and talk to him to get him back on track? During these times, I felt pressured to assist with the situation, as he often listened to me. However, this meant I was also missing out on class time. According to the Australian Bureau of Statistics (2016), 26% of Aboriginal and Torres Strait Islander students completed Year 12. My younger brother was not one of them. I feel sad and disappointed when I think about this.

Reflecting back on the whole situation, I wish I had done more to educate the students and teachers at the schools I attended about how to encourage and guide my younger brother along with his learning journey. I also wonder whether my mother sought support strategies to encourage him to attend school. I cannot help but also think that my brother's irregular attendance was his personal responsibility. The

above experience contributed immensely to my desire to become a teacher. I aim to make students' learning experiences as engaging and fun as possible, so they want to keep going to school.

Who Do I Think I Am?

Our family dynamics have changed dramatically over the years, and we now live in various parts of the country. I feel as though my mother did her absolute best to encourage my younger brother to attend school regularly. The whole journey (which continues) has given me the opportunity to appreciate how much my parents supported and encouraged me to learn valuable knowledge and skills by attending school regularly.

The real decider for me to pursue a career in education was after I completed a teaching practicum at a public primary school situated in a low socioeconomic area in my hometown. A large portion of the students at this school are Indigenous Australians. I gained an insight into some of the challenges the school faced, such as student attendance rates, academic results, and antisocial behavior. Once I completed my teaching practicum, I was certain that I wanted to become a teacher.

As part of my third year teaching practicum, I traveled to a remote community, approximately 560 km from Katherine in the Northern Territory. There I worked with a Year 2 class where all but one student was Indigenous. This was my first experience of living and working in a remote community. Initially, it was overwhelming and I felt like an outcast again. After one week of living and working there, however, I felt included as a member of the community. The greatest challenge for the school was student attendance rates. These fluctuated immensely, particularly during times when royalties were paid (mining companies must pay the town money, and it is distributed based on community agreement). This went on for two weeks while I was there and often meant that once families received their money, and they would take their children and go shopping in Katherine or Darwin for much-needed supplies.

One of the challenges I faced was trying to figure out a way to cover relevant material from the Australian Curriculum in a short time frame. The reason I found this challenging was because many students were behind in literacy skills; therefore, they found it extremely difficult to understand maths content as it was taught in English. The way I overcame this was by using the gradual release model (Levy 2007). This model is used to move classroom instruction from teacher centered, whole class delivery to student centered, collaborative group work, and then independent practice. Today, I can say I am a confident, resilient, and supportive person, and because of my experiences, I can relate to my students' families and guide them through education to ensure their children attend school regularly. I can do this by informing them of the benefits for their children, their family, and the community.

Of This Much I Am Sure

I asked three teachers from remote schools about their opinions about the influence families have on lower primary school students' attendance in remote communities. One teacher said that if parents support their kids going to school in our remote community, there would be an improvement in attendance rates. The kids with parents who get up in the morning to get their kids showered and organized usually attend more regularly. Attendance is affected by parents' attitudes toward routines at home. Another teacher explained that young children are reliant, on the most part, on their parents to get them to school. They are reliant on their parents knowing when they should be at school. Some parents do not know when their child can be enrolled so that some children might begin their education months to a year behind their peers.

A friend of mine, who also completed a teaching practicum in a remote community, commented that any person of higher social standing, like an elder, a parent, or even an older sibling, can influence how and what children can do, demonstrating the power of respect. In order to gain and maintain respect children must listen to that higher person. Many parents do not agree with "mainstream" education and would rather their child learn their own cultural forms of respect.

Of this much I am sure: It is clear that these teachers believe it is a matter of personal and parental responsibility that needs to be taken up by the community. The goal is to improve the attendance rate of lower primary school students within their own community. In the Northern Territory, there is a program known as Families as First Teachers (FaFT). This program encourages parents and families to build positive relationships with their children and with the school. The aim of FaFT is to improve developmental outcomes for remote Indigenous children by working with families and children prior to school entry (Department of Education 2016). This is currently being run at a number of schools in remote communities. One teacher commented that FaFT had some success, and this is especially the case in my experience with the program at the local school. This is run by two Indigenous teachers—one local and another connected via marriage. They have made inroads into the community as they know many of the young parents as a result of their extended family connections.

Working closely with Indigenous people can result in positive changes within the community. It is important to note that some FaFT programs are also mobile. The program operates at the school one day a week and is mobile for the other four days to help the parents become more comfortable about being involved and promote positive school community culture.

Conclusion

Following my professional experiences, reading many research articles and government documents, reading the responses to my research question, and discussions, I had with my mentor teacher, I have come to the conclusion that it is up to the

individual and family (personal and family responsibility) to make sure lower primary school students attend school regularly.

Although parents and families have a significant influence on their child's school attendance, teachers' adoption of more culturally appropriate methods of engagement with the community is necessary. At the moment, education in remote communities is still Western knowledge-based and data-driven. Some of this is inappropriate. There is a dramatic and positive change in the way education is delivered on the Arnhem Plateau. Driven by the Nawarddeken Academy (2016), a program about Aboriginal knowledge is guiding education, hand in hand with key Western knowledge such as literacy and numeracy.

Overall, I do think the people of the remote Indigenous communities need to work in collaboration with their local schools (and vice versa) in order to make progress and positive changes to lower primary school students' attendance.

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Chapter 37
Varying Gender Contexts to Increase Female Engagement in PE

Jack Burton

Abstract Observing the limited involvement of female students within physical education [PE], both as a fellow student and later as a pre-service teacher, I decided to investigate ways in which to increase participation and engagement for female students during PE. It was found via questionnaires that, in co-educational settings, the majority of teachers do not separate males and females students for PE lessons. Furthermore, both females and males enjoy the curricula area and do not believe that it should be split into single-gendered classes. During my teaching placement, I separated males and females for PE lessons and, through observation, noticed an immediate improvement in females' engagement and skill levels when participating in single-sex PE classes. It is recommended that educators consider utilising single-sex classes as a way to improve females' participation and engagement in PE classes.

Journal entry, 26 July 2016, Coffin Bay, South Australia:

> I can vividly remember, like it was yesterday, playing touch football as a Year 10 student and thinking, "Am I the only one who wants to do PE anymore?" Except for Jeff [not his real name], one of my friends, why is no one else trying? Should I ask the teacher if she could force everyone else to try? Maybe I'm taking this too seriously? As I ran over the touchline on our small area school oval to score another try, I decided then and there that I did not want to look as though I was taking PE too seriously. At the end of the lesson and after picking up all the cones from the touch field, Jeff, my PE teacher, and I walked back across the oval, while the other fourteen students in my class had already crossed the road and were getting a drink. As the three of us walked across the road, Jeff said, "There's no point even doing PE anymore. The girls never try and it ruins the whole game." Straight away I looked at my teacher to see her reaction. She looked at us both briefly but didn't say a word. I looked at Jeff and replied, "We just need more boys in our class."

> Fast forward to 2016 and after nearly twelve years completing an apprenticeship working as an electrician, and almost four years of studying externally, I find myself in a similar position as a pre-service teacher to my teacher back then. It is as if nothing has changed. On the second day of my current placement, one of the PE staff came into the office complaining about the female students in her class who were reluctant to participate and

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how the boys controlled the entire game. I said to myself, "Surely someone has thought of something by now."

Introduction

I grew up in a small coastal South Australian town (population just over 1000), which is renowned for its oyster industry and recreational fishing. I was lucky to be brought up in a stable and loving environment, along with my older sister. As is the case in most small country towns in Australia, the sport was such an important part of the community's fabric, and I could not get enough of it. My family all participated in some sport as I was growing up and were often involved in coaching or administrative roles in various sports. Growing up, I participated in many sports such as football, tennis, cricket, basketball swimming and surfing and represented my club and association on many occasions. I guess it is no mystery what my favourite lesson was at school! The local area school that I attended was rather small: in fact, it consisted of just 190 or so students from Reception to Year 12.

As a consequence, once I had reached the upper middle school, the number of students in my class had reduced significantly. The school did not have a gymnasium; therefore, all PE lessons were conducted outdoors in the schoolyard or on the oval across the road. It is on this oval where I came to believe that girls did not like PE: they just liked sitting around and gossiping!

Throughout this reflexive practice, I will address the influence of gender in PE lessons and aim to determine how PE teachers can provide engaging lessons in both co-educational and single-gender contexts to encourage female students to become more engaged during PE.

Who Was I? A "Casually" Competitive Kid

As previously mentioned, I came from a small community and was brought up in a family environment that encouraged my sister and me to participate in sport and physical activity. I did not need much encouragement as it turns out. Growing up with my mother as the school principal, we lived in a house that was right next door to the school. I remember telling people I disliked living there because I could not ride my bike to school: it was too close, and it would have just been silly. However, despite this one "major" dilemma, I secretly loved living so close. I had a football oval in my front yard, a full-size basketball court that I could access next door, access to the sports shed and all of the school's equipment, cricket nets and the swimming pool. Having the pool so close was especially good in summer. If someone in the class forgot to bring their bathers to school for swimming during PE, I would race home at recess or lunchtime and grab a spare pair of my shorts so that they would not miss out.

I was always relatively shy and quiet as a child/adolescent; however, those underlying traits disappeared when I crossed into a sport and physical activity context, for this is where I was truly confident. I never considered myself to be particularly smart at school, neither did I consider myself as dumb. I was somewhere in the middle. I found most other subjects boring and was uninterested during lessons, with the exception of art. PE lessons provided me with something to look forward to and get excited about. Even the theory lessons, where we learned about the body and how it works, fascinated me. However, practical lessons were what I looked forward to the most. Growing up, I felt that everybody else felt the same way. We would all be looking up at the clock during maths or English, counting the minutes that felt like hours until the siren went for a change of lesson and time for PE. However, as I reached Year 10, something was different in the attitude of nearly all of my female classmates. It was like over the summer holidays they had decided that PE was not cool anymore. Many girls were suddenly faking injuries, forgetting their bathers and trying their best to be uncoordinated, when they were normally quite talented at sport. I took their actions personally as it directly impacted my favourite lesson. I never felt that I was over-competitive at school, and I always tried my best to include and accept others; therefore, I thought it was unfair that they put in such little effort.

Who Am I Now?

I am currently a pre-service teacher; however, I will be a teacher in the very near future. I have been doing practicum teaching in different schools on the west coast of South Australia and have come across the issue of gender and participation in PE lessons at some point in each school. I previously believed that there was little you could do to combat this issue and that as a teacher you could only try your best to motivate and encourage students to become engaged in sport and physical activity. That is why, when a member of the PE staff came into the office complaining how the female students in her class were reluctant to participate and that the boys controlled the entire game, I thought that it was just something I would have to learn to manage as a professional. I had been experiencing similar behaviour from two female students in the Year 10 Sports Academy class I was teaching, so I decided to ask my mentor teacher about some of the strategies that he applies to combat this issue. He suggested dividing some of the learning activities in each lesson by gender. Research by Hohepa et al. (2006) supports this approach. The research found that female students who participated in single-gendered PE classes (after previously participating in co-educational classes) emphasised feelings of relief and enjoyment while exhibiting movement with increased confidence and at a greater skill level. I took my mentor teacher's advice, altered my next lesson plan accordingly and began planning for the next lesson.

My next lesson was the beginning of a new unit on badminton. After the initial introduction of the rules, I separated the class into male and female gender. I then explained the next few activities (which were skill learning based) before getting into

some modified games. I noticed that, compared to the previous unit I had taught on touch football, the female students' effort seemed to increase and they were gaining confidence in a game situation by the end of the lesson. I continued this gender separation approach up until the final week of the unit. Some of the female students had surpassed my expectations for their skill level at the end of the unit; one girl, in particular, was one of the two students who had been reluctant to participate in the previous unit. Feedback provided verbally from the students about gender separation was really positive from male and female students. It allowed them to work with others at a similar ability, which increased student motivation and enthusiasm. Female students also appeared more comfortable and less concerned about their appearance playing without the presence of their male classmates.

Referring back to what was stated earlier, as a school student I was confounded when female members of my class were reluctant to participate in PE lessons. I believed that certain social expectations and external influences were behind this behavioural change and that girls were under pressure to be seen not to try or not be good at sport to meet social expectations of others. Now I am beginning to feel like I may have a weapon to unleash when I come across this issue as a future teacher. However, I get the feeling that this one strategy only scratches the surface of a much more complex range of factors contributing to this issue.

Of This Much I Am Sure

When I began this topic I set out to answer this question, "Is it possible for a PE teacher to provide both co-educational and single-gender contexts in order to encourage female students to become more engaged in physical education lessons and more specifically, physical activities"? My answer is simply, "Yes". However, along the journey to answer this question, I discovered that this is just one of many factors influencing female students' behaviour and participation in PE contexts.

Gender's role in PE is an extensively researched issue that is constantly creating discussions among health and physical educators. Many researchers in the education sector have recorded observations and hold views in line with my own experiences, where female students have been reluctant to participate in physical activity classes. Among the most debated topics regarding this important issue is whether a co-educational or single-gender PE context is more beneficial for students (Woodson-Smith et al. 2015). During my recent practicum, I conducted two questionnaires, aimed at PE teachers and students, respectively (it should be noted that this took place in a co-educational school where there were no single-gender classes). My aim was to determine how teachers and students felt about their current PE lessons, and what they thought about gender segregation during PE. I also conducted a practical unit on badminton where I was able to create a single-gender context for large portions of the lesson. It was here where I was able to make my own observations, discuss them with my mentor teacher and compare my findings to current research.

I found that the majority of teachers currently do not separate students by gender during PE lessons; however, all teachers agreed that gender separation is beneficial for students. Hill et al. (2012) revealed that the majority of teaching professionals believed that male and female students would receive greater benefits in regard to skill development and social support in a single-gender PE context. A lot of teachers, however, also would like to provide both gender separate and co-educational contexts for their PE students. This surprised me, as I am not sure why these teachers do not try to implement gender separation during their lessons if they believe it is an effective way to engage students. Further investigation as to why teachers do not include gender separation in their lessons may be beneficial.

Interestingly, most teachers I had conversations with also believed that gender separation would not be beneficial for all year levels. From my own observations during practicums, I have noticed a shift in female students' attitude and behaviour towards physical activity once they reach middle to senior school. While reviewing the current literature on this topic, I found that research conducted by Marques et al. (2016), investigating the effect of sexual maturation on girls' physical activity and sedentary behaviours, supports these observations. I believe that gender separation is most suitable for Years 8 onwards.

All the teachers agreed that they would change certain aspects of their current PE lessons. The teachers, however, were divided into two completely different opinions when asked whether they would prefer to teach PE lessons if there were an all-boys or all-girls class. A large majority of teachers disagreed that students would find PE more fun if there were a one gender class.

I imagined students would love the opportunity to participate in both single and co-educational PE settings. I know that, as a student myself, I would have relished the opportunity to have a more competitive game on the odd occasion. However, what I found from current students was completely different. A large majority of students stated that they would not change a thing about their current co-educational PE lessons and were strongly against the idea of a single-gender class. The majority of the students believed that single-gendered classes would be more competitive, and all students stated that they would like more PE lessons than they currently have. These findings suggest that most students at this school enjoy participating in PE, which is parallel with what I found through my observations during class. It should be noted that the school where I undertook my practicum is a co-educational private school and has a diverse range of students from various socio-economic and cultural backgrounds.

Conclusion

Gender's involvement in physical education is a topic that resonates with me, as I will soon become a graduate, secondary health and physical education teacher. Completing this very reflective piece has provided me with a much deeper understanding of how gender can affect PE contexts and exposed me to different strategies that I will use in my future career. It has also provided me with opportunities to test my

findings and converse with students during PE lessons throughout my practicum. This experience has been truly beneficial to me and, hopefully, the school students as it has allowed me to further my knowledge about students, including how they learn, how they can become engaged and how to meet their needs as an educator.

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Chapter 38
"He Never Wears a Hat": Listening to Parents' Concerns

Jing Weng

Abstract While working in the Early Learning Centre and on the practicums, I experienced the concerns of some families about their child's well-being. The Early Learning Centre provides parents with parent handbooks after their child is enrolled. Interviews between parents and educators regarding their child's physical health, development, behaviour and interaction with others happen every semester. Effective communication helps families and educators to build a trusting partnership and promote respectful relationships. Parental concerns help the educators understand what is happening at home so that they can better support the child (KidsMatter 2017). Drawing upon my own experience and my practicum experience, I believe understanding parents' concerns is important when developing the learning program.

Journal Entry, September 22, 2016, Darwin, Northern Territory:

> Today, we received three calls from Charlie's [not his real name] mother Mrs. Brown regarding "how her son is, is he happy inside, does he wear his hat for outdoor play." Charlie is not the most coordinated child. If he is worried about his hat, he is not paying attention to climbing and running, but he is very active and loves outdoor play a lot. For Mrs. Brown, it is a very big deal. "I try my best to pick up my son after afternoon preschool at 2:45. I know my son is only three years old and can't be expected to wear a hat. My dad died of skin cancer, and my son is predisposed to have sun sensitivity. If I am running late to pick him up, I am wondering if he is wearing his hat and I cannot keep my mind on my job." Mrs. Brown came at 4 pm and Charlie was playing hide and seek with his peers without the hat on. The educator did ask him to keep the hat on, but he said the wind kept blowing his hat away and he refused to put it on. Mrs. Brown was very upset when she saw her son wasn't wearing his hat. She said, "Every time I pick up my son, he is never wearing his hat. I have no problem getting him to wear his hat at home. From now on, keep my son playing in the room. No more outside play." She grasped her son's hand without signing him out or saying goodbye to the educators. The next day, we got an email from the mother. Mrs. Brown wrote the email to my mentor to complain to the educators about her son not being looked after appropriately.

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Introduction

I am a mother, student, part-time language teacher and proud Chinese with Australian permanent residency. I have been a part-time Mandarin teacher at the Darwin Language Centre since 2008, and I have been working in a long day care centre since 2010. I brought up my son in China, and I understand how a busy working mother worries about her child's education and physical health and well-being. I came to Australian in 2007 for my son's education. Now my son is a young adult, and I am focusing on my professional development, so I keep studying. I have achieved several qualifications since I came to Australia. I am working towards my Bachelor of Early Childhood Education at the moment. I wish to be a good teacher to support children's early learning after I graduate from my studies.

Who Was I?

I was a middle school teacher in China for 17 years before I immigrated to Australia. I had 65 students in my class and worked closely with the parents in China. I built very strong, respectful relationships with the parents. It was not easy to be a teacher in China. You might find it hard to imagine parents who had the teacher's home phone number and personal mobile phone number. They could call the teachers any time after work to talk about their child's study. My family members always complained about my phone is like a hotline as I had to answer so many calls from the parents all the time. I did not have my own life being a teacher in China, but the benefit was I knew everything that was happening to my students outside the school, and I had many close relationships with the parents.

I felt lost when I started my life in the strange country, Australia, especially for my son's education. I did not have any contact details for the teachers and was eager to see his teachers and get to know how my son was progressing. I tried to go to my son's school to ask about his progress, but I was stopped by the front office and was told that unless I had any special concerns, I could not see his teachers. If I did have some important things to discuss with his teachers, I needed to make an appointment. Busy working parents may not have the opportunities to chat with the teacher about their child's development and the things happening in the school. It made me feel so different to be a teacher here as I felt the lack of communication with the families and their difficulty in building a close relationship with teachers.

As a mother I wanted the teachers to support my son so that he would be happy in his learning environment. Also as a mother, I understand Mrs. Brown's worries about her son's physical health. The sun safety issue happened in my placement school also, and this made me think about being a mother in China. When my son was a young child, I loved to take him to many outdoor activities. I was never worried about whether he would get sunburnt, although I did put some sunscreen on him before we went for an outdoor play. At that time, I only thought the sun would make him look

darker, as many Chinese love white skin. It seemed I never heard about skin cancer in China.

When I first started to work in a long day care centre at my first staff meeting, I heard about skin cancer and sun smart requirements. I knew about the sun safety procedures for children in child care from then on. To be SunSmart and play SunSmart is very important in long day care. SunSmart means you apply sunscreen on the exposed skin 20 min before outdoor play and you need a hat and sunglasses during outdoor play. Working in long day care, I did meet some families who were concerned about their children's outdoor sun safety. Consequently, staff reviewed the workplace sun safety policy and attended the staff meeting to reflect on their daily practice to support children's sun safe awareness. Parents were encouraged to be their role models for outdoor sun safety and were involved in their child's school life. Some parents were happy to assist with the class morning tea or afternoon tea.

In my placement school, I had opportunities to listen to the parents and my mentor in an interview situation about the child's learning. Each family was given ten minutes to talk to the teacher, and my mentor used the child's work to help the parents understand about their child's development. The parents could listen to the teacher talking about their child's study specifically and individually and make a decision together about supporting their child's education. The parent evening and special school events became very important for catching up with the parents and getting them involved in their child's learning.

Who Am I?

Since I came to Australia, I have worked in a preschool and studied Early Childhood teaching, I have learned a lot from my colleagues and mentors. The ways to build relationships with busy working parents have impressed me the most. During my placement, I experienced a parent concerned about her son's sun safety requirements. My mentor organised a meeting with the parent and provided some sun safety information and followed it up by reviewing the issues at the staff meeting. Each staff member then had a clear idea of sun safety policy and how to communicate with parents in a professional way. Skin cancer is one of the most common diseases in Australia. In 2013, more than 2200 people died of skin cancer in Australia (Cancer Council Australia 2016). I used my survey questions to communicate with the parents and staff, and I have a clear idea of their thinking and how I will solve the problem. I am an early childhood educator, and I am aiming to promote children's well-being and early education, and I am willing to learn more to support the parents to educate the children. I will work with parents and colleagues to educate the young generation to form lifelong sun safety habits.

Working in the early learning section and learning from my mentors during my placements has inspired me to be a teacher in Australia, especially a language teacher after I graduate. I have taught some Chinese songs to the pre-schoolers where I am working, and I have very good feedback from the families. They were proud of their

children singing Chinese songs at home which make me feel that I want to be an early childhood teacher. I am sure the optimum age to learn the second language is from early childhood. For this reason, I want to be an early childhood language teacher.

Of This Much I Am Sure

Based on Charlie's mother's concerns, I had many conversations with parents and educators regarding parents' concerns. According to their different cultures and a different background, parents have different expectations for their children. For example, for the children's outdoor play, some parents hoped the educators would teach their children to sun safety rules, and the educators outlined their outdoor sun safety fun activities which supported the children in learning to play SunSmart. Some parents did not have too many worries about sun safety. They thought the educators just needed to make sure their children were safe and happy.

Of this much I am sure: staff and parents, as role models, are so important for children. If the staff do not wear hats while participating in outdoor activities, how do they expect the children to wear their hats? The daily sun safety practice should become a consistent routine, such as applying sunscreen on the skin 20 min before outdoor play, wearing a hat and sun safe clothing all the time during outside the room. Parents should be provided with the full sun safe policy.

Of this much I am sure: I am ready to assist in updating our centre with the improvement action plan including the sun safety and effective communication with the families to build trust relationships. I am sure also that listening to parents' concerns will be of great benefit in building respectful relationships (KidsMatter 2017).

Conclusion

Reflecting on my own teaching experience with different age groups and my placement experience in different schools, I have met all kinds of parents and realized the importance of building trust relationships with them. School and childcare policies should be reviewed regularly to ensure they meet the parents' needs and building effective partnerships with families will continue to be very important. Parents' concerns will give us insight into finding solutions as to how to work with families and find the best way to support each child's development. I love the students for who they are and appreciate the chance to work with them and to see them grow up. I always feel pleasure in their company when they understand their achievements and development and also see their unique view of the world around them (Powers 2005). I am ready to put on their shoes and stand by parents' sides and use my professional teaching knowledge to work with families to support their children to be well educated and healthy.

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Chapter 39
The Powerless Choice: Mainstream Versus Specialist: The Critical Decision for Parents of School-Aged Children with Mild to Moderate Physical and Intellectual Disabilities

Kathryn Hamilton

Abstract The choice between inclusion in a mainstream class or special needs setting is a difficult one for parents with a child with special needs. This chapter explores the complexities involved in making such a choice and acknowledges that there are many stakeholders involved in these decisions. I believe that it is important for parents to be fully informed about the choices that are available and the strengths and limitations of each setting. I also found that the social and emotional well-being of the child was paramount in the decisions that parents made. There are no right or wrong choices for parents, only the decision that feels right for the child and the family. For teachers choosing to work in special education settings empathy, passion and a desire to help others are necessary prerequisites.

Journal entry, Monday 16th May 2016, a remote community, Northern Territory

> Today is the start of week two of my third placement in a special needs setting. After settling into the classroom, getting to know the students and how the classroom works I find myself questioning many different things. Are special education settings appropriate for individual students? Do they benefit them more socially and academically? Who decides which school is setting students enrol in and what methods or strategies are in place to facilitate this decision? The more I consider the possibilities, the more questions arise. Many whys with no answers.

Introduction

I grew up as what is affectionately known as an army brat. My dad joined the army when I was five-year old; however, this was not the beginning of my nomadic life. From a young age, we moved a lot, which just increased as dad started his career. However, I always had my three older sisters as friends wherever we went before I

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established my own circle of friends at school. It was somewhat of a security blanket to know if I struggled to make friends, which I often did, being bullied throughout primary school, I had my sisters there to always support and comfort me. I come from a large family where disability thankfully has not been present.

I believe it takes someone with empathy, passion and a drive to assist others to work with special needs students. In my case, I consider my drive and passion to help others manifested itself when I met my best friend's younger brother, Brent. I instantly felt there was a connection between Brent, the nine-year old, happy, drooling boy, and me the fourteen-year-old high school student. As a fourteen-year old, I could not explain what that connection was; however, as an adult, I can now see that this connection came from compassion and a sense of fun. This was quite possibly the beginning of my interest in special needs, which has turned into a lifelong passion.

After meeting and spending a lot of time getting to know Brent, I began volunteering during the school holidays with a family friend who is a special needs teacher in Victoria, going on day trips and camps. These trips showed me that children with special needs are individuals; therefore, their needs are complex and vary between each child. The traits that I believe amongst them all are the desire to be loved, included and valued. Sometimes these children do not have these basic human needs filled in their everyday lives, causing them to react often in extreme ways such as violence, withdrawal and self-harm. At the time, I did not give much thought to how these students came to be grouped together, only the why; because of their complex needs.

From here, I did work experience at the special education centre within my high school and realised I wanted a career helping others. I had decided I was going to go into the healthcare system as a nurse. Finishing high school and discovering, I was not cut out for nursing led me to get a contract working as a teacher assistant in an autism-specific primary school. This is where I fell in love and knew that this is where I wanted to be, so after working for four years, I decided to return to university and study teaching with the intention of working with special needs children. Not long into my degree I was fortunate enough to find work in special needs outside school hours care centre and conducted my third practicum in a special needs primary school.

Who Did I Think I Was?

During my time as a teacher assistant, I would occasionally question why a child was not enrolled at a mainstream school as the child, in my opinion, could handle it and hopefully thrive. Why were parents holding their child back by enrolling them to attend in a special education setting? Why couldn't they see that they should send the child to a mainstream school? It cannot be that hard to see, right? Surely, they could see their child beginning to copy the inappropriate behaviours of other students and that academically they were well equipped to keep up with mainstream students. Shouldn't parents want their child to fit in as much as possible?

I assumed that schools had little or no influence on the enrolment and parents knew exactly what to do.

Over the years, I came to realise that I was judging parents on their decisions when I had no idea what it felt like to have to make a decision for a child that could ultimately impact on their development and social and emotional well-being for the rest of their lives. The concerns that ran through parents' minds when contemplating such an enormous decision never occurred to me, making me feel very ignorant and showing my lack of understanding.

Who Do I Think I Am?

Since working at the outside school hours care centre and doing my third placement, I've come to realise choosing a school for a child with a mild intellectual and/or physical disability is a much more complex process and am beginning to grasp the enormity of the decision. With maturity and life experience, my thought processes began changing. I began looking at decisions from a different angle. Where I once thought it was an individual decision, I better understand now the number of stakeholders involved. Yes, parents have the final say. However, I now know that parents face many challenges when making this crucial decision. There can be roadblocks from professionals imposing their so-called expert advice on parents as well as schools and principals "explaining" that the child would feel more comfortable in a special needs environment. Then there are families offering unsolicited advice, transport issues as special schools are few and far between and parents being uninformed of services available, and a parent's own inner turmoil. I can now grasp the importance of the decision for parents; however, I feel that once the decision is made it does not mean it can't be changed.

Of This Much I'm Sure

When speaking to parents, I was acutely aware that the *Disability Standards for Education* (Department of Education and Training 2018) clearly states that schools must make reasonable adjustments to provide all students with equal opportunity to education. However, it became apparent that a small number of parents were not aware of this. Had those parents been aware of their child's right and the school's responsibility to their child, would this have impacted on their decision? I believe it would.

Parents and carers were happy to discuss this topic openly and freely with me, with some parents becoming passionate when describing their individual stories. What my paper suggests is that, although educational policy states that parents make the decision on school enrolment, an overwhelming majority of parents and carers felt that there was pressure to follow what their advisory support suggested. Advisory

support came in different forms from family and friends, educational professionals, and healthcare professionals.

One parent (who will be known as June) felt immense pressure from her child's psychologist, who assured her that the only option that would be best for her child was to enrol him in a special education setting. June spoke about not feeling empowered to question or overrule this decision as she had little understanding of her child's disability, autism, and little knowledge of how the Australian education system operates due to being East Timorese. June went on to explain that the situation with her second child found her in a better position to make a more informed decision and advocated for what she felt was right for her child.

Another parent (who will be known Stephanie) spoke of her experience with the school she had chosen for her daughter to attend being negative, hitting a lot of roadblocks along the way. In discussions with the school's enrolment team and the principal, Stephanie was told that they did not feel their school would be the right environment for her child and that the child's needs would be better served in a special needs environment. Stephanie was very sure that she wanted to send her daughter to a mainstream school; however, the more resistance she felt from the school the less confident she felt. In the end, Stephanie enrolled her daughter in a different mainstream school. Teachers went out of the way to assure Stephanie that they would work with her to make the environment suit her child's needs. Ultimately, after trying mainstream education, Stephanie and the school felt that a shift to a special needs school would help her daughter socially and academically.

Two consistent themes began to emerge. The first was that parents and grandparents were more concerned with how their child or grandchild would fare socially and emotionally, with academic learning falling to the bottom of the list. Parents were acutely aware that their child would face challenges socially in mainstream schools such as exclusion and bullying. The concern that their child would develop traits from other special need students within a special setting was also a legitimate concern (Shah 2005).

The other concern was the role of mainstream schools avoiding enrolling a student with disabilities and actively guiding the parent to special needs schools or units within the mainstream school, which is supported by Graham et al. (2016) in their article "How schools avoid enrolling children with disabilities". The authors describe parents of children with intellectual and physical disabilities as those who face the highest challenge when enrolling their child into a mainstream school.

While researching this topic, I came across another barrier for parents that being the individual state and territory selection criteria for enrolment of students with special needs and the funding available to them. For the parents that felt certain that mainstream was the best option for their child to find out that their child was actually eligible to attend a special needs school or use funding available to them to make use of mainstream schools support staff, the decision had a new level to consider. This challenge was faced by two parents who suddenly started to question whether they were doing their child a disservice if they chose to forgo the options available to them and chose a different path instead.

Conclusion

I explored my preconceived ideas about the enrolment of students in special need schools and conducted research to better inform my opinion. I started with the thought that parents could easily choose between mainstream and special school without any sort of limitations. However, this view quickly changed. Parents are faced with many issues to consider when deciding on the educational choices for their child, including possible social and emotional impacts, expert advice and opinions, family influences, and locational limitations and selection criteria for enrolment and funding. What is clear is that the people who are supposed to be supporting parents to make these decisions are placing unnecessary pressure on parents, on top of the pressure that parents place on themselves to make the right decision for their child. I feel there is no right or wrong choice for parents, only the decision that feels right for their child, themselves and their family at that time.

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Part VII
Windup

Chapter 40
Reflections on Reflections

Paul Black, Gretchen Geng, Pamela Smith, Yoshi Budd and Leigh Disney

Abstract This chapter presents our reflective conclusions on this volume. It starts by noting how some of the chapters observe how teachers sometimes find it difficult to keep up to date with their practices, and how this highlights the importance of reflective practice, as is also acknowledged in some of the other student chapters. We then note how some of those contributions also help illustrate the complexities of teaching. After a brief update on what some of the student contributors to our earlier volume (Geng et al. 2017) are now doing, we also discuss how the development of this volume provided the teacher educator editors with a significant opportunity for reflective practice as well.

Since this is a book on reflective practice in teaching, it seems appropriate to conclude with our own reflections on this volume. Not only do we, as teacher educators, see the book as an instrument of our teaching, but in addition, the pre-service teachers' chapters in this book originated as assignments in classes taught by two of the editors. With each author's reflections and each student self-study journey in mind, we'll comment on some of these chapters as we first reconsider the value of reflective teaching and then the complexity of teaching more generally. We will also provide a brief update on what some of the student contributors to our earlier volume (Geng

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et al. 2017) are now doing, and then we will also consider how the development of this volume provided us editors with a significant opportunity for reflective practice as well.

On the Value of Reflective Teaching

In Chap. 16, Gretchen Geng stressed the need for teachers to "keep updated with the new emerging ICTs and how to use them in their teaching". Of course, not all teachers do, and accordingly, Dominic May (in Chap. 20) makes a number of comments on the ICT limitations of teachers he has worked with, concluding that teachers generally "still lack either the pedagogical knowledge required to include the devices in lessons or … identifiable applications for the devices around which to build effective teaching pedagogies".

While ICT may be a special problem as a rapidly advancing field, we think it is probably not uncommon to find similar problems in any area of teaching. In Chap. 15, for example, Zerina Hadziabdic reminds us of how we can still observe outdated language teaching practices in schools, if hopefully just from teachers who learned them many years ago and have not progressed since. More generally, a recent history of teaching in the Northern Territory (Bennett 2016, pp. 329–341) gave a damning report on the quality of teaching in the NT in past years, with one long-time educator asking, "What's worse, no teacher or a poor performing teacher?" (p. 334). While that material is dated and regional, in our careers as teacher educators, we have all had occasion to observe teaching that was far from ideal, even from so-called experienced teachers. Sometimes it is not the teacher's fault, as they may be pressed into positions they have not been properly prepared for, such as secondary trained teachers required to teach in the primary years. Even so, we believe this simply highlights the importance of continually learning through reflecting on one's teaching, which can help teachers gain years of real teaching experience, as opposed to much the same single year repeated many times over.

In any case, these are reasons why it is important for teachers to reflect on their practice, not just casually, but honestly and in informed ways, and then actually take steps to do what we can to keep improving, or at the very least to keep from falling back. In this, a major complication is a habit. Unfortunately, in an era marked by rapid technological change and a proliferation of new policies and technologies designed to raise student achievement levels, developing habits of practice can be viewed as one of the many deadly sins teachers can be accused of, along with greed ("Come on, I know it's a German language class, but can't my budget include poster paper?"), gluttony ("I am hoarding teaching resources I may never use or find again"), and slothfulness ("Sometimes I don't feel like working on the weekend"). In an era of rapid change and constant innovation, "habit" seems to have become a dirty word, perhaps oddly considering the Australian education system has remained "largely unchanged for decades" (Masters 2016, p. 15).

It is interesting how words, such as "habit" and "change", take on different meanings depending on who uses them. Some habits are bad (in the eighteenth century, chewing on a lead pencil could kill you), but some are valuable, as they reduce cognitive load, particularly when multitasking. And if a teacher has developed good teaching habits and can rely on them to help cope with the stress of an excessive workload, who could gainsay that? Through reflective practice, or "self-evaluative reflection" (Smith et al. 2017), furthermore, some habits can be actively cultivated, fine-tuned, or if necessary eliminated. Reflective practice, however, can serve many masters, and "… increased surveillance, control of curricula, and emphasis on efficiency, outcomes and skills in teacher education …" (Kaur 2012) can exert a powerful influence on teachers' pedagogical priorities and, similarly, their focus for reflective practice.

Van Manen's (1995, p. 35) points that "reflection is implied in the very meaning of pedagogy" suggests that pre-service teachers need to reflect more critically on the assumptions underlying their understanding of good practice. This means that, instead of asking. "Am I doing it right?", they also need to ask, "Is this the right thing to do?" (Larrivee 2008, p. 344). Van Manen's concept of "pedagogical tact" as "… inherently an intersubjective, social, and cultural ethical notion" (p. 43) takes into account the multiple perspectives and experiences that frame all teacher–student interactions. Critically, reflective practice can support the development of pedagogical tact by increasing pre-service teachers' awareness of their own habits of practice as culturally and historically situated, legitimating the knowledge and experiences of some and excluding those of others and reproducing "patterns of inequality and social stratification" (Edwards 2014, p. 167).

Pre-service teachers are under intense scrutiny during their professional experiences in schools. They are required to optimise student learning, plan for all foreseeable issues, effectively manage the unexpected, and be prepared to justify their pedagogical practices to diverse stakeholders, including students, parents, colleagues and potential employers. The ability to reflect critically on the effect of institutional practices on teaching pedagogies and teacher identities can ensure that pre-service teachers do not find themselves complicit in their own disempowerment but instead establish a critical and questioning mindset that enables them to explore their intellectual autonomy. Teachers need to reflect not only on strategies and methods used to reach predetermined goals but also to consider the value of those goals (Larrivee 2008). Our hope is that our pre-service teachers will not leave the ends of education unexamined, but will continue to develop, with "humility, curiosity, and open mindedness" (Dewey 1910, p. 190), pedagogies that promote a more just and equitable society.

In their chapters in this book, our pre-service teachers have indeed explored their understandings of reflective practice and, in so doing, demonstrate its multifaceted nature. They have reflected in various ways and to various degrees on their own histories, on diverse classroom contexts, on teaching, learning and assessment practices, on their students' perspectives and experiences of learning, on the research literature that informs understandings of good practice, and on the ethical, social and political consequences of institutional practices.

We believe they have often expressed themselves profoundly about their work because they have invested heavily in it. Self-reflection brings emotional self-awareness. Writing about trying to increase female engagement in Physical Education, Jack Burton (Chap. 37) says that the opportunity to reflect on his own schooling and interest in Physical Education (PE) as he tried to engage all students in PE lessons during his practicums has provided him with a deeper understanding of the issue of engagement. Kathryn Hamilton (Chap. 39) says that the reflection afforded her by her research project had her exploring her pre-conceived ideas about the choices parents might make about the best placement for children with special needs. Likewise, Emily Ford (Chap. 22) writes that she does not believe her understanding would be as deep today if she had not had this opportunity to reflect on her own life experiences and that reflecting on her practicum experiences enabled her to question the purpose and benefits of ICT in education.

Teacher identity relates to the core beliefs the teacher has about teaching and being a teacher. These beliefs are interpreted against the backdrop of previously acquired experience and knowledge (Loyens et al. 2007). Pre-service teachers, as they progress through their education programme, are confronted with a range of theories of learning, teaching strategies and educational philosophies, which they then have to balance with the real world of schools and the classrooms they experience during their practicum placements (Smith et al. 2017)

"Reflection or reflective thinking usually means looking back at something and then thinking about what happened and why" (Killen 2009, p. 100). We have also valued the opportunity to look back and hopefully make some sense of the many changes we have experienced throughout our careers in education. Through reflection hopefully we have been able to "make sense" of an institution that we have served and been passionately committed to, in one case for over 50 years.

The Complexity of Teaching

Teaching is complex and multifaceted, and the student chapters in this volume often demonstrate how our pre-service teachers are coming to grips with this. One of us used to tell their research students, just half jokingly, that the answer to every research question was the same, namely "It all depends". That is, when it is actually useful to do research, one should not really expect clear-cut, all or nothing answers, due to the inherent complexities of situations.

We can also see this in how some of the student chapters reflect on teaching situations. For example, Petros Gerakios (in Chap. 17) found that the use of technology has pluses and minuses, while Brodie Curtis (in Chap. 11) found positive things to write about both extrinsic and intrinsic motivation. In Chap. 3, Linda Hamilton decided that every classroom layout is unique and that teachers need to contextualise multiple factors to create layouts that work for both them and their students. In Chap. 14, Caitlin Taylor decided that "listening to music may help students concentrate on

individual tasks", but that "it can also interfere with interacting with the teacher and other students, so I ended up feeling that a compromise needs to be made".

Similarly, whereas Demi Cubillo (in Chap. 32) became convinced of the importance of play in children's learning, she also found it was difficult to implement in a hospital school, where direct instruction seemed to work better. From working in this and a rather different environment, she decided that she needed to consider "how to integrate both methods within differing contexts cohesively". In her investigation of homework in Chap. 9, Mikaila Mangohig arrived at "a belief that with mixed ability classes, one size doesn't fit all, and as with in-class teaching, the homework also needed to be differentiated to meet the needs of the students and to keep them engaged".

With regard to ICT, Emily Ford (in Chap. 22) saw value in the use of iPads in maths lessons, but that "it is dependent upon the context and how they are incorporated into a lesson". In Chap. 19, Laura Checkley was struck by how useless ICT seemed to be in her first two placements but how valuable they were in a third, in connection with which she drew the interesting conclusion that students' inappropriate use of ICT was not actually due to the nature of ICT itself, but rather from student boredom with lessons, so that it did "not really represent disengagement, but rather a cure for disengagement".

Reports on Some of Our Graduates

We wish we could report on how our graduates have found reflective practice important in the careers they ended up pursuing. We don't have such details, and we allow that it can take years for teachers to fully appreciate what they have learned from their teacher education programmes. Here, however, we can give four reports of what student authors from our earlier volume (Geng et al. 2017) have ended up doing.

Sally Booth (2017), who wrote about "planned ignoring" for behaviour management, was instantly offered casual work in the same school where she finished her practicum, and within two terms she was then offered full time teaching as the Learning and Teaching Teacher (LAST). Sally has gained a lot of experience in this role, which sharpened her focus for all her future teaching ambitions in the areas of student engagements.

> I attended many LAST meetings and forums; sharing information and ideas, successes and struggles. These meetings always provided opportunities for professional development, particularly focusing on education surrounding students with autism, Reactive Attachment Disorder (RAD), processing disorders and the encouragement of growth mindset strategies for both students and educators. I was able to work closely with executive staff to develop and administrate whole school programs based on LAST professional development and personal passions, such as growth mindset and meditation as tools for student self regulation. I developed Access Requests for students with disabilities across the school and gained great insight into whole school administration. After two years in the LAST position I sought to gain experience with my own class and was offered temporary full time work on

Kindergarten. All my education and experience led me to this particular year with a highly challenging and rewarding class. (personal communication from Sally Booth)

Andreae (2017) also updated her teaching career by "choosing to do relief teaching" to start with and then "being offered a 6 month contract" (personal communication from Naomi Andrea). She gained her full registration after 2 years of teaching. Naomi also walked out of her comfort zone by re-enrolling in the early childhood qualification to enhance her career pathways. Considering the uncertainty of the teacher position market, she commented, "As I am a contract teacher I am not sure of what the future holds; however, I am very excited for what it will bring."

Our international student author, Gomez do Rosário (2017), has also had her unique teaching experience. She went back to Timor and worked as a teacher for a short time, after which she gained another opportunity to undertake further studies, this time in New Zealand.

Even though my teaching career is only a short time, yet I am very happy because during the period I have learn a lot of teaching skills by attending some training in Australia. I am also grateful that I can have a chance to study in the university that made me become who I am today by providing a range of teaching strategies and skills that are very useful for me to use in my teaching practice in Timor. (personal communication from Carmen Gomez do Rosário)

Although these updates do not represent all the graduates, they do provide some idea of the impact of their studies with us. The resilience, the academic knowledge and practical skills our graduates developed during their learning journey make us believe that our own teaching education is helpful. This is confirmed by word from Dayna Clark (2017), who had written on play-based learning:

In my role as an Education support officer (SSO), I have the privilege of working closely with children and building a strong nurturing relationship to help them set and achieve their goals within education. Some children just need a little more support in order to reach their full potential. I have found that combining my degree and professional experience helps me to be more understanding of the students' needs and allows me to adapt my teaching style to suit each individual student. Each day brings about new challenges and experiences and each student brings something new to the table for us to work with. (personal communication from Dayna Clark)

The Development of This Book

Each of the editors within this book has at one stage or another lectured in higher education and been involved with teacher education. Pre-service teachers come to us with a wonderful diversity of experience, each one interpreting the tutorials, lectures and readings provided in a manner that allows them to make sense of their context and the educators they hope to be. As lecturers, we need to consider the why and how of such delivery. While it would be naive to suggest we fully comprehend the impact of our teaching, we hope that each pre-service teacher takes the knowledge we offer

and synthesises it through reflective practice to make sense of their chosen career path. As academic lecturers, we cannot prepare every student for every situation, yet building the capacity to reflect on the experience in the moment and after it is done is quintessential to adaptive teaching.

Making contact with the issues that pre-service teachers have reflected on sparked our own processes of self-reflection, which you see especially in our introductory chapters to each of the first five parts of this volume. It takes courage to examine the depths of one's own experiences, but we have been glad to have had the opportunity to do this as the editors of this book, and we take our hats off to the pre-service teachers who have been willing to "expose" themselves with courage and honesty through the reflective papers that they have contributed to this book.

When we decided to write a follow-up book to *The challenge of teaching: Through the eyes of pre-service teachers* (Geng et al. 2017), we added two members to the editorial team, namely Yoshi Budd and Leigh Disney. Joining Paul Black, Gretchen Geng and Pamela Smith, this brought the editorial team to five. Bringing in two new editors allowed for the follow-up book to be considered from a fresh perspective, while at the same time drawing upon the experience gained from the original team. Within the team, there are varying levels of experience within academia and life more generally. This diversity of experience, as well as individuals' unique skills and research disciplines, allowed for varying degrees of mentoring and reciprocal learning to occur during the writing process. Writing about the value of co-authoring publications, Noddings (2001, p. 62) describes that "working closely with another scholar on a shared intellectual project was an important way to foster growth and learning". As educational philosophers, we understand through the work of Russian psychologist Lev Vygotsky that learning is a socially mediated process, where by learning occurs socially first and then individually (Vygotsky et al. 2004; Vygotsky and Cole 1978). As a team, we worked together and shared moments of learning.

Reports on Our Own Reflection

As editors of this book and academics, we truly valued our own opportunities for reflective practice and personal growth over the co-editing and writing period. Each editor wrote an introductory chapter for a different section on a different topic. Reflecting on the path traversed to ensure the successful completion of this book allows for such moments. It was a process that involved a great deal of intersubjectivity, in that "aesthetic tastes may be intersubjective, in the sense that we respond to things similarly, but not objective if the fact that we do so owes as much to an accidental coincidence of taste as to the nature of the object" (Blackburn 2016, p. 249). Thereby each editor had an opportunity to reflect on each other's perspective and the nuances we each brought to the process. Our email trails were long and our teleconferences frequent, each interaction framing a pathway to the next goal or achievement. Yet within that, small moments of reflection have passed which help shape us as academics and as people. Our processes as editors have allowed us to reconsider

many attributes, such as how we write and edit academic literature, understand our students, the topics not considered, and the simple joy of appreciating friendship. These attributes will help guide us during future experience. Reflection allows for human growth and development, regardless of who the reflector may be.

While we chose not to critically analyse the pre-service teachers' chapters, as we view them as the work of reflective teachers, not academic researchers in this book, some key issues and challenging scenarios mentioned by the student teachers can be made subject to critical discussion and questions to promote readers' reflective thinking in future. We hope to create a dialogic space between teacher educators and student teachers that can add strength to the book.

Conclusion

The preceding highlights some of the things that we, as teacher educator and editors, see in this volume. Undoubtedly, each reader will find additional matters of interest. In any case, we hope that this volume has amply illustrated approaches to reflection in teaching, including our own reflections as teacher educators in this and other chapters, and has provided some convincing reasons why it is important for teachers to be reflective practitioners.

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