Chapter 9
Meta-analysis Along the Policy Trajectory and Discussion

Abstract This chapter compares and contrasts the results of the study along the whole policy trajectory, beginning with the global context and extending through national (Australian) to State (Western Australian) and to local school levels in order to generate a meta-analysis. The results are also discussed in relation to the relevant academic literature, including drawing on critical theory to illuminate the patterns of power relations along the whole policy trajectory (Rizvi and Lingard, Globalizing education policy. Taylor & Francis, Hoboken 2010; Vidovich, Theory and method in higher education research (international perspectives on higher education research, Vol. 9). Emerald Insight, Bingley 2013). The chapter also includes a discussion related to the final context of the policy trajectory, namely, the context of potential longer-term outcomes of the curriculum policies under investigation.

> *"The 21st century is the century of knowledge."*
>   – Narendra Modi (14th Prime Minister of India), 2013

Introduction

Results were presented in the previous four chapters based on data drawn from documents, individual interviews and focus group discussions at three levels of the policy trajectory (national, State and school) and relating to the emergence of the concept of 'C21 curriculum' policy in particular Australian contexts. The Australian Curriculum, originating in the first decade of the twenty-first century, claimed to be a 'C21 curriculum' as it includes "learning areas, general capabilities and cross-curriculum priorities that together support 21st century learning" (Australian Curriculum, 2015, "F-10 curriculum," para. 2). Documents used related primarily to the national (Australia) and State (WA) levels as they yielded insights on the contexts of influences and policy text production in relation to 'C21 curriculum' policies. In relation to the case-study schools at the local level of the policy trajectory, documents, individual interviews and focus group discussions were analysed to

generate themes pertaining to influences, policy text production and practices/ effects (or enactment) of curriculum policy.

The *Melbourne Declaration of Educational Goals for Young Australians* (MDEYA) (2008) was identified as being influential at all levels of the policy trajectory (national, State and school) as it laid the foundations for a 'C21 curriculum' in Australia. Additionally, it is important to highlight that the authors were aware that policy related to the concept of a 'C21 curriculum' had not been static. Rather, we recognized that it had been rapidly evolving over time, especially as different political parties came to power.

This chapter now compares and contrasts the results of the study along the whole policy trajectory, from national (Australia) to State (WA) to local school levels in order to generate a meta-analysis. We also discuss these in relation to the relevant academic literature. To this end, we drew upon critical theory to illuminate the broader patterns of power relations along the whole policy trajectory (Rizvi & Lingard, 2010; Vidovich, 2013). The chapter also includes a discussion related to the final context of the policy trajectory, namely, the context of potential longer-term outcomes. We discuss these separately.

The research questions of the study, it will be recalled, were generated from the components of the policy trajectory, namely, influences, policy text production, practices/ effects (or enactment) and potential longer-term outcomes. The analysis of the data led to the generation of themes and sub-themes in relation to each research question. We then engaged in a meta-analysis with themes and sub-themes from the first three policy contexts which were compared and contrasted to identify similarities and differences along the policy trajectory from the national level to the State level and to the local school level. Finally, we produced a series of propositions from the analysis.

Three Tables (9.1, 9.2 and 9.3) summarise the results about influences, policy texts and enactment at the three levels of the policy trajectory (national, State and school), respectively. The column titled 'meta-analysis' indicates that the overarching themes we had deduced dominated the policy trajectory across all levels. We express these in more abstract, conceptual terms and they form the foundation of 'propositions' we generated.

The meta-analysis illuminates the wide power relations along the policy trajectory in relation to 'C21 curriculum' policy processes in Australia. It does so by offering a synthesis of dominant themes. For example, for the context of influences, themes of 'increasing competition in the global world', 'moves towards a knowledge-based economy', and 'drive for quality' have been integrated into the meta-theme of 'neo-liberalism'.

Table 9.1 Summary of themes and meta-themes identified from data analysis for the context of policy influences

	Themes					Meta-analysis (Meta-themes)
	National – (Australia) Chapter 5	State (WA) Chapter 5	Local (Private case-study schools)			
			'Pepper' Chapter 6	'Mint' Chapter 7	'Sage' Chapter 8	Chapter 9
Sources of data	*Documents*	*Documents*	*Documents, interviews & focus groups*			
Influences (RQ1)	**Global**		**Global**	**Global**	**Global**	**Global**
	– Increasing competition – Drive for quality – Policy borrowing – Aligning with OECD's agenda		– Increasing competition – Move towards a knowledge-based economy	– Increasing competition – Move towards a knowledge-based economy	– Increasing competition	– Neo-liberalism
	National	**National**	**National**	**National**	**National**	**National**
	– 'In the national interest'	– Standardisation – 'In the national interest'	– 'In the national interest'	– 'In the national interest'	– 'In the national interest'	– Nationalism
	Local	**Local**	**Local**	**Local**	**Local**	**Local**
	– Stances on knowledge & learning	– Stances on knowledge & learning	– Stances on knowledge & learning – Fulfilling & adding depth to the Australian Curriculum	– Stances on knowledge & learning – Fulfilling & adding depth to the Australian Curriculum – Marketing	– Stances on knowledge & learning – Fulfilling & adding depth to the Australian Curriculum	– Competing educational perspectives

Table 9.2 Summary of key themes & meta-themes identified from data analysis for the context of policy text production

	Themes					Meta-analysis (Meta-themes)
	Macro – National (Australia) Chapter 5	Meso – State (WA) Chapter 5	Micro – Local (private schools)			
			'Pepper' Chapter 6	'Mint' Chapter 7	'Sage' Chapter 8	Chapter 9
Sources of data	*Documents*	*Documents*	*Documents, individual interviews, focus group discussions*			
Policy text (RQ2) (Processes)	– Contested knowledge for C21 – Evolving policy texts – Tensions in political ideology – Economic discourses	– Contested knowledge for C21	– Contested knowledge for C21 – Powerful knowledge actors – Economic discourses	– Contested knowledge for C21 – Powerful knowledge actors – Top-down approach to decision-making	– Contested knowledge for C21 – Powerful knowledge actors – 'Open' policy text – Top-down approach to decision-making	– Contested knowledge for C21 – Powerful knowledge actors – Economic discourses

Context of Influences

Research Question 1:
What are the <u>influences</u> that led to the introduction of 'C21 curriculum' policies in Australian contexts?

Table 9.1 indicates the dominant themes and meta-themes (final column) generated on the three different levels – national, State and local – relating to policy influences. Three meta-themes were also generated from the data analysis and relate to significant influences on 'C21 curriculum' policies in Australia. These are **neo-liberalism**, **nationalism**, and **competing educational perspectives**. Each will now be discussed. In the process, they will also be linked back to relevant literature.

Influence: Neo-liberalism (Meta-theme)

Neo-liberalism is a powerful ideology identified along the policy trajectory as influencing the introduction of 'C21 curriculum' policies in Australia. The data revealed a prevalence of related discourses on competition, quality and standardization. These were identified in the literature as characterising neo-liberalism (Benze & Carter, 2011; Saunders, 2010; Zajda & Rust, 2016). The sub-themes of 'international policy borrowing' and the 'dominant role of the OECD' have also been

Table 9.3 Summary of key themes & meta-themes identified from data analysis for the context of policy enactment

	Themes			Meta-analysis (Meta-themes)
	Micro – Local (Private schools)			
	'Pepper' Chapter 6	'Mint' Chapter 7	'Sage' Chapter 8	Chapter 9
Sources of data	*Documents, individual interviews, focus group discussions*			
Practices/ effects (or enactmet) (RQ3)	– 'Complex' nature of C21 skills – Complex role of teachers' professional experience – Contestation about C21 skills in different learning areas – Constraints of testing – Contestation about teachers' professionalism – Generous budget	– 'Complex' nature of C21 skills – Complex role of teachers' professional experience – Contestation about C21 skills in different learning areas – Pedagogical constraints – Challenges for teachers' professionalism – Use of new physical space	– 'Complex' nature of C21 skills – Complex role of teachers' professional experience – Contestation about C21 skills in different learning areas – Constraints of testing – Growth of teachers' professionalism – Competing priorities – Staff hiring	– Tension between teachers' ideologies & principles of 'C21 curriculum' – Pressures from high-stakes testing – Importance of school settings

identified as characteristics of neo-liberal views (Lingard, 2010; Small, 2011; Vidovich, 2013). Hence, neo-liberalism was a meta-theme along the 'C21 curriculum' policy trajectory investigated.

The neo-liberal ideology associated with evolving curriculum policies has been linked to globalization, especially due to the role of such international actors as the OECD and the World Bank, in steering education policies in the twenty-first century (Appadurai, 2013; Apple, 2006; Ball, Junemann & Santori, 2017; Bottery, 2006). One key example of this is the Programme for International Student Assessment (PISA) testing carried out every three years by the OECD since 2000 as a form of international comparative testing to rank countries according to the education performance of samples of 15-year olds. For an individual country, impressive standing in the league tables is seen to validate 'quality' outcomes of their education systems.

A 'C21 curriculum' policy was identified by a majority of participants in the study reported in this book as a means to improve Australia's international standing in education as its ranking had been declining in the PISA league tables ever since testing began in 2000. The apparent weakness in Australia's education performance revealed by the test results supported Masters' (2016) claim that Australian students lack the ability to apply literacy and numeracy skills to real life situations and that, as a result, the introduction of a 'C21 curriculum' is justified. Further, a neo-liberal ideology is consistent with the focus on competitiveness that was evident as a

pervading influence at all levels of the policy trajectory in the study. Concurrently, the OECD was quoted numerous times at the national level in Australia to justify certain education decisions taken regarding 'C21 curriculum' policy. By contrast, there are arguments that constructing a curriculum to produce internationally competitive outcomes in the OECD's testing regime, which is often taken as a *de facto* measure of national educational 'quality', could mean that "more fulsome constructions of equity such as equal opportunity and social equality are elided or recast according to productivity and efficiency" (Anagnostopoulos, Lingard, & Sellar, 2016, p. 346).

Along with seeing education competitiveness as being promoted to enhance quality and excellence, *economic* competitiveness was also seen by participants as being a concern for Australia that could be addressed by promoting a 'C21 curriculum' policy as a 'solution' for a knowledge-based economy. This was in line with positions taken in the academic literature holding that the twenty-first century is an era in which advanced science, technology, engineering and mathematics (STEM) specialists are required. Thus, many countries have turned to the use of knowledge in such domains as being central to driving the national economy (Masters, 2016). At the same time, one cannot overlook the arguments of those who decry the tendency to view students as 'human capital' (Apple, 2007; Marginson, 2019; Muller & Young, 2019) and knowledge as commodified (Ball, 2012; Ball et al., 2017; Karpov, 2013). This suggests one might conclude that 'C21 curriculum' policy has been associated with steering the Australian nation's economy towards being knowledge-based and that C21 skills have been promoted as a form of commodification of knowledge. Such a narrow economic rationalist view of education could run the risk of it being valued solely for utilitarian purposes, thereby excluding such wider purposes as ethical and philosophical appreciation (Apple, 2012).

Other influences related to neo-liberalism include pressures from those who argue that there is a need for the standardisation of education to improve the quality of national educational outcomes (Doherty, 2007; Green, 2019; McNeil & Klein, 2011). The associated 'standardisation movement' in Australian education was clearly enacted through the introduction of the National Assessment Programme – Language and Numeracy (NAPLAN) testing regime in 2008. This was based on the assumption that "quality and efficiency" could be achieved through the use of data (Lingard, Thompson, & Sellar, 2015, p. 1). Some also promoted the push for a 'C21 curriculum' policy as a component of the standardisation movement. For instance, at a national level, it was revealed in the *Donnelly-Wiltshire Review* (2014, p. 3) that "education systems are benchmarking their curriculums against those of nations that perform well in international testings." Arguments like this were being mounted to underpin Australia's rationale for standardising its 'C21 curriculum' policy in the form of the Australian Curriculum and thus to aim to achieve excellence.

At both State (WA) and school levels, standardisation was observable through the implementation of the Australian Curriculum. Standardisation, in conjunction with a neo-liberal ideology was being used as a tool to improve education outcomes without much input being forthcoming from the State (Doherty, 2007; Turner & Yolcu, 2014). It could be argued that the prevailing neo-liberal ideology has

succeeded in capturing the equity agenda as PISA testing has been used not only to ascertain the quality outcomes of education systems, but also to determine the equity of their education systems (Agasisti, Longobardi & Regoli, 2017; Anagnostopoulos et al., 2016). For example, Finland was applauded by the OECD for doing well in PISA not only because there were impressive performance outcomes, but also because a high level of equity and a balanced expenditure on education resources were evident (Sahlberg, 2011).

Influenced by the OECD, many countries, including Australia, incorporated both quality and equity in their national goals of schooling and in subsequent national curriculum policies. For example, Australia's MDEYA had called for "equity" and "excellence" (ACARA, 2009, "Educational goals", para. 1) in relation to the production and enactment of 'C21 curriculum' policy. At the State level in WA, however, data became available that prompted the Equity Advisory Board (WA) to call for more inclusivity in relation to a 'C21 curriculum.' This, the Board argued, was necessary because standardising knowledge and skills for the future meant that schools were not catering adequately for the needs of students from various linguistic backgrounds and those with disabilities and learning difficulties (WA Curriculum Council, 2010). This has implications for equity, a matter elaborated upon in the later part of this chapter.

In relation to the influence of neo-liberalism, the education authorities implemented Australia's 'C21 curriculum' in a bid to enhance quality so that the nation would become more competitive in global comparisons. That, however, could have a reductionist outcome through being focused overly on productivity while at the same time excluding the needs of certain groups of students. This, then, in turn, could have negatives implications for equity.

Influence: Nationalism (Meta-theme)

A second meta-theme generated during the analysis of the curriculum policy trajectory under investigation is **nationalism**. The existence of a clear belief was evident from national to State to school levels, that a 'C21 curriculum' policy can be a panacea for the survival and growth of the nation in light of globalization and rapid technological changes. To a certain extent, this is not surprising given the extent to which there is recognition in the academic literature of the impact of globalization. For example, Ferguson (2014, p. 136) has written that "globalization has geographical scope, volume, density of transactions, and a direction and pace of change". In education, he has added, this rapid pace of change has resulted in a feeling of fear that Australia's future will be threatened if steps are not taken to overcome the dangers of an unpredictable future.

The academic literature has also highlighted a view that the national governments of many countries are increasingly articulating the necessity of linking curriculum with the discourse of globalization (de Saxe, Bucknovitz, & Mahoney-Mosedale, 2020; Spring, 2015; Yates & Grumet, 2011). Authors of related

studies claim to have demonstrated that an investment in upgrading students' skills can have a positive impact on national economies, including a society's monetary growth (OECD, 2015, 2019). It is likely that cognisance of such results are partly why national policy actors, including those in Australia, have emphasised investing in a curriculum that could develop students' skills for the twenty-first century (Rizvi & Lingard, 2010; Sellar & Lingard, 2013; van Laar et al., 2017).

At the same time, a word of caution has been voiced by several commentators who have argued that the values of some multicultural groups in liberal-democratic societies are sometimes excluded from statements on national purposes in relation to school curricula (McDonough & Cormier, 2013). For example, in the UK, there were calls for a more diverse curriculum to reflect that nation's multicultural population amidst a backdrop of globalization. Particular concern was expressed that the national curriculum for history represented a "largely exclusionary, monochrome and defended 'Britishness'" (Alexander & Weekes-Bernard, 2017, p. 490).

An examination of documentary data at the national level within Australia demonstrates that 'C21 curriculum' policies have prioritised certain social values over others in relation to nationalism. This was exemplified in the debate between the Labor (2007–2012) and Coalition (Conservative) Governments (2013-) over specific cross curricular priorities in 'C21 curriculum' policy. For example, the Donnelly-Wiltshire Review (2014, p. 117) produced under the Coalition Government called for a greater focus on "religions and belief systems, especially Christianity" and a reduced emphasis on Aboriginal and Asian perspectives, thus prioritising the values of Anglo-Saxon Australians over other groups in society. Some citizens expressed concern that such an emphasis would have negative implications for multiculturalism in Australia and had the potential to threaten social cohesion and national identity relating to long-held beliefs about 'egalitarianism' and a 'fair go'.

There is the likelihood that issues of national identity could also have an impact on the direction in which Australia aspires to travel in the future. This, in turn, could influence the nature of 'C21 curriculum' policy. On this, Peterson (2016) stated that students' futures in the twenty-first century are shaped by such factors as trade and technology. Hence, he advocated for increased engagement with Asia for pragmatic purposes. Additionally, he argued, the tension over the selection of cross-curricular priorities has implications not only for matters of inclusivity but also for the formation of Australian identity "as a nation within a globalised world" (Peterson, 2016, p. 40).

Such a globalization/nationalism tension is not unique to Australia. Indeed, various academics have recognised its existence in many parts of the world (Law, 2014; Halikiopoulou & Vasilopoulou, 2013; Tett & Hamilton, 2019; Yates & Grumet, 2011). Halikiopoulou and Vasilopoulou (2013), for example, have explained the issue clearly in pointing out that while nationalism emphasises the independence of the nation, globalization highlights the interconnectedness of countries in the international arena. Relatedly, accelerating globalization has resulted in tensions being embedded in 'C21 curriculum' policy in Australia. This is because, on the one hand, globalization has triggered the perceived need for 'C21 curriculum' policies with more of a global orientation, while on the other hand, what is conceived as 'national

interests' can vary according to political parties in power. A possible implication is that Australian identity could be compromised in the future (Peterson, 2016).

Influence: Competing Educational Perspectives (Meta-theme)

Data generated with respect to national and school levels in relation to the policy trajectory under investigation pointed to the purpose of a 'C21 curriculum' policy as being instrumental. In other words, it has come to be seen to be necessary in order to prepare students to meet the economic needs of the nation. While other reasons were also given, including meeting the diverse needs of students, improving test scores and increasing students' engagement, the main rationale was to enhance economic success. This reflects a major trends reported in the academic literature that 'C21 curricula' are seen in many countries as being necessary to equip students with competencies and skills for the future in a globalized world (Deng, 2015; Fadel & Groff, 2019; UNESCO, 2015; Voogt, Erstad, Dede, & Mishra, 2013; Young, 2014).

Notwithstanding the point made above, the emphasis on instrumental purposes of education has varied in Australia depending on which political party is in power. Thus, **competing education perspectives** were identified as another meta-theme relating to policy influences. On this, the data indicated that both the Labor (2007–2012) and Coalition (Conservative) Governments (2013–) supported the view that the utilitarian purposes of education, especially in an era of accelerating global competition, should be promoted. However, while the Labor Government (2007–2012) was explicit on this and its relationship to the use of C21 skills in the first decade of the twenty-first century, the Coalition Government (2013–) challenged the very concept of C21 skills, referring to them repeatedly and in cynical tone as 'so-called 21st century skill'. This was repeated in the *Donnelly-Wiltshire Review* (2014), which called for a more 'liberal-humanist' (Lingard, 2014) approach towards education than what existed. That review also claimed it had the power and authority to redefine 'C21 curriculum' policy in accordance with its views, thus serving to support the claim that dominant voices have the "power to establish 'legitimate' definitions of social needs" (Lim & Apple, 2016, p. 5).

A particular thrust in the related academic literature claims that there is a link between political ideology and curriculum (Ball et al., 2017; Lim & Apple, 2016; Yates & Grumet, 2011). On this, Ball (2015) has stated that apparently similar education policies can be represented by different actors in different ways in different contexts. Similarly, Westbury (2016), as well as Fleury and Bentley (2020), have argued that approaches to state-based curricula making can be entrenched within governments and that, relatedly, so can the concerns of politics, political stakeholders and their interests. Specifically in the case of Australia, the construction of two differing education perspectives, presented by the two major political parties in government during the decade prior to this study, indicated that the nature of 'C21 curriculum' policy had become a site of political struggle. This, in turn, had implications for the articulation and enactment of 'C21 curriculum' policy in Australia.

Propositions Relating to the Context of Influences

The three propositions below about 'C21 curriculum' policy influences were generated from the results of the study.

Propositions About Policy Influences

Proposition 1: Neo-liberalism: A 'C21 curriculum' policy in Australia has been strongly influenced by a globally predominant neo-liberal ideology and discourses of competition, quality and standardisation, but these have implications for equity. Quality and equity are potentially in tension within 'C21 curriculum' policy.

Proposition 2: Nationalism: The evolution of 'C21 curriculum' policy has been significantly influenced by accelerating globalization, resulting in individual countries, such as Australia, increasingly steering curriculum policy 'in the national interest' within the competitive global arena. However, what is construed as 'national interest' varies according to the major political party in power and, in turn, this could influence the direction of 'C21 curriculum' policy.

Proposition 3: Competing educational perspectives: Instrumental learning, with its focus on skills for the workforce, has been a dominant influence on the conceptualisation of 'C21 curriculum' policy in Australia. However, the extent and nature of instrumentalism varies with the competing perspectives of different political parties in power and within different schools at different times, which in turn, impacts on 'C21 curriculum' policy.

Context of Policy Text Production

Research Question 2:
What is the nature of the 'C21 curriculum' policy texts at national, State (WA) and local (school) levels in Australia and how was it constructed?

Table 9.2 outlines the themes and meta-themes (final column) that apply to the three different levels – national (Australia), State (WA) and local (schools) – regarding the context of policy text production.

Three key meta-themes were associated with curriculum policy text production. They are **contested knowledge for the twenty-first century**, **powerful knowledge actors**, and **economic discourses**. Each will now be discussed.

Contested Knowledge for the Twenty-First Century (Meta-theme)

One major meta-theme for policy text production is **contested knowledge for the twenty-first century**. This was identified because at all levels there was either contestation over the definition of C21 skills or contestation over the selection of twenty-first century knowledge that should be included in 'C21 curriculum' policy.

A particular definitional contestation over 'C21 curriculum' was observed at the national level in Australia. Both the Labor (2007–2012) and Coalition (2013–) governments had argued for the introduction of a contemporary and 'world class curriculum' (ACARA, 2009; Donnelly-Wiltshire Review, 2014) based on the principles of the MDEYA (Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA, 2008). What the Coalition Government (2013–) appeared to be pursuing was a continuation of the conceptualisation of the original 'C21 curriculum' concept espoused by the Labor Government (2007–2012), albeit to a lesser degree. Further, the Coalition Government (2013) did not call for the removal of the 'general capabilities' (which had been labelled as C21 skills) (Donnelly-Wiltshire Review, 2014) dimension of the 'C21 curriculum'. It did, however, as indicated already, refer to them less emphatically, labelling them with the derogatory term of 'so-called twenty-first century skills' in its policy text, and concurrently emphasising of the importance of the curriculum having a 'liberal humanist' perspective. The view on the latter was that there should be a greater emphasis than was currently the case on "moral and spiritual values" (Donnelly-Wiltshire Review, 2014, p. 237). The latter, it was added, was missing in the Labor Government's (2007–2012) conceptualisation of 'C21 curriculum' policy.

Regarding the State level, it was revealed that there was a lack of content on Aboriginal culture in the 'C21 curriculum' policy endorsed by the Labor Government (2007–2012) of WA (WA Curriculum Council, 2010). Equally, at the local level, while participating schools implemented programs that were mainly aligned to cognitive and digital skills, some teachers expressed a belief that other emotional skills were excluded from the school's construction of 'C21 curriculum.' Others yet again expressed a belief that a 'C21 curriculum' should consist of more than technological skills.

The national Australian Labor Government's (2007–2012) focus on C21 skills was in the form of general capabilities. These included 'ICT capability', 'critical and creative thinking', 'personal and social capability', 'ethical understanding' and 'intercultural understanding.' These C21 skills were in line with those identified in the international policy and academic literature (European Communities, 2007; OECD, 2012; P21, n.d.; UNESCO, 2015). Further, while the term '21st century competencies' was highlighted as being commonly used in Europe, 'C21 skills' had already been identified as the preferred term for use in the USA and in academia (Voogt, Erstad, Dede, & Mishra, 2013). Equally, while there were many frameworks to facilitate the teaching of skills for the twenty-first century (European Communities, 2007; OECD, 2019; P21, n.d.; UNESCO, 2005, 2015), scholars were

generally in agreement that the specific skills related to learning for the twenty-first century are 'collaboration', 'problem-solving', 'creativity', 'critical thinking', 'digital literacy', 'communication' and 'citizenship' (Voogt et al., 2013; Voogt & Roblin, 2012). Additionally, academics have argued that these 'higher-order skills' (Scott, 2015) or cognitive, intrapersonal and interpersonal skills, are not new (Mishra & Kereluik, 2012; Nehring & Szczesiul, 2015; Voogt et al., 2013). Indeed, only 'creativity' and 'digital skills' were acknowledged as being less familiar to educationists compared to other C21 skills (Voogt et al., 2013).

Notwithstanding a great degree of agreement on fundamental matters, divisions over the type of knowledge deemed necessary for the twenty-first century is reflected in different strands of work in the literature (Barrett & Rata, 2014; Gilbert, 2019). Some hold that C21 skills do not cater for a variety of important aspects of education and life, including wisdom (Greenlaw, 2015). Equally, Elgstrom and Hellstenus (2011) identified reconstructivist knowledge being accorded less emphasis than other types of knowledge. They also argued that having this type of knowledge is crucial because it can assist in developing a critical view of society and working towards changing it. Further, they argued that having reconstructivist knowledge is relevant for the twenty-first century as it can help individuals to deal with change and problems in society. Similarly, Mayes and Holdsworth (2020, p. 101), in critiquing the current Australian Curriculum, proposed a 'curriculum of critical hope' where students are encouraged to engage with world issues so that they become activists and trigger change in society.

An area in which there was contestation over knowledge for the twenty-first century within Australia was in relation to the role that content knowledge and skills should play in 'C21 curriculum' policy. Both the Labor Government of 2007–2012 (MCEETYA, 2008) and the Coalition Governments since 2013 (Donnelly-Wiltshire Review, 2014) acknowledged that the learning of content and disciplines of knowledge, along with acquiring set skills and competencies, are important in developing the child both for the present and for the future. However, conflict emerged pertaining to the priority given to content knowledge and general skills or general capabilities. On this, while the Labor Government (2007–2012) championed the promotion of C21 skills, the Coalition Government (2013–) supported a stronger emphasis on literacy and numeracy in the early years of schooling and downplaying C21 skills, more than had been the case (Donnelly-Wiltshire, 2014).

The debate on the latter matters also took place within academic circles. Carlgren (2020) outlined the debate by stating that proponents of a discipline-based model of curriculum argued that one needs knowledge of content before one can meaningfully acquire concepts and cognitive skills and that, as a result, acquisition of these should not be promoted until later stages in student learning. By contrast, she stated that defenders of a skills-based model of curriculum asserted that students need to acquire intellectual skills from an early stage so that they can be prepared appropriately for the knowledge-based economy. Deng (2018) deemed this schism in knowledge as 'knowledge-as-an-end-in-itself' versus 'knowledge-as-a-means-for-cultivation-of-human-powers'. Further, and specifically regarding Australia, Masters (2016) argued that existing curricula were primarily based on factual and disciplinary knowledge

instead of on the application of such knowledge to real life problems. One consequence, according to Young and Muller (2015), is that conflict embedded in curriculum has resulted in the emergence of a 'curriculum crisis' in education.

There is also concern some could exacerbate contestation about knowledge for the twenty-first century by having a strong instrumental focus on education. According to the OECD (2012, 2019), a 'C21 curriculum' consists of knowledge, skills, character (including 'appropriate' behaviours, values and attitudes), and a meta-layer of competencies comprised of 'learning how to learn', an interdisciplinary focus, systems thinking and personalisation. On this, however, Young (2013, p. 106) claimed that one of the constraints facing curriculum has been a shift in emphasis on learning for "internal ends" (for intrinsic purposes) to learning for "external ends" (for employability purposes). Similarly, Peacock, Lingard, and Sellar (2015) acknowledged that while the Australian Curriculum - with its combination of learning areas, general capabilities and cross-curricular priorities – was the outcome of compromise between these two goals, they also claimed that the cross-curricular priorities reflected an instrumentalist rationale. Furthermore, Sellar (2015) raised a concern about the selection of knowledge within contemporary curricula in Australia. On this, he argued that there may be 'non-cognitive skills' within the curriculum (skills that refer to personality traits which were subjective in nature) and if so they are likely to have been selected not only to improve academic scores but also to perpetuate the economic prosperity of a nation.

While Sellar's (2015, p. 201) views are, in his own words, "primarily theoretical", they do raise questions about what he calls the "cruel optimism" (Sellar, 2015, p. 213) of having a curriculum adhering to human capital theory, where knowledge is viewed as a commodity to be used primarily to help progress the economy. Considering such a view serves to remind us again that the instrumental purposes of education could serve as a constraining rather than an enabling factor in the construction of 'C21 curriculum' policy. Arguably, however, it could also be possible to reduce disputation over the selection of knowledge in a 'C21 curriculum' if the internal and external purposes of learning were balanced (Young, 2013).

Powerful Knowledge Actors (Meta-theme)

Powerful knowledge actors were identified as a meta-theme relating to the context of policy text production at all levels of the policy trajectory where non-state actors played a role in providing advice, direction and expertise on 'C21 curriculum' policy. At the national level in Australia, the OECD played a major role in the construction of the 'C21 curriculum' policy with its advice for education in the twenty-first century being highlighted in all three texts analysed, namely, the MCEETYA (2008) text, *The Shape of the Australian Curriculum* (n.d.) and the *Donnelly-Wiltshire Review* (2014).

Knowledge production can be seen to be crucial to a knowledge-based society. The adoption of this view resulted in education policy being increasingly linked to knowledge as a commodity (Grek & Ozga, 2010; Spring, 2015). Along with the rise of neo-liberal influences in policy-making, this resulted in the ascendancy of consultants in education policy production (Ball, 2012; Gunter & Mills, 2017). Academics like Gunter and Mills (2017) have tended to view these personnel as knowledge actors hired to exchange their knowledge and expertise in return for a fee. This role of consultants in education policy-making can also be seen to represent the influence of private sector rationalism because of the outsourcing of services from the public sector to the private sector (Gunter, Hall, & Mills, 2015; Sjoberg, 2017).

In the specific case of the 'C21 curriculum' policy text within Australia, an associated evaluation of it in its form as the Australian Curriculum was conducted by Donnelly and Wiltshire, and their product became known at the national level as the *Donnelly-Wiltshire Review* (2014). This reinforced further the paradoxical role that the state plays in relation to education policies and the notion of education being a public good. Relatedly, Lapsley, Miller, and Pollock (2013), urging caution, argued that while the use of consultants as tools of validation for the activities of governments can be very powerful, there are implications in terms of public expectations about the ability of such consultants to address the needs of the public.

References by participants in this study to Microsoft as a dominant policy actor at 'Pepper' School and as a minor player at 'Sage' School also reinforced the strong role of consultancy in the sphere of 'C21 curriculum' policy making. More broadly, Ball (2015) referred to Microsoft as being an 'edu-business' since transactionally it has provided technical expertise and various forms of knowledge deemed essential for the twenty-first century to schools. Such edu-businesses, of course, are not new to Australia, as evident by the awarding of contracts relating to NAPLAN tests to Pearson by most States in Australia (Hogan, 2016).

Ball (2015) referred to the role of such companies in new 'policy spaces' as providing 'solutions' to gaps in knowledge about education. Further, their activity has a number of implications. First, what takes place symbolises a neo-liberal encroachment within education because of profit-making pursuits on the part of consultants (Ball et al., 2017; Exley & Ball, 2014; Williamson, 2020). On this, Lapsley et al. (2013) have argued that consultancies have 'colonised' the IT sector due to the shortage of IT skills in the market. Secondly, a perspective that contemporary and modern approaches in education depend on consultancy can be constructed. This has the potential to dominate work culture and services provided to consumers (Lapsley et al., 2013). Thirdly, there are implications for social justice as consultancy services are expensive. Particularly alarming on this is that not everyone may end up having access to them (Ball, 2012; Ball et al., 2017).

The above implications can also be considered specifically in relation to 'C21 curriculum' policy development in Australia. For example, the role of Microsoft as an edu-business in constructing a 'C21 curriculum' represented an increase in corporate interests in 'C21 curriculum' policy in the nation. Specifically, the consultations that took place with external knowledge actors suggested the existence of a

view that additional support was required to teach twenty-first century knowledge. This then resulted in the outsourcing of twenty-first century knowledge generation, an activity that in turn had implications for the professionalism of teachers. In addition, the reliance on edu-businesses constructed a perspective within Australia not only that a strong dependence on technology indicated the adoption of a progressive approach towards embracing knowledge for the twenty-first century but that this could potentially become a dominating force. Finally, there was an indication of a belief that 'C21 curriculum' policy had the potential to widen an existing gap between public and private schools in the country.

Economic Discourses (Meta-theme)

A third meta-theme generated is that there was a prevalence of **economic discourses** in education policy texts in Australia. On this at the national level, the Labor Government (2007–2012) had used an economic rationale to justify the production and enactment of a 'C21 curriculum' policy and the associated discourses became evident in the MDEYA (2008). For example, it was stated in it that the emphasis it placed on students developing C21 skills was to prepare them for the workforce (MDEYA, 2008).

Furthermore, even though the *Donnelly-Wiltshire Review* (2014) had called for a 'liberal-humanist' approach to 'C21 curriculum' policy, there was also an underlying economic rationale in its orientation. This was due partly to its focus on competitive positioning. Relatedly, and in view of the lack of any explicit objection to the teaching of general capabilities or C21 skills, the State government in WA can be said to have complied with these rationalist underpinnings of the 'C21 curriculum' policy.

At the school level in the study being reported here, economic discourses underpinned 'C21 curriculum' policy and triggered a top-down approach to decision-making in relation to it. In each of the three case study schools, the policy elite (school leadership) had decided to focus on C21 skills as they regarded them to be imperative for the good of the nation. Here it is helpful to recall Ball's (2016) argument made in relation to societal developments more widely that amidst the backdrop of policy reforms at national or school levels, the discourse of 'necessarian logic' has emerged. According to this logic, reforms tend to start off small and be innovative and then evolve into something that is more established before culminating into something that is common sense and obvious. Similarly, in the case of 'C21 curriculum' policy in Australia, the discourses of change that eventually came to dominate include those to do with 'unpredictability', 'rapid changes' and 'technological advancements'. This left little opportunity for negotiations to take place at the school level. Further, within the case study schools there was general acceptance that 'C21 curriculum' policy was rational and necessary, and that this was sufficient justification for the stakeholders having constructed a 'C21 curriculum'.

Propositions Relating to the Context of Policy Text Production

> **Propositions About Policy Text Production**
> **Proposition 4:** Contestation over the selection of C21 knowledge and the relative priority given to content and skills in the curriculum, was revealed as a prominent characteristic of 'C21 curriculum' policy text in Australia. This contestation was potentially exacerbated by C21 skills being selected for primarily instrumental reasons, with potential neglect of liberal-humanist orientations.
>
>   **Proposition 5:** Powerful knowledge actors, especially external (and often international) consultants, have emerged as important non-state players (for profit) who are responsible for the production of 'C21 curriculum' policy texts in Australian contexts. Consequently, the neo-liberal intentions of 'C21 curriculum' policy are reinforced, with implications for equity and social justice, as well as the professionalism of teachers.
>
>   **Proposition 6:** Economic discourses of change have characterised 'C21 curriculum' policy texts in Australia which, in turn, contributed to a top-down approach to curriculum decision-making, thereby reinforcing the embedded neo-liberal orientation of 'C21 curriculum' policy.

Three propositions were generated pertaining to the context of policy text production.

Context of Enactment

Research Question 3:
What are the practices/effects resulting from the enactment of 'C21 curriculum' policies in case-study schools?

Table 9.3 outlines the themes and meta-themes (final column) that apply to the three different levels – national (Australia), State (WA) and local (school) – with regard to the context of enactment.

There are three meta-themes about the context of policy enactment across the whole policy trajectory. These are as follows: **tension between teachers' ideologies and principles of 'C21 curriculum' policy**, **pressures from high-stakes testing**, and the **importance of school settings**. Each will now be discussed.

Tension Between Teachers' Ideologies and Principles of 'C21 Curriculum' Policy (Meta-theme)

Teachers said that their philosophy, experiences and knowledge affected their enactment of 'C21 curriculum' in the classroom. Further, they said that they consider that these teaching philosophies, experiences, and knowledge bases are part of their 'teachers' ideologies.' Further, they indicated that there was **tension between their teachers' ideologies and the principles of 'C21 curriculum' policy**. On the one hand, some teachers said they believed that their teaching ideology resonated with what a 'C21 curriculum' policy is meant to stand for. On the other hand, some teachers felt apprehensive because they believed that the complexity of twenty-first century knowledge is incompatible with their teaching ideology.

It is important that policy makers take account of teachers' views as outlined above. This position is taken by Hardy (2015) who argues that a critical approach to policy enactment involves making sense of policy actors' experiences. Further, it resonates with the position taken by those who argue that teachers need to be recognised at any time of education change because of the extent to which school micro-politics and successful curriculum enactment are linked (Ball, 1994; Fasso, Knight & Purnell, 2016).

The two polar positions outlined above - the optimistic voice versus the critical voice - are not unusual. Indeed, they reflect the stances that policy actors often adopt in relation to education policy enactment in general (Golding, 2017; Wilkinson & Penny, 2020). On this, Braun et al. (2011) have emphasised the ways in which policy enactments are 'peopled' by policy actors identified as 'defenders' and 'enthusiasts' (supporters of policy enactment) or as 'critics' and 'copers' (opponents of policy enactment).

Some of the 'defenders' and 'enthusiasts' of a 'C21 curriculum' policy in the study reported here mentioned that the competencies outlined in 'C21 curriculum' policy resonated with their teaching philosophy; they did not see the notion of C21 skills as being an extraordinary concept in any way. This reflects views in the literature. Kereluik, Mishra, Fahnoe and Terry (2013), for example, offered a possible explanation for an apparent paradox in the different levels of empowerment associated with 'C21 curriculum' policy. They argued that there are two ways of thinking pertaining to twenty-first century knowledge, namely, 'nothing has changed' versus 'everything has changed'. By this they mean that some educators believe that 'nothing has changed' in the twenty-first century because required knowledge and skills are not novel. They argue that what is involved is common knowledge that should be taught in schools. They tend to adopt an agreeable attitude towards 'C21 curriculum', thus making them the 'defenders' and 'enthusiasts' of associated education policy.

On the other hand, as Kereluik et al. (2013) argued, there are educators who believe that 'everything has changed' because technological modernisation and globalization have resulted in different ways of teaching. This has led to feelings of being overwhelmed and lacking confidence to teach a 'C21 curriculum'. As a result,

such teachers become the 'critics' or the 'copers'. Certainly, this position was reflected in the views of a group of participants in the study being reported here on 'C21 curriculum' policy in Australia.

Continuing in relation to the school level within the study reported here, teachers also indicated they had various views pertaining to the role of technology in 'C21 curriculum' policy. For some, while the role played by Microsoft at 'Pepper' School and the investments by the school in the state-of-the-art technology underscored the importance of technology in its 'C21 curriculum' policy, some critics questioned the importance attached to this development. Once again, the debate that ensued is reflected within the academic literature. For example, Choi and Kim (2017) as well as Prensky (2012) maintain that technologically driven 'C21 curriculum' policy has the potential to be a great enabler in knowledge construction. Others maintain that technology has the potential to offer support in the development of students' C21 skills, and particularly in relation to the development of creative and critical thinking and communicative and collaborative skills (P21, n.d.; Scott, 2015; Trilling & Fadel, 2012; van Laar et al., 2017; Voogt et al., 2013). On the other hand, there are critics of a technologically focused 'C21 curriculum' policy who have argued that an over-emphasis on digital tools to cultivate C21 skills can devalue the role of teachers and of teaching with face-to-face interaction. As they see it, the latter are vital since they play a major role in helping students to be discerning with information and to be able to find patterns in data in order to be able to function effectively and efficiently in this information age (Greenlaw, 2015).

The resistance displayed by some teachers in this study towards technology seemed to stem not only from their preconceived notions about twenty-first century learning but also from social circumstances. First, they argued, the emergence of newer forms of technology has complicated the process of teaching with technology in the classroom. This calls to mind the position of Koehler, Mishra, and Cain (2013) who hold that the newer technologies can be viewed to be 'protean' (could be used in multiple ways), 'unstable' (constantly evolving) and 'opaque' (internal functioning), and this situation can make it challenging for teachers in trying to cope with the pace and scope of associated change.

Some academics also draw attention to the possible influence of contextual factors (Koehler, Mishra, and Cain, 2013; Mishra & Mehta, 2017). On this, they point to the fact that many teachers underwent their initial teacher preparation at a time when the application of educational technology was more limited than is currently the situation, and this can now have a significant impact on the pedagogical choices they make in relation to their classrooms (Koehler, Mishra, & Cain, 2013). It has also been pointed out that a gap has grown for many teachers between the intended and the enacted 'C21 curriculum' (Voogt, Erstad, Dede, & Mishra, 2013) because of the complexity of using technology, and therefore they are resistant.

The academic literature is also revealing in a number of other ways in relation to the study being reported here. Kereluik et al. (2013), for example, identified three types of knowledge with which teachers should be equipped to teach a 'C21 curriculum'. The first type consists of foundational knowledge (what teachers should know) and includes content knowledge, information literary and cross-disciplinary

knowledge. The second type is meta-knowledge (how teachers should act on the knowledge) and being able to use such C21 skills as problem-solving and creative and critical thinking, as well as collaboration skills. The last type is focused on humanistic knowledge (what values are important), and relates to forms of cultural, global and ethical awareness.

Academics, in taking account of these distinctions, have argued that at present teachers in many constituencies are not sufficiently prepared to teach a 'C21 curriculum' (Lowe & Galstaun, 2020; Scott, 2015). Masters (2016) has gone further in recommending the provision of 'sound' courses of initial teacher education aimed at strengthening teachers' levels of preparedness for teaching a 'C21 curriculum'. In similar vein, Scott (2015, p. 14) has suggested that particularly tailored professional development programmes should be offered involving "purposeful interaction between individuals at all levels." In addressing the gap in teachers' pedagogic narratives of teaching, in the particular cross-curricular priority of *Aboriginal and Torres Strait Islander Histories*, Lowe and Galstaun (2020) propose that teachers should be involved in creating whole-school programs that emphasise integrating Indigenous perspectives in an authentic manner rather than embedding it in a superficial and forced manner.

Koehler, Mishra and Cain (2013) also proposed an integration of technological, pedagogical and content knowledge so that the teaching of technology can occur in a meaningful manner. On this, they argued that for teachers to be convinced of the relevance and application of technology within a 'C21 curriculum', they should first understand the possible influence of the use of technology on teaching practices in terms of improving content mastery and as an effective pedagogical tool. They elaborated on this, stating that teachers need to know which technological tools have the potential to enable or constrain building on students' prior knowledge and creating new knowledge. This also requires, they hold, having the ability to make effective pedagogical choices in terms of using or excluding technology when teaching students to master challenging concepts. Hence, according to them, technology needs to be viewed as a method for helping students to enhance their learning. Further, they add that the technological, pedagogical and content knowledge (TPACK) framework should be used within a 'C21 curriculum' to facilitate narrowing any gap that may exist between the intended curriculum and the enacted curriculum. Moves to this end, they held, could be carried out not only by promoting understanding of the reasons behind resistance to technology, but also by addressing it through the provision of appropriate professional development programmes (Chai, Koh & Teo, 2019; Koehler, Mishra, & Cain, 2013).

Another area of conflict in relation to teachers' ideologies and the principles of 'C21 curriculum' policy in relation to the study reported here centred on the belief of some teachers that their professional creativity was stifled because of the 'standardised' modes of 'C21 curriculum' mandated by their school leaders. In the case of 'Pepper' School and 'Mint' School, teachers were instructed to follow the Microsoft model and Bloom's Taxonomy when preparing to teach specific C21 skills. However, some teachers indicated that as a consequence they were left with little room for professional creativity and autonomy. In comparison, the experiences

related by the teachers at 'Sage School' indicated they had more opportunities to make their own decisions about the selection of C21 skills to be taught in the classroom. The indications also are that they were more favourably disposed towards the curriculum because it was strongly recommended rather than mandated.

The latter point serves to recall Hardy's (2015) analysis of the enactment of a new State curriculum in Queensland (Australia) early this century. He indicated that having it highly prescriptive compromised the professional autonomy of all policy actors. On the same curriculum, Rizvi and Lingard (2010) argued that having compulsory policies specifically in relation to pedagogy can lead to a dissociation of pedagogies from epistemological and knowledge concerns and work against teacher professional mediation of policy. It is possible that in the study reported here, the use of a prescribed model/framework for a 'C21 curriculum' policy in several case study schools could have contributed in like fashion to a compromising of some teachers' professional autonomy.

Several other points of contention have emerged pertaining to the enactment of 'C21 curriculum' policy more generally in Australia. This situation can be attributed to the multifarious logics of policy actors or to put it another way, the multiple views about how 'C21 curriculum' policy should be enacted based on their teaching ideology. In particular, it appears as if the difficulty in aligning teachers' professional beliefs about the twenty-first century and technology to the school's vision of the twenty-first century and the use of technology, together with the resistance displayed in adhering to a prescriptive model for the enactment of 'C21 curriculum', resulted in translating policy into practice being messy and contested.

Pressures of High-Stakes Testing (Meta-theme)

Teachers at 'Mint' School expressed a belief that its 'C21 curriculum' policy in the form of critical thinking (as articulated in Bloom's Taxonomy) is a means to improve students' test scores. At 'Sage' School, by contrast, teachers claimed that the emphasis there on students doing well in the tertiary entrance examinations limited them in emphasising 'C21 curriculum' in Years 11 and 12. In both cases, however, high-stakes testing was a major influence.

The academic literature once again clarifies that the situation portrayed above is not unusual. Further, it identifies a range of strong criticisms of high-stakes testing in contemporary times (Ball, 2016; Rizvi & Lingard, 2010; Winter, 2017). Drawing from Bernstein's three message systems – curriculum, pedagogy and assessment – Rizvi and Lingard (2010), for example, claimed that in current times, with a focus on an 'audit culture' and 'datafication', a fourth system - high stakes testing – has emerged to reconfigure 'productive' knowledge. This is knowledge that could lead to an improvement in a nation's economic productivity. In critical tone, they (Rizvi & Lingard, 2010) also indicated that changes in one or more of the message systems, including high-stakes testing, could trigger changes in the others.

There are also those who point out that the combination of knowledge, skills, attitudes, values and ethics (Binkley et al., 2012; Fadel & Groff, 2018; Halasz & Michel, 2011) outlined in a 'C21 curriculum' are sometimes seen to support developmental learning and higher order thinking skills (Adie, 2014). They then highlight, however, that high stakes testing, rather paradoxically, is usually focused on achievement and numerical outcomes. For Rizvi and Lingard (2010) the problem with this is that the outcome is rarely the production of creative and critical thinkers. In similar vein, Braun et al. (2011) argued that confusion in focusing both on developmental and numerical outcomes can mean that enactment of 'C21 curriculum' policy can be compromised by competing policies and values.

The Importance of School Settings (Meta-theme)

At this point Braun et al.'s (2011) argument that having a deep understanding of policy enactment is instructive. They held that such understanding can be in relation to four different dimensions, namely, situated, material, professional, and external, and that these can influence policy enactment in schools. Regarding the first of these, namely, material conditions, the present study revealed that they had a major positive influence on the enactment of 'C21 curriculum' policy in the case study schools. For example, all shared the advantage of significantly high levels of financial resources, albeit with the amounts varying from school to school. 'Pepper' School had a generous budget that facilitated its consultation with Microsoft for its enactment of 'C21 curriculum' policy. 'Mint' School had invested in building its physical landscape to create creative and collaborative spaces for its enactment of 'C21 curriculum' policy. 'Sage' School had devoted professional development to ensure that it had well-qualified staff to enact its 'C21 curriculum' policy.

In all three cases state-of-the-art technological resources, consultancy services, creative physical spaces and professional development were provided and were appreciated as being highly influential in enabling the enactment of a 'C21 curriculum' policy. Additionally, participants considered that these were two major implications. First, these were implications relating to equity and social justice (a matter that will be addressed later). Secondly, implications for policy-making were highlighted that accorded with the view that policy makers ignore taking cognisance of contexts at their peril (Braun et al., 2011; Molla & Gale, 2019). To put it another way, both they and our participants came to realise that making assumptions from the outset that schools already possess the ideal conditions for policy implementation can lead to all kinds of difficulties later on. The solution, according to Braun et al. (2011), is that such 'idealism' should be 'disrupted' by taking contexts seriously.

Propositions Relating to the Context of Policy Enactment

The two propositions below about 'C21 curriculum' policy enactment were generated from the results.

Propositions About Context of Policy Enactment
Proposition 7: Tensions were evident in the enactment of 'C21 curriculum' policy in schools in the following ways:

(a) Teachers had contradictory professional interpretations of the concept of 'C21 curriculum' policy, especially the extent to which technology should play a key role, which resulted in varying levels of uptake.
(b) Creativity, as one of the tenets of 'C21 curriculum' policy, was seen to be compromised as pressures to comply with 'standard' approaches and high stakes testing potentially reduced both teachers and students' creativity.

Proposition 8: Importance of school settings: School settings, especially in terms of material conditions, shaped 'C21 curriculum' policy enactment, such that a generous budget, abundant infrastructure and professional development facilitated the effective enactment of a 'C21 curriculum'.

Context of Outcomes

Research Question 4:
What are the anticipated longer-term <u>outcomes</u> of 'C21 curriculum' policies in Australia and internationally?

Table 9.4 below identifies meta-themes across the three different levels – national (Australia), State (WA) and local (school) – for the context of potential longer-term outcomes. Two major meta-themes were generated for the context of longer-term outcomes of a 'C21 curriculum' policy. The first of these is **continual changes to 'C21 curriculum' policy** and the second is **equity and social justice.** Each will now be considered in turn.

Table 9.4 Summary of key meta-themes identified for the context of outcomes

Themes	
	Meta-analysis (Meta-themes)
Context of outcomes (RQ4)	– Continual changes to 'C21 curriculum' policy – Equity and social justice

Continual Changes to 'C21 Curriculum' Policy (Meta-theme)

The first meta-theme pertaining to the context of longer-term policy outcomes is **continual changes to 'C21 curriculum' policy**. The associated theme of 'contested knowledge for C21' and 'tension between teachers' ideologies and the principles of 'C21 curriculum' policy', along with the sub-theme of 'competing educational perspectives' suggest that knowledge will continue to be a site of contention among different stakeholders in the long term. Relatedly, the result may well be that 'C21 curriculum' policy will be constantly changing and evolving. This brings to mind Young's (2013, p. 115) view that "the struggle over schooling has always been a struggle for knowledge" as well as Muller and Young's (2019) view that some forms of knowledge are more powerful than others.

When our participants were asked about what was likely to happen regarding 'C21 curriculum' in the future, many commented that while they foresaw that the associated policy would continue to evolve, this would take place slowly. On this, one teacher from 'Pepper' School commented as follows: *"I think it's going to take a very long time. I think the idea of C21 skills, of 'C21 curriculum', is currently a little bit of a 'pie in the sky.'"* Others were more apathetic, claiming that they were not enthusiastic about the phenomenon but were resigned to the fact that it would continue to be highlighted as part of constant change in education. Others yet again, like the school leader from 'Mint' School, were rather cynical about the future of 'C21 curriculum' policy. In this regard, he said that "*education can be pretty disappointing because there's a lot more talk about school improvement than there actually are schools improving.*" There is again nothing novel about the latter observation. Indeed, in a study they conducted at a high school in WA, Lyle, Cunningham and Gray (2014) discovered that there was a perception amongst teachers not only that there would be continual change in the school but that this would be ideal practice.

Equity and social justice (meta-theme)

The second meta-theme pertaining to the context of longer-term policy outcomes is that of **equity and social justice.** At the national level, neo-liberal influences on 'C21 curriculum' policy, which some academics have argued is overly focussed on productivity (Greenlaw, 2015; Peacock, Lingard, & Sellar, 2015), might result in equity being viewed as less important. This, in turn could lead to a deepening of inequalities in education. Zajda and Rust's (2016) analysis of this is revealing. While it is based on higher education patterns, the link they indicated exists between economic competitiveness and the knowledge-based economy (Zajda & Rust, 2016) justifies consideration in relation to 'C21 curriculum' policy because of similar economic discourses revealed within it. In similar vein, Gale and Molla (2015) asserted that while such an education policy is justified in terms of its value to the economy might improve an individual's opportunities for gaining a high-paying job, it can

also reduce the individual's scope for learning and thriving and playing a part in addressing inequalities in society. This, they concluded, can constitute "a deprivation of agency and reinforce injustice" (Gale & Molla, 2015, p. 820). The same might be said regarding 'C21 curriculum' policy within Australia in so far as it has an instrumentalist link.

At the national and State levels, 'C21 curriculum' policy has not operated to ensure equal education outcomes for students with special educational needs and possibly for other disadvantaged students. One of the goals of the policy is to ensure equity by enabling "*all* young Australians (to) become successful learners, confident and creative individuals, and active and informed citizens" (MDEYA, 2008). However, there has been no framework to guide teachers in differentiating the curriculum to accommodate the needs of students with learning difficulties (WA Curriculum Council, 2010). In this regard, it is helpful to recall Gale and Molla's (2015) point that social justice in education involves incorporating values of fairness and equity within pedagogy and curriculum.

At the school level 'Pepper' School, 'Mint' School and 'Sage' School introduced what they referred to as 'C21 curriculum' policies that aim to meet the learning needs of all students. Some students at 'Pepper' School and 'Sage' School, however, argued that the main emphasis on C21 skills there was evident when students were in extension classes reserved for the brightest. The rationale for this being the case, they said, was that these skills are highly challenging and thus better suited for higher-ability students.

Some of the teachers in the study also perceived C21 skills to be 'complex'. A problem with this is that a 'C21 curriculum' could come to be seen to promote intellectual elitism that, in turn, could have implications for equity. On this matter more generally, Heuser, Wang, and Shahid (2017) maintained that extension programs aimed at more intellectually able students are often perceived to be effective in nurturing these students so that they can play a future role in developing their nation's progress and prosperity. This then, however, could make it difficult to harmonise the education aims of student excellence with student equity.

The involvement of private edu-businesses such as Microsoft at 'Pepper' School and to some extent, also, corporate involvement at 'Sage' School, highlights how the privatisation of education can equally raise issues of equity. On this more generally, Au and Ferrare (2015) have argued that increasing corporate interests in education could not only undermine the professionalism of teachers, but could also lead to inequality in the distribution of resources for students. For example, because consultancy services tend to be expensive, not all students will necessarily have access to what is provided and because the knowledge consultants provide is often specialised and niche, many may not be able to avail of it, thus perpetuating a degree of inequality. Such a conclusion resulted in calling for improvement in 'epistemic access', epistemic injustice, or access to the 'best' knowledge available as a means to stem inequality in education (Kidd, Medina, & Pohlhaus, 2017; Walker, 2019; Young, 2013, p. 115). Furthermore, it could be that increasing corporate interests in 'C21 curriculum' policy in Australia could signal not only an increasing erosion of

professionalism among teachers, but could also highlight inequitable access to knowledge that should be available to all.

Propositions Relating to the Context of Longer-Term Outcomes

The two propositions below about 'C21 curriculum' policy outcomes were generated from the results of our study.

Conclusion

Propositions About Policy Outcomes

Proposition 9: Continual Changes to 'C21 Curriculum' Policy: Given patterns in Australia to date, there is a high possibility that there will be continual changes to 'C21 curriculum' policy in the longer term due to knowledge being an ongoing site of contention for stakeholders in education.

   Proposition 10: Tensions Were Evident in Relation to Equity and Social Justice in 'C21 Curriculum' Policy Within Australia in the Following Ways:

(a) Owing to a strong focus on competitive economic productivity, 'C21 curriculum' policy could limit goals of equity and social justice.
(b) Insufficient attention to curriculum adaptations for students with special educational circumstances could exacerbate issues of equity.
(c) The notion of C21 skills being cognitively superior, as well as the priority afforded to them in extension classes for the higher-ability students, could potentially exacerbate tensions between achieving student excellence and student equity in the long term.
(d) The increasing corporate interests within 'C21 curriculum' policy production and enactment could result in inequitable access to knowledge for all students.

This chapter has compared and contrasted our results in relation to the policy trajectory from the national (Australia), State (WA) and local (school) levels. A critical theory perspective was drawn upon to reveal power dynamics and overarching patterns in policy processes in a meta-analysis. Major meta-themes in this regard are summarised below in Table 9.5.

Table 9.5 Summary of key meta-themes identified from meta-analysis along the policy trajectory

Context of influences	Context of policy text production	Context of enactment	Context of outcomes
– Neo-liberalism – Nationalism – Competing educational perspectives	– Contested knowledge for the twenty-first century – Powerful knowledge actors – Economic discourses	– Tension between teachers' ideologies & principles of 'C21 curriculum' – Pressures from high-stakes testing – Importance of school settings	– Continual changes to 'C21 curriculum' policy – Equity & social justice

The next and final chapter suggests possible recommendations for policy and practice and outlines possible areas of research for the future based on the results overall.

References

Adie, L. (2014). The development of shared understandings of assessment policy: Travelling between global and local contexts. *Journal of Education Policy, 29*(4), 532–545. https://doi.org/10.1080/02680939.2013.853101

Agasisti, T., Longobardi, S., & Regoli, A. (2017). A cross-country panel approach to exploring the determinants of educational equity through PISA data. *Quality & Quantity, 51*(3), 1243–1260. https://doi.org/10.1007/s11135-016-0328-z

Alexander, C., & Weekes-Bernard, D. (2017). History lessons: Inequality, diversity and the national curriculum. *Race Ethnicity and Education, 20*(4), 478–494. https://doi.org/10.1080/13613324.2017.1294571

Anagnostopoulos, D., Lingard, B., & Sellar, S. (2016). Argumentation in educational policy disputes: Competing visions of quality and equity. *Theory Into Practice, 55*(4), 342–351. https://doi.org/10.1080/00405841.2016.1208071

Appadurai, A. (2013). *The future as cultural fact: Essays on the global condition*. London: Verso.

Apple, M. (2006). Freire, neo-liberalism and education. *Discourse: Studies in the cultural politics of education, 20*(1), 5–20. https://doi.org/10.1080/0159630990200101

Apple, M. (2007). Ideological Success, Educational Failure?: On the politics of no child left behind. *Journal of Teacher Education, 58*(2), 108–116. https://doi.org/10.1177/2F0022487106297844

Apple, M. (2012). *Can education change society?* New York: Routledge.

Au, W., & Ferrare, J. (2015). *Mapping corporate education reform power and policy networks in the neo-liberal state*. Hoboken, NJ: Taylor and Francis.

Australian Curriculum (n.d.). *The Australian Curriculum*. Retrieved from http://www.australian-curriculum.edu.au/

Australian Curriculum, Assessment and Reporting Authority (2009). *National Report on Schooling in Australia 2009*. Retrieved from http://www.acara.edu.au/reporting/national_report_on_schooling_2009/national_policy_context/educational_goals.html

Ball, S. (2012). *Global education inc.: New policy networks and the neo-liberal imaginary*. Abingdon/Oxon, UK: Routledge.

Ball, S. (2015). Policy actors/policy subjects. *Journal of Education Policy, 30*(4), 467–467. https://doi.org/10.1080/02680939.2015.1038454

Ball, S. (2016). Neoliberal education? Confronting the slouching beast. *Policy Futures in Education, 14*(8), 1046–1059. https://doi.org/10.1177/1478210316664259

Ball, S., Junemann, C., & Santori, D. (2017). *Edu.net: Globalization and education policy mobility* (1st ed.). London: Routledge. https://doi.org/10.4324/9781315630717

Ball, S. J. (1994). What is policy? Texts, trajectories and toolboxes. *Discourse, Studies in the Cultural Politics of Education, 13*(2), 10–17. https://doi.org/10.1080/0159630930130203

Barrett, B., & Rata, E. (2014). *Knowledge and the future of the Curriculum: International studies in social realism*. London: Palgrave Macmillan Limited.

Benze, L., & Carter, L. (2011). Globalising students for the common good. *Journal of Research in Science Teaching, 48*(6), 648–669. https://doi.org/10.1002/tea.20419

Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., et al. (2012). Assessment development. In P. Griffin, B. McGraw, & E. Care (Eds.), *Assessment and teaching of 21st century skills* (pp. 17–66). Dordrecht, the Netherlands: Springer.

Bottery. (2006). Education and globalization: Redefining the role of the educational professional. *Educational Review, 58*(1), 95–113. https://doi.org/10.1080/00131910500352804

Braun, A., Ball, S., Maguire, M., & Hoskins, K. (2011). Taking context seriously: Towards explaining policy enactments in the secondary school. *Discourse: Studies in the Cultural Politics of Education, 32*(4), 585–596. https://doi.org/10.1080/01596306.2011.601555

Carlgren, I. (2020). Powerful knowns and powerful knowings. *Journal of Curriculum Studies, 52*(3), 323–336. https://doi.org/10.1080/00220272.2020.1717634

Chai, C. S., Hwee Ling Koh, J., & Teo, Y. H. (2019). Enhancing and modeling teachers' design beliefs and efficacy of technological pedagogical content knowledge for 21st century quality learning. *Journal of Educational Computing Research, 57*(2), 360–384. https://doi.org/10.1177/0735633117752453

Choi, S., & Kim, S. H. (2017). The effect of global learning using web technologies on 21st century skills. *International Information Institute (Tokyo). Information, 20*(4B), 2679–2686.

de Saxe, J. G., Bucknovitz, S., & Mahoney-Mosedale, F. (2020). The deprofessionalization of educators: An intersectional analysis of neoliberalism and education "Reform.". *Education and Urban Society, 52*(1), 51–69. https://doi.org/10.1177/0013124518786398

Deng, Z. (2015). Michael Young, knowledge and curriculum: an international dialogue. *Journal of Curriculum Studies, 47*(6), 723–732. https://doi.org/10.1080/00220272.2015.1101492

Deng, Z. (2018). Contemporary curriculum theorizing: Crisis and resolution. *Journal of Curriculum Studies, 50*(6), 691–710. https://doi.org/10.1080/00220272.2018.1537376

Doherty, R. (2007). Education, neoliberalism and the consumer citizen: After the golden age of egalitarian reform. *Critical Studies in Education, 48*(2), 269–288. https://doi.org/10.1080/17508480701494275

Donnelly-Wiltshire Report (2014). *Review of the Australian curriculum – Final report*. Retrieved from https://docs.education.gov.au/system/files/doc/other/review_of_the_national_curriculum_final_report.pdf

Elgstrom, O., & Hellstenius, M. (2011). Curriculum debate and policy change. *Journal of Curriculum Studies, 43*(6), 717–738. https://doi.org/10.1080/00220272.2011.584562

European Communities. (2007). *Key competences for lifelong learning: A European reference framework*. Retrieved from http://www.britishcouncil.org/sites/britishcouncil.uk2/files/youth-in-action-keycomp-en.pdf

Exeley, S., & Ball, S. (2014). Neo-liberalism and English education. In D. Turner & H. Yolcu (Eds.), *Neo-liberal educational reforms-A critical analysis* (pp. 13–32). Florence, Italy: Taylor and Francis.

Fadel, C., & Groff, J. (2019). Four-dimensional education for sustainable societies. In J. Cook (Ed.), *Sustainability, human well-being, and the future of education* (pp. 269–281). Cham, Switzerland: Palgrave MacMillan.

Fasso, W., Knight, B., & Purnell, K. (2016). Distributed leadership of school curriculum change: an integrative approach. *School Leadership & Management, 36*(2), 204–220. https://doi.org/10.1080/13632434.2016.1209177

Ferguson, Y. (2014). The history and dynamics of globalization. *Diplomacy & Statecraft, 25*(1), 135–155. https://doi.org/10.1080/09592296.2014.873615

Fleury, S., & Bentley, M. (2020). Crisis and hope: Educating citizens for the 21st century. *Taboo, 19*(2), 70–80.

Gale, T., & Molla, T. (2015). Social justice intents in policy: An analysis of capability "for" and "through" education. *Journal of Education Policy, 30*(6), 810–830. https://doi.org/10.1080/02680939.2014.987828

Gilbert, R. (2019). General capabilities in the Australian curriculum: promise, problems and prospects. *Curriculum Perspectives, 39*(2), 169–177. https://doi.org/10.1007/s41297-019-00079-z

Golding, J. (2017). Policy critics and policy survivors: Who are they and how do they contribute to a department policy role typology? *Discourse: Studies in the Cultural Politics of Education, 38*(6), 923–936. https://doi.org/10.1080/01596306.2016.1183589

Green, B. (2019). Introduction – National curriculum: international perspectives. *Curriculum Perspectives, 39*(2), 179–180. https://doi.org/10.1007/s41297-019-00078-0

Greenlaw, J. (2015). Deconstructing the Metanarrative of the 21st Century Skills Movement. *Educational Philosophy and Theory, 47*(9), 894–903. https://doi.org/10.1080/00131857.2015.1035156

Grek, S., & Ozga, J. (2010). Governing education though data: Scotland, England, and the European education policy space. *British Educational Research Journal, 36*(6), 937–952. https://doi.org/10.1080/01411920903275865

Gunter, H., & Mills, C. (2017). *Consultants and Consultancy*. Cham, Switzerland: Springer International Publishing.

Halasz, G., & Michel, A. (2011). Key competences in Europe: Interpretation, policy formulation and implementation. *European Journal of Education, 46*(3), 289–306. https://doi.org/10.1111/j.1465-3435.2011.01491.x

Halikiopoulou, D., & Vasilopoulou, S. (2013). *Nationalism and globalization – Conflicting or Complementary?* New York: Taylor and Francis.

Hardy, I. (2015). Curriculum reform as contested: An analysis of curriculum policy enactment in Queensland, Australia. *International Journal of Educational Research, 74*, 70–81. https://doi.org/10.1016/j.ijer.2015.09.010

Heuser, B., Wang, K., & Shahid, S. (2017). Global dimensions of gifted and talented education: The influence of national perceptions on policies and practices. *Global Education Review, 4*(1), 4–21.

Hogan, A. (2016). NAPLAN and the role of edu-business: New governance, new privatisations and new partnerships in Australian education policy. *Australian Educational Researcher, 43*(1), 93–110. https://doi.org/10.1007/s13384-014-0162-z

Karpov, A. O. (2013). The commodification of education. *Russian Education and Society, 54*(5), 22–37. https://doi.org/10.1080/10611428.2013.11065521

Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What knowledge is of most worth: Teacher knowledge for 21st century learning. *Journal of Digital Learning in Teacher Education, 29*(4), 127–140. https://doi.org/10.1080/21532974.2013.10784716

Kidd, I. J., Medina, J., & Pohlhaus, G. (2017). *Introduction to the Routledge handbook of epistemic injustice*. https://doi.org/10.4324/9781315212043-1

Koehler, M., Mishra, P., & Cain, W. (2013). What is technological pedagogical content knowledge (TPACK)? *Journal of Education, 193*(3), 13–19. https://doi.org/10.1177/002205741319300303

Lapsley, I., Miller, P., & Pollock, N. (2013). Foreword management consultants – Demons or benign change agents? *Financial Accountability & Management, 29*(2), 117–123. https://doi.org/10.1111/faam.12013

Law, W. (2014). Understanding China's curriculum reform for the 21st century. *Journal of Curriculum Studies, 46*(3), 332–360. https://doi.org/10.1080/00220272.2014.883431

Lim, L., & Apple, M. (2016). *The strong state and curriculum reform: Assessing the politics and possibilities of educational change in Asia*. Abingdon, UK: Taylor and Francis.

Lingard, B. (2010). Policy borrowing, policy learning: Testing times in Australian schooling. *Critical Studies in Education, 51*(2), 129–147. https://doi.org/10.1080/17508481003731026

Lingard, B. (2014). A critical reflection on the Donnelly-Wiltshire review of the Australian Curriculum. *Professional Educator, 13*(6), 10–13.

Lingard, B., Thompson, G., & Sellar, S. (2015). *National testing in schools: An Australian assessment*. Florence, Italy: Taylor and Francis.

Lowe, K., & Galstaun, V. (2020). Ethical challenges: the possibility of authentic teaching encounters with indigenous cross-curriculum content? *Curriculum Perspectives, 40*(1), 93–98. https://doi.org/10.1007/s41297-019-00093-1

Lyle, J., Cunningham, C., & Gray, J. (2014). The new Australian Curriculum, teachers and change fatigue. *Australian Journal of Teacher Education, 39*(11), 45–64. https://doi.org/10.14221/ajte.2014v39n11.4

Marginson, S. (2019). Limitations of human capital theory. *Studies in Higher Education, 44*(2), 287–301. https://doi.org/10.1080/03075079.2017.1359823

Masters, G. N. (2016). Five challenges in Australian education. *Policy Insights* No. 5. Victoria: Australian Council for Educational Research.

Mayes, E., & Holdsworth, R. (2020). Learning from contemporary student activism: towards a curriculum of fervent concern and critical hope. *Curriculum Perspectives, 40*(1), 99–103. https://doi.org/10.1007/s41297-019-00094-0

McDonough, K., & Cormier, A. (2013). Beyond patriotic education: Locating the place of nationalism in the public school curriculum. *Education, Citizenship and Social Justice, 8*(2), 135–150. https://doi.org/10.1177/1746197913483657

McNeil, M., & Klein, A. (2011). Obama outlines NCLB flexibility. *Education Week, 31*(5), 20.

Ministerial Council on Education, Employment, Training and Youth Affairs (2008). *Melbourne declaration on educational goals for young Australians*. Retrieved from http://www.curriculum.edu.au/verve/_resources/national_declaration_on_the_educational_goals_for_young_australians.pdf

Mishra, P., & Mehta, R. (2017). What we educators get wrong about 21st-century learning: Results of a survey. *Journal of Digital Learning in Teacher Education, 33*(1), 6–19. https://doi.org/10.1080/21532974.2016.1242392

Modi, N. (2013). *Narendra Modi*. Retrieved from https://www.narendramodi.in/i-dream-of-a-society-where-each-individual-is-a-part-of-creation-of-knowledge-cm-at-icai-meet-5030

Molla, T., & Gale, T. (2019). Positional matters: school leaders engaging with national equity agendas. *Journal of Education Policy: Australian Education Policy – A Case of Global Education Reform Hyperactivity, 34*(6), 858–876. https://doi.org/10.1080/02680939.2018.1556811

Muller, J., & Young, M. (2019). Knowledge, power and powerful knowledge re-visited. *The Curriculum Journal: After the Knowledge Turn? Politics and Pedagogy, 30*(2), 196–214. https://doi.org/10.1080/09585176.2019.1570292

Nehring, J., & Szczesiul, S. (2015). Redefining high performance in Northern Ireland: Deeper learning and twenty-first century skills meet high stakes accountability. *Journal of Educational Change, 16*(3), 327–348. https://doi.org/10.1007/s10833-015-9250-8

Organisation for Economic Co-operation and Development (OECD). (2012). *Preparing teachers and developing school leaders for the 21st century* (Vol. 23). Paris: OECD Publishing. https://doi.org/10.1787/9789264174559-en

Organisation for Economic Co-operation and Development (OECD) (2015). *Education Policy Outlook: Making Reforms Happen*. OECD Publishing. https://doi.org/10.1787/9789264225442-en.htm

Organisation for Economic Co-operation and Development (OECD) (2019). *OECD Future of Education and skills 2030: OECD Learning Compass 2030*. OECD Publishing. Retrieved from http://www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/OECD_Learning_Compass_2030_concept_note.pdf

P21. (n.d.). *Tools and resources*. Retrieved June 19, 2020, from http://www.p21.org/tools-and-resources/educators#Exemplars

Peacock, D., Lingard, B., & Sellar, S. (2015). Texturing space-times in the Australian curriculum: Cross-curriculum priorities. *Curriculum Inquiry, 45*(4), 367–388. https://doi.org/10.1080/03626784.2015.1064305

Peterson, A. (2016). Australia. In A. Peterson, I. Davies, K. M. Chong, T. Epstein, C. Peck, A. Ross, et al. (Eds.), *Education, globalization and the nation* (pp. 17–40). London: Palgrave Macmillan.

Prensky, M. (2012). *From digital natives to digital wisdom: Hopeful essays for 21st century learning*. Thousand Oaks, CA: Corwin.

Rizvi, F., & Lingard, B. (2010). *Globalizing Education Policy*. Hoboken, NJ: Taylor & Francis.

Sahlberg, P. (2011). PISA in Finland: An education miracle or an obstacle to change? *Centre for Educational Policy Studies Journal, 1*(3), 119–140.

Saunders, D. (2010). Neoliberal ideology and public higher education in the United States. *The Journal of Critical Education Policy Studies, 8*(1), 41–77. http://www.jceps.com/archives/626

Scott, C. L. (2015). *The futures of learning 3: What kind of pedagogies for the 21st century?* UNESCO Education Research and Foresight, Paris. [ERF Working Papers Series, No. 15].

Sellar, S. (2015). A strange craving to be motivated: Schizoanalysis, human Capital and education. *Deleuze Studies, 9*(3), 424–436. https://doi.org/10.3366/dls.2015.0196

Sellar, S., & Lingard, B. (2013). The OECD and global governance in education. *Journal of Education Policy, 28*(5), 710–725. https://doi.org/10.1080/02680939.2013.779791

Sjøberg, S. (2017). Pisa testing: A global educational race? *Europhysics News, 48*(4), 17–20. https://doi.org/10.1051/epn/2017402

Small, D. (2011). Neo-liberalism in crisis? Educational dimensions. *Policy Futures in Education, 9*(2), 258–266. https://doi.org/10.2304/pfie.2011.9.2.258

Spring, J. (2015). *Economization of education: Human capital, global corporations, skills-based schooling* (1st ed.). New York: Routledge. https://doi.org/10.4324/9781315730233

Tett, L., & Hamilton, M. (2019). *Resisting neoliberalism in education: Local, national and transnational perspectives*. Bristol, UK: Policy Press.

Trilling, B., & Fadel, C. (2012). *21st century skills: Learning for life in our times*. San Francisco, CA: Jossey-Bass.

Turner, D., & Yolcu, H. (2014). *Neo-liberal educational reforms – A critical analysis*. New York: Routledge. Florence: Taylor and Francis.

United Nations Educational, Scientific and Cultural Organisation. (2005). *Towards knowledge societies*. France: UNESCO Publishing.

United Nations Educational, Scientific and Cultural Organisation. (2015). *The futures of learning 1: Why must learning content and methods change in the 21st century?* Paris: UNESCO Education Research and Foresight. [ERF Working Papers Series, No. 13].

van Laar, E., van Deursen, A. J. A., van Dijk, J. A. G., & de Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior, 72*, 577–588. https://doi.org/10.1016/j.chb.2017.03.010

Vidovich, L. (2013). Policy research in higher education: Theories and methods for globalizing times? In J. Huisman & M. Tight (Eds.), *Theory and method in higher education research (international perspectives on higher education research, volume 9)* (pp. 21–39). Bingley, UK: Emerald Insight.

Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning, 29*, 403–413. https://doi.org/10.1111/jcal.12029

Voogt, J., & Roblin, N. (2012). A comparative analysis of international frameworks for 21st century competencies: Implications for national curriculum policies. *Journal of Curriculum Studies, 44*(3), 299–321. https://doi.org/10.1080/00220272.2012.668938

WA Curriculum Council (2010). *Western Australia's response to the draft pre-primary – Year 10 Australian curriculum for English, mathematics, history and science*. 1–41. WA: Australia: Government of WA Curriculum Council.

Walker, M. (2019). Why epistemic justice matters in and for education. *Asia Pacific Education Review, 20*(2), 161–170. https://doi.org/10.1007/s12564-019-09601-4

Westbury, I. (2016). State-based curriculum-making: The Illinois learning standards. *Journal of Curriculum Studies, 48*(6), 783–802. https://doi.org/10.1080/00220272.2016.1186740

Wilkinson, S. D., & Penney, D. (2020). Setting policy and student agency in physical education: Students as policy actors. *Sport, Education and Society*, 1–14. https://doi.org/10.1080/1357332 2.2020.1722625

Williamson, B. (2020). Making markets through digital platforms: Pearson, edu-business, and the (e)valuation of higher education. *Critical Studies in Education*, 1–17. https://doi.org/10.108 0/17508487.2020.1737556williamson

Winter, C. (2017). Curriculum policy reform in an era of technical accountability: "fixing" curriculum, teachers and students in English schools. *Journal of Curriculum Studies, 49*(1), 55–74. https://doi.org/10.1080/00220272.2016.1205138

Yates, L., & Grumet, M. (2011). *Curriculum in today's world: Configuring knowledge, Identities, work and politics*. London: Routledge.

Young, M. (2013). Overcoming the crisis in curriculum theory: A knowledge-based approach. *Journal of Curriculum Studies, 45*(2), 101–118. https://doi.org/10.1080/0022027 2.2013.764505

Young, M. (2014). What is a curriculum and what can it do? *The Curriculum Journal, 25*(1), 7–13. https://doi.org/10.1080/09585176.2014.902526

Young, M., & Muller, J. (2015). *Curriculum and the Specialization of Knowledge: Studies in the Sociology of Education*. Florence, Italy: Taylor and Francis.

Zajda, J., & Rust, V. (2016). Research in globalisation and higher education reforms. In J. Zajda & V. Rust (Eds.), *Globalisation and higher education reforms*. Dordrecht: Springer.