Scripted Solutions for Mathematics? Rethinking Outsourced Curriculum Planning and Teacher Workload Challenges

Emily Ross
The University of Queensland
emily.ross@uq.edu.au

Curriculum reform is an opportunity to refresh programs to meet the needs of current students, but this is not without significant investment from teachers. In this exploratory multiple case study, semi-structured interviews captured teachers' processes of curriculum interpretation for mathematics planning and teaching in a school using scripted curriculum materials. Findings show that when using the scripted materials, the teachers in this study still felt compelled to engage in additional planning to prepare adequately for teaching their students. This finding has implications for proposed teacher workload solutions that suggest teacher curriculum planning can be outsourced.

Curriculum change is a constant feature of the Australian educational landscape. As teachers adapt to each new curriculum, they engage in a process of interpretation to determine the most effective ways to engage their students and teach the outlined concepts and skills (Ross, 2024; Superfine, 2008). The literature often highlights two key dimensions of this process: the intended curriculum and the enacted curriculum (Ben-Peretz, 1990; Ellis, 2004; Reid, 2008). The intended curriculum encompasses the materials or policy documents provided to teachers, usually by curriculum agencies or government bodies. In contrast, the enacted curriculum refers to the collective learning and teaching interactions within the classroom, shaped by the teacher's intentions and students' responses. Australian curriculum discussions have widely supported this dichotomy (Reid, 2008). However, they do not capture the process of interpretation that a teacher must undertake to enact the intended curriculum.

Curriculum reform offers opportunities for teacher professional learning (Moore et al., 2021) but also adds to teacher workloads. Many reports are emerging with descriptions of the current state of work intensification in teaching (Creagh et al., 2023; Wilson et al., 2020), with Creagh et al.'s (2023) synthesis indicating that interventions must address the root causes of workload to tackle teachers' time poverty effectively. While governments propose solutions to ease teacher burdens, curriculum work is being framed as an administrative task (Stacey et al., 2024), leading to calls for outsourcing curriculum planning. However, research shows that outsourced curriculum materials can reduce teacher satisfaction (Poulton & Mockler, 2024), and many teachers value lesson planning as a key part of their role (Stacey et al., 2024). This paper examines five teachers' experiences teaching mathematics with scripted curriculum materials to explore whether they truly saved time.

Literature Review

In seeking to conceptualise the process of curriculum enactment, Remillard and Heck (2014) developed a framework of the curriculum policy, design and enactment system to provide a heuristic for studies that investigate the "relationships among elements of curriculum and influences on them" (Remillard & Heck, 2014, p.714). Their framework (see Figure 1), specific to decisions made with mathematics curricula, acknowledged the various curricular elements contributing to mathematics curriculum development, design and enactment (Jameson & Bobis, 2023). The research presented artefacts of mathematics curriculum interpretation decisions, such as the teacher-intended curriculum and student outcomes, highlighting the distinction between the intended (official) and the enacted (operational) curriculum. Their definitions describe the official curriculum as specified by governing authorities and setting out

(2025). In S. M. Patahuddin, L. Gaunt, D. Harris & K. Tripet (Eds.), *Unlocking minds in mathematics education. Proceedings of the 47th annual conference of the Mathematics Education Research Group of Australasia* (pp. 381–388). Canberra: MERGA.

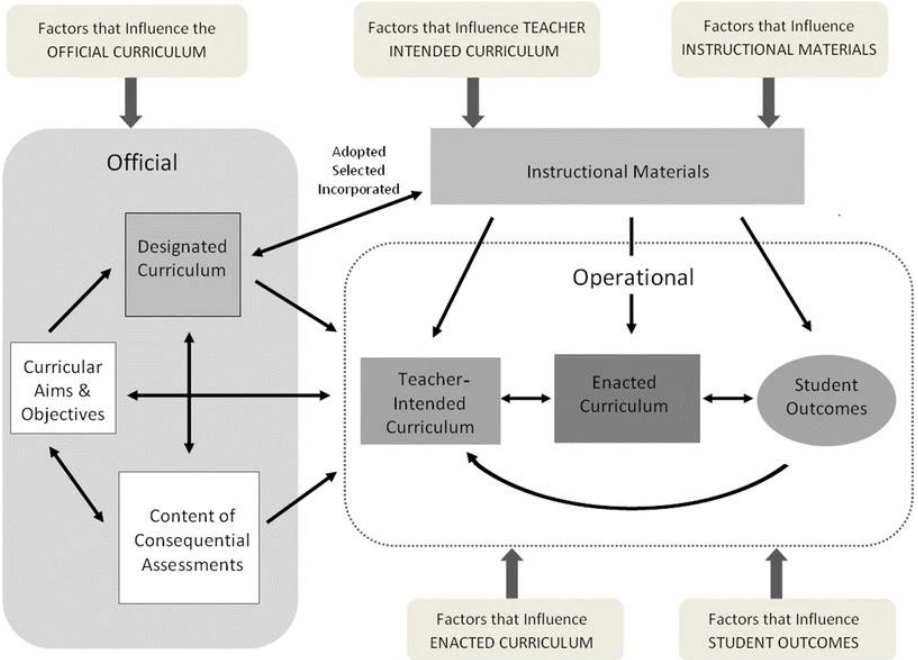
expectations for students' learning. The operational curriculum represents the transformation of the official curriculum into teachers' personal plans, and how these plans play out in the interactions between teachers and students in the mathematics classroom.

Remillard and Heck (2014) highlighted factors that influence elements of the official curriculum and the operational curriculum: these factors "may be social, political, cultural, structural, or cognitive" (p. 714). Influencing factors may include societal needs, values, expectations, and beliefs; views of individuals and groups wielding power; research on learning, teaching, and assessment; teacher knowledge, beliefs and practices; teachers' access to resources and support; contextual opportunities and constraints; and a range of student characteristics and cultural resources. These factors interact with each other in complex ways, and their influence on the curriculum system may be either direct or subtle (Ross, 2017; 2024).

Remillard and Heck's (2014) framework articulates other curricular elements that shape the official and operational curriculum for teachers. The official curriculum includes the Designated Curriculum, defined by Remillard and Heck to refer to the set of supporting materials for mathematics teachers informed by the official curricular aims and objectives and specified by a governing body. Their elaboration of this curricular element encompasses approved textbooks or packages of teaching resources to mandated system-wide assessment. These materials are distinct from Instructional Materials in the framework, which are positioned outside of the official or operational curriculum boxes to denote that these materials are typically not authored by those developing the official or operational curricula.

Figure 1

Visual Model of the Curriculum Policy, Design, and Enactment System (Remillard & Heck, 2014, p. 709)



Teacher-Intended Curriculum

Teacher planning is an important phase of teaching, giving teachers time and space to make decisions about the content and instruction that they will use to shape student learning in mathematics (Superfine, 2008; Ross, 2024). The concept of teacher curriculum planning, referring to the process by which teachers interpret the curriculum into a plan for enactment, has been inconsistently addressed in the literature (Ross, 2017). It has been described as aligning with the intended curriculum, as the teachers' intention of what they will cover (Ellis,

2004; Sherin & Drake, 2009), while other researchers have positioned it as an aspect of curriculum enactment (Solomon, 2009). Curriculum planning supports teachers in enlivening and making the curriculum content accessible to the students in the classroom; the blueprint, which the teacher devises for covering the intended curriculum, but not the act of teaching the curriculum in the classroom. It is an interpretation developed by the teacher to unpack the curriculum and tailor it to meet the needs of the students in their classroom (Kurz et al., 2010; Solomon, 2009).

Remillard and Heck (2014) described the teacher-intended curriculum as an interim step between the official and the enacted curricula, representing the process of interpretation and planning that teachers must engage in to envision and plan mathematics classroom instruction (Ross, 2017). While effective classroom instruction begins with thoughtful planning (Bieda et al., 2020), Remillard and Heck's (2014) studies of mathematics teachers suggested that the teacher-intended curriculum is often the hardest to observe, as it is in its most detailed form within the teacher's mind. However, growing accountability measures require teachers to produce planning artefacts in various forms and degrees of specificity from as far back as their initial teacher education (Ross, 2024). These processes are now under scrutiny as governments try to solve teacher workload issues with a frequent trend towards providing teachers with scripted curriculum materials to ease the burden of curriculum interpretation (Mockler & Stacey, 2024).

Scripted Curriculum Resources

There is a current trend in the Australian educational landscape to position curriculum planning as an administrative burden of teachers, with growing suggestions that a potential solution to workload issues in teaching can be found in outsourcing curriculum planning (Stacey et al., 2024; Ross, 2024). Shulman (1983) used the phrase "remote control of teaching" to refer to situations where teachers feel they have limited autonomy to make decisions in their classrooms, essentially making them feel like they are following instructions from a remote control. These "classroom-ready" resources provide the day-by-day approach to teaching that can leave teachers feeling as though they no longer have agency in planning for their specific group of students (Poulton & Mockler, 2024). Further, removing the teacher engagement with the curriculum may have the effect of de-professionalising teachers by ceasing their need and capacity to work with curriculum policy to develop student pathways that best support student development, as they frequently take the form of a "one-size-fits-all approach to instruction" (Remillard & Reinke, 2012, p.3). These highly structured curriculum guides have been referred to as "scripted curriculum", positioning teachers more as performers than professionals.

What happens, then, when the Designated Curriculum replaces the Teacher-Intended Curriculum? In Queensland, during the implementation of the Australian Curriculum: Mathematics (published by the Australian Curriculum, Assessment and Reporting Authority (ACARA)) (n.d.), government schools were given the Curriculum into the Classroom (C2C) materials by the Department of Education (DoE) (2015). The C2C materials, a comprehensive suite of whole school, year-level, unit-level, and lesson plans, and assessments with pre-written marking criteria, were provided to schools to ease curriculum reform fatigue by fast-tracking the interpretation process (Ross, 2017). The C2C materials were delivered with mixed messages about their use, which were refined to an "adopt or adapt" mantra (Ross, 2024). Teachers in schools that "adopted" the C2C materials were told to use them as written. In this circumstance, the Designated Curriculum is being provided to the teacher in place of their process of curriculum interpretation with the specific aim of replacing the Teacher-Intended Curriculum as their intended plan for enactment. Do teachers feel compelled to enact the scripted curriculum unaltered? The following question frames this paper:

- What process of curriculum interpretation is undertaken by primary teachers using scripted curriculum materials to teach mathematics?

Research Design

Context and Participants

This paper describes part of the research from a larger Doctoral study analysing teachers' processes of curriculum interpretation to implement the Australian Curriculum: Mathematics (ACARA, n.d.). Exploring Remillard and Heck's (2014) framework based on studies of mathematics curriculum enactment, this paper focuses on the curriculum interpretation process undertaken by primary teachers of mathematics using scripted curriculum.

The five teachers in the study were part of the teaching staff at a government primary school in Southeast Queensland. The teachers expressed interest in participating in the study, were all female, and each had over 10 years of teaching experience, having taught mathematics across several primary school year levels. As the school had decided to *adopt* the DoE's C2C (2015) materials, the teachers were enacting curriculum plans developed to support them in implementing the Australian Curriculum: Mathematics (ACARA, n.d.).

Data Collection

Using an exploratory multiple case study design, this project sought to capture the process of teacher curriculum decision-making while enacting a primary mathematics unit of work. Pre- and post-unit semi-structured interviews aimed to capture the processes of preparation for and reflection on the enactment of the unit. Semi-structured interviews enable open questioning to capture detailed narratives of the participants. Yin (2012) highlighted their value in eliciting richer data and identified interviews as a key data source in case studies.

Reflective journals kept by teachers during the mathematics unit sought to provide a continuous capture of the curriculum decisions that teachers made during the unit and the influences on those decisions. Journals allow the participant to reflect upon events as they occur rather than utilising memory after some time has passed. It also provides a mechanism to triangulate data collected via other means within the study (Janesick, 1999). The teacher journals were used during the post-unit interviews as a stimulus for reflection.

Data Analysis

The process of thematic analysis employed was based on Braun and Clarke's (2014) six phases of thematic analysis. The data gathered for each participant was considered as a whole and analysed individually; that is, all three items for one participant (pre- and post-unit interview transcripts and unit journal) were analysed before analysis commenced on the items from another participant. This paper reports findings from the theme, *curriculum interpretation*, which was derived from teachers' references to their process for engaging with the curriculum.

Data coded to the theme *curriculum interpretation* was used to develop diagrammatic representations of each teacher's pathway from the Australian Curriculum: Mathematics (ACARA, n.d.) to its enactment in their classroom, thereby representing their curriculum interpretation and enactment process (all representations can be seen in Ross, 2017). The representations were developed for comparison purposes.

Results and Discussion

The diagrammatic representations of each teacher's curriculum interpretation and enactment process provided a picture of their sequential path from the official curriculum to enactment in their mathematics classrooms. Comparisons of the representations provided an opportunity to synthesise the general process of curriculum interpretation and enactment used

by the teachers to implement the Australian Curriculum: Mathematics (ACARA, n.d.). The results of this paper present the general process of curriculum interpretation and enactment and discuss the implications of this process in relation to Remillard and Heck's (2014) framework.

Scripted Curriculum Materials as the Official Curriculum

When the teachers commenced their implementation of the Australian Curriculum: Mathematics (ACARA, n.d.), their school had made the decision to adopt the C2C (DoE, 2015) materials as written. While the messaging from the DoE was to "adopt or adapt", meaning changes could be made to the scripted materials, many schools felt compelled to implement the materials as they were written (Ross, 2017). As schools recognised that the C2C materials had been developed from the Australian Curriculum, they saw the C2C materials as a feasible starting point for their curriculum implementation. Hillary described that it provided her with all she needed to engage in curriculum planning, "[I] mainly stay with the C2C. You don't have a lot of timeframes. All the other subject areas that you're working on…too much diversion…it [C2C] seems to cover it" (Pre-unit interview: Hillary). Hillary did not see a need to consult the Australian Curriculum on ACARA's website. Similarly, Miriam did not feel the need to consult the Australian Curriculum: Mathematics, as she felt the C2C materials and other accompanying supports were sufficient in cascading the information to teachers "I don't go to ACARA [website] much at all because … we're fortunate that we've got Amy (Curriculum Coordinator) and Lesley (Deputy Principal), and they both do a fabulous job of passing that information through to us in our planning sessions." (Pre-unit interview: Miriam).

Miriam's comments are indicative of how the teachers in this study engaged with the materials. Recognising the C2C (DoE, 2015) materials were an interpretation of the Australian Curriculum: Mathematics (ACARA, n.d.), C2C materials were consulted as if they were the curriculum, illustrated by Lyn's comment referring to the C2C materials as the Australian Curriculum: Mathematics "I mean, we are doing time again this term, but if you are not doing it all the time, they forget so quickly. That is another - a little problem I find with the maths curriculum." (Post-unit interview: Lyn). The Australian Curriculum presents Curricular Aims and Objectives by year level rather than specifying topics in terms, as Lyn has referred to. In the same way, Winnie stated: "I know I keep talking of Australian Curriculum, but that's just what we follow, the C2C." (Post-unit interview: Winnie), denoting that the teachers see the C2C materials as interchangeable with the Australian Curriculum: Mathematics. The consideration and treatment of the C2C materials by teachers in the study positions them firmly as an aspect of the official curriculum in the teachers' minds.

Scripted Curriculum Materials as the Operational Curriculum

While the teachers may have viewed the C2C (DoE, 2015) materials as though they were the official curriculum, the intention of the materials, when adopted, was to provide schools and teachers with ready-made planning documents. The C2C materials were developed to fast-track the process of interpretation and provide teachers with the plans ready for enactment. As Hillary describes, the C2C materials were quite prescriptive.

> They [the C2C materials] specifically guide you through with the expectation of the objectives. You just follow those through. If you get the time to do every single lesson, it's all extremely prescriptive for it to guide through to the final guides to making judgements (Post-unit interview: Hillary).

While, as Hillary expresses, the mathematics materials were available for teachers to enact as written, all five teachers in the study felt it necessary to develop a classroom plan based on the C2C (DoE, 2015) materials. Most of the teachers in the study cited differentiation or preparing students for assessment as the key reasons for their adaptation to the C2C materials. Lyn explained her concerns for a lack of opportunity to differentiate the content: "There is a lot of directed teaching in it [the C2C materials], which makes it hard to then differentiate because

those children are not getting your modelling … If you are modelling to one group what are the others doing?" (Post-unit interview: Lyn). Miriam shared these concerns, stating, "I don't think that there has been enough time for us … to model that [process] for them [the students]" (Post-unit interview: Miriam). The teachers felt compelled to alter the C2C materials to provide opportunities to differentiate for their students.

Winnie also suggested that time constraints meant she struggled to work through all the mathematics content, instead opting for a more direct route to ensure her students had the necessary learning for assessment success:

> I just made sure that I covered everything that needed to be covered for their assessment. I know that's sort of teaching to a test in a way, but I'm not going to put something in front of them that we haven't worked at together. (Post-unit interview: Winnie).

Abigail shared Winnie's concerns about time constraints in teaching mathematics content, but described a path that was led by her students' prior knowledge of the content or topic

> Time restraints was the biggest one…I guess it's not a huge deviation, but it's more a condensing of everything…choosing the most important parts to teach and having to…let go of a few other bits that might not have been as worthy or that were too time-consuming. (Post-unit interview: Abigail).

Each teacher felt it necessary to develop a classroom plan based on the C2C materials. C2C was provided to teachers with the message that it would fast-track curriculum planning. This did not eventuate. While the intention of the C2C materials may have been to minimise the curriculum planning time that teachers were required to invest, in practice, they were still devising personal curriculum plans. The C2C materials did not "fast-track" the process of interpretation by removing the requirement to unpack the curriculum. Instead, the teachers simply began the same process from a different starting point. The teachers began planning with an interpretation of the intended curriculum rather than from the intended curriculum itself.

Impact on Curriculum Interpretation

While the teachers felt the C2C (DoE, 2015) materials needed adaptation before enacting them in the classroom, they did not feel compelled to engage with the original official curriculum, that is, the Australian Curriculum: Mathematics (ACARA, n.d.), to begin their process of curriculum interpretation. Acknowledging that C2C had been developed from the Australian Curriculum, they instead opted to use C2C as their starting point for planning. Figure 2 represents a model of curriculum interpretation and enactment of the teachers in the study.

Figure 2

General Model of Teacher Interpretation and Enactment

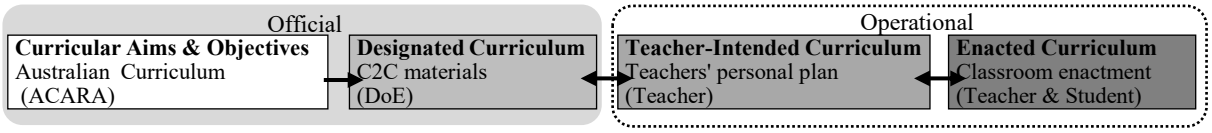
The model (Figure 2) denotes the Australian Curriculum: Mathematics (ACARA, n.d.) has been used to develop the C2C (DoE, 2015) materials by the DoE, but the arrow is unidirectional, as once this interpretation has taken place, the Australian Curriculum was not included in the process of curriculum interpretation undertaken by the teachers in this study. The C2C materials were instead used as the basis for teachers' interpretations of their classroom intentions, rather than the Australian Curriculum. These aspects align with curricular elements from Remillard and Heck's (2014) framework but are not necessarily in the same configuration. The general model developed from the teacher experiences in this study (Figure 2) has been overlaid with Remillard and Heck's terminology in Figure 3.

The Australian Curriculum: Mathematics (ACARA, n.d.), developed by ACARA, provides the Curricular Aims and Objectives for teachers to teach. A different government agency (the Queensland DoE) developed the C2C (2015) materials as a set of instructional materials to

support teachers' interpretation of the Curricular Aims and Objectives. Thus, the intent of the C2C materials aligns with Remillard and Heck's (2014) definition of Designated Curriculum.

Figure 3

General Model of Teacher Interpretation and Enactment with Remillard and Heck's (2014) Terminology



In Remillard and Heck's (2014) framework, the Curricular Aims and Objectives and the Designated Curriculum comprise elements of the Official Curriculum together (see Figure 1). The arrows connecting these elements in their framework allow for engagement with both elements, in addition to the Content of Consequential Assessments, describing flexibilities inherent in the different systems of curriculum policy, design and enactment the framework is designed to represent. Whereas, in the way teachers in this study used the C2C materials and not the Australian Curriculum, the Designated Curriculum (C2C materials) became an intermediary element between the Curricular Aims and Objectives and the Teacher-Intended Curriculum, as teachers felt the need to adapt the C2C materials to support the needs of their students. In doing so, teachers created their Teacher-Intended Curriculum from the C2C materials. To an extent, Remillard and Heck (2014) pre-empt this eventuality, describing systems where "nested governing agencies" (p.710) specify different components of the official curriculum. As is the case in Australia, the state-based agencies are responsible for implementing a federally developed curriculum. Thus, Remillard and Heck's (2014) framework accommodates this relationship.

Conclusion and Implications

There is a key resource implication that emanates from the relationship between the Curricular Aims and Objectives and the Teacher-Intended Curriculum highlighted in this study, are these curricular elements supporting teachers with their curriculum making, or duplicating processes undertaken by teachers that assist with developing their knowledge of curriculum and students? Either way, current teacher workforce issues are leading to calls for more scripted curriculum materials to ease the burden of curriculum interpretation. However, the notion that materials like C2C will remove the necessity for teacher curriculum planning was not seen in the teachers' actions in this study. The teachers in this study still needed to invest time in developing their plans to best meet the needs of their students (Superfine, 2008). Teachers value this time to prepare for their students (Stacey et al., 2024); thus, teacher curriculum planning cannot be "fast-tracked" as easily as has been described in the current curriculum landscape.

The evidence presented in this study is based on a small sample of teachers from one school involved in the implementation of the Australian Curriculum: Mathematics (ACARA, n.d.). Consequently, further research is needed to explore the impact of scripted curriculum materials in other schools and circumstances. Additionally, further research could be undertaken to compare the processes and products of curriculum support across teacher backgrounds and jurisdictions implementing the Australian Curriculum: Mathematics. Regardless, this study provides strong support for the importance of teacher curriculum planning to ensure they feel adequately prepared to support the needs of their students.

Acknowledgements

Ethics approval was granted by Queensland University of Technology (Approval number 1200000182) and the Queensland Department of Education. Participants gave informed consent, and pseudonyms have been used.

References

Australian Curriculum, Assessment and Reporting Authority [ACARA] (n.d.). Introduction to mathematics. Retrieved from www.australiancurriculum.edu.au/f-10-curriculum/mathematics/

Ben-Peretz, M. (1990). *The teacher-curriculum encounter: Freeing teachers from the tyranny of texts.* State University of New York Press.

Bieda, K.N., Lane, J., Evert, K., Hu, S., Opperman, A., & Ellefson, N. (2020). A large-scale study of how districts' curriculum policies and practices shape teachers' mathematics lesson planning. *Journal of Curriculum Studies, 52*(6), 770-799. https://doi.org/10.1080/00220272.2020.1754921

Braun, V., & Clarke, V. (2014). Thematic analysis. In T. Teo (Ed.), *Encyclopedia of Critical Psychology* (pp. 1947-1952). New York: Springer.

Creagh, S., Thompson, G., Mockler, N., Stacey, M., & Hogan, A. (2023). Workload, work intensification and time poverty for teachers and school leaders: A systematic research synthesis. *Educational Review*, 1–20. https://doi.org/10.1080/00131911.2023.2196607

Department of Education [DoE] (The State of Queensland) (2015). *Curriculum into the Classroom (C2C)*. https://det-school.eq.edu.au/schools/index.php

Ellis, A.K. (2004). *Exemplars of curriculum theory*. Eye on Education.

Jameson, E., & Bobis, J. (2023). Modelling curriculum reform: A system of agents, processes and objects. In: Shimizu, Y., Vithal, R. (eds) *Mathematics Curriculum Reforms Around the World. New ICMI Study Series*. Springer, Cham. https://doi.org/10.1007/978-3-031-13548-4_27

Janesick, V.J. (1999). A journal about journal writing as a qualitative research technique: History, issues, and reflections. *Qualitative Inquiry*, *5*, 505-524. https://doi.org/10.1177/107780049900500404

Kurz, A., Elliott, S.N., Wehby, J.H., & Smithson, J.L. (2010). Alignment of the intended, planned, and enacted curriculum in general and special education and its relation to student achievement. *Journal of Special Education*, 44(3), 131-145. https://doi.org/10.1177/0022466909341196

Mockler, N., & Stacey, M. (2024). Outsourced curriculum planning to reduce teacher workload: Tracing the evolution of a policy solution. *Curric Perspect, 44*(4), 567–571. https://doi.org/10.1007/s41297-024-00280-9

Moore, N., Coldwell, M., & Perry, E. (2021). Exploring the role of curriculum materials in teacher professional development. *Professional Development in Education*, *47*(2–3), 331–347. https://doi.org/10.1080/19415257.2021.1879230

Poulton, P. & Mockler, N. (2024). Early career primary teachers' curriculum-making experiences: Enablers and constraints to knowledge-led forms of curriculum-making. *Curriculum Journal, 35*(1), 20-37. https://doi.org/10.1002/curj.225

Remillard, J., & Heck, D. (2014). Conceptualizing the curriculum enactment process in mathematics education. ZDM Mathematics Education, 46, 705-718. https://doi.org/10.1007/s11858-014-0600-4

Remillard, J. T., & Reinke, L. T. (2012, April). *Complicating scripted curriculum: Can scripts be educative for teachers?* [Paper presentation]. American Educational Research Association Meeting 2012, Vancouver, BC, CA. https://icubit.gse.upenn.edu/sites/default/files/RemillardReinkeAERA2012.pdf

Reid, A. (2005). *Rethinking national curriculum collaboration: Towards an Australian curriculum*. Australian Government, Department of Education, Science and Training.

Ross, E. (2017). *An investigation of teachers' curriculum interpretation and implementation in a Queensland school* [Doctoral dissertation, Queensland University of Technology]. QUT ePrints. https://doi.org/10.5204/thesis.eprints.107049

Ross, E. (2024). Teachers' interpretation of curriculum as a window into 'curriculum potential'. *The Curriculum Journal, 35*(1), 38-55. https://doi.org/10.1002/curj.239

Sherin, M., & Drake, C. (2009). Curriculum strategy framework: Investigating patterns in teachers' use of a reform-based elementary mathematics curriculum. *Journal of Curriculum Studies*, *41*(4), 467–500. https://doi.org/10.1080/00220270802696115

Shulman, L.S. (1983). Autonomy and obligation: The remote control of teaching. In L. Shulman & G. Sykes (Eds.), *Handbook of Teaching and Policy* (pp. 484-504). New York: Longman.

Solomon, P. (2009). *The curriculum bridge: From standards to actual classroom practice* (3rd ed.). Corwin Press.

Stacey, M., Gavin, M., Fitzgerald, S., McGrath-Champ, S., & Wilson, R. (2024). Reducing teachers' workload or deskilling 'core' work? Analysis of a policy response to teacher workload demands. *Discourse: Studies in the Cultural Politics of Education, 45*(2), 187-199. https://doi.org/10.1080/01596306.2023.2271856

Superfine, A. C. (2008). Planning for mathematics instruction: A model of experienced teachers' planning processes in the context of a reform mathematics curriculum. *The Mathematics Educator*, *18*(2), 11.

Wilson, R., Stacey, M., & McGrath-Champ, S. (2020). *Teachers' work during the COVID-19 pandemic: Shifts, challenges and opportunities*. Work and Organisational Studies Discipline.

Yin, R.K. (2012). *Applications of case study research* (3rd ed.). Sage.