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Professional Learning in Reading Instruction: The Influence of Context on Engagement and Enactment

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Abstract: Professional learning is widely acknowledged as an effective way to improve teacher practice and, consequently, student outcomes. However, this presupposes a direct link from professional learning to the enactment of the content of professional learning in teaching. This paper explores teachers' engagement with a continuing professional learning (CPL) program intended to improve teachers' knowledge and practice in reading instruction. Six case study subjects, self-selected from 10 schools participating in a year-long CPL program, provided the opportunity to explore what teachers enacted from the professional learning. This research highlighted the significance of contextual factors on how teachers engaged with and enacted information from the CPL. Contextual factors included individual beliefs about reading instruction and the expectations of the systems in which they are operating. This research emphasised the need to identify the personal and professional contexts of teachers involved in CPL programs in order to more effectively influence practice.

Keywords: reading instruction, context, continuing professional learning, teacher change, teacher knowledge, teacher beliefs

Professional Learning

Professional learning is widely acknowledged as an effective way to improve teacher knowledge and change practice (Darling-Hammond et al., 2017a; Ingvarson, et al., 2005) and failure to access professional learning is considered to be of concern for the quality of teaching practice (Organisation for Economic Co-operation and Development [OECD], 2009). It has been asserted that professional learning provides the means to bridge the research-to-practice gap (Jensen, 2010). However, there are various forms of professional learning from group presentations, in which information is presented to participants in order to inform their practice, to iterative processes where learning is enacted and reflected on to guide further practice. The latter has been consistently identified as more effective than the former (Darling-Hammond et al., 2017b; Fullan, et al., 2006; Timperley, 2011). Increasingly, the terms Professional Learning (PL) and Professional Development (PD) are being used interchangeably in the literature, with PL being increasingly used to refer to what was previously considered PD, the one-off presentation of information. The term continuing professional learning (CPL) is used in this paper to describe activities that involve teachers in

ongoing learning in a specific area, including multiple professional development (PD) activities, and opportunities to implement information from the PD into practice and evaluate the outcomes over time. Changing teacher practice has been identified as a complex process occurring over weeks, months or years, rather than resulting from a discrete professional development session (Loucks-Horsley et al., 1998; Sugrue, 2008). As such, CPL has been shown to be more effective in supporting teachers' development than other forms of professional learning (Darling-Hammond et al., 2017; Fullan et al., 2006; Timperley, 2011).

Engagement in Continuous Professional Learning

Understanding how teachers engage with CPL, and what elements have the greatest impact on their level of engagement, is an important consideration in developing programs that will deliver beneficial outcomes (Christie, 2009; Timperley, 2011). Context has been identified as a significant influencing factor in the outcome of CPL (Louws et al., 2017; Opfer et al., 2011); but Boylan et al. (2018) warn against the conceptualisation of context as a fixed setting in which the CPL takes place. They suggest that it is not separate to the other influential factors and that conceptualising it as such fails to acknowledge the dynamic interplay of factors occurring during CPL. As Greene, et al. (2001) assert:

Our work is conducted in natural settings, where history and context matter, where human behavior traces complex patterns of influence and relationship, where what is meaningful to those in the setting is both phenomenological and structural, arising from both lived experiences and the societal institutions that frame and shape those experiences. (p. 25)

In examining the differences in engagement with professional learning, Boylan et al. (2018) recommend applying multiple theoretical constructs to understand the influences of context on this engagement. In their research they drew on Bourdieu's (1986) concept of capital, figured worlds (Holland et al., 1999) and systemic coupling (Orton & Weick, 1990) to identify the influence of contextual factors on engagement. The relative advantage of schools, a teacher's personal context, and the history and culture surrounding the school and the content of the CPL were all identified as factors that influenced engagement. Aspects of teachers' personal context that have been identified as influencing engagement with CPL include: career stage (Richter et al., 2014); concerns (Hall & Hord, 2001); agency (Vähäsantanen, 2015); beliefs, including whether teachers see the need to change, believe the change will have an impact on student outcomes, and think change is worth the effort; and existing knowledge and skills in the focus area of the CPL (Buckingham et al., 2013). Relevant to the CPL being reported on in this paper, teachers' beliefs about reading instruction have been shown to have a significant impact on what strategies and approaches they select when designing learning opportunities (Cunningham et al., 2009). The literature on teachers' beliefs also indicates that they can be so strongly held that teachers are resistant to change in the content and delivery of curriculum even when they are presented with evidence that contradicts their practice (de Lemos, 2005; Slater & Nelson, 2013; Smith & Shepherd, 1988; Westwood, et al., 2005). This has been shown repeatedly in the literature on approaches to reading instruction (Chall, 1967, 1983; Cook et al., 2017; Pearson, 2004).

Reading Instruction in Schools

The most effective way to teach reading has been a contentious issue for generations (Flesch, 1955) with the different approaches to reading being underpinned by different

theoretical beliefs. The approach referred to as systematic synthetic phonics is more closely aligned to behaviourist views of learning, which have been widely criticised in contemporary educational literature, while the whole language or meaning-based approaches are aligned with the more popular constructivist beliefs of learning.

The increased focus on improving students' reading outcomes has led to national enquiries in several countries including the National Inquiry into the Teaching of Literacy (NITL) in Australia (Rowe, 2005), the Rose Review in the United Kingdom (Rose, 2006, 2009) and the Report of the National Reading Panel in the United States of America (National Reading Panel, 2000). These enquiries have unanimously endorsed the need to teach phonics to beginning readers. Despite the additional funding to schools in response to these reviews, recent national reports and reviews of literacy in Australia suggest that there continues to be significant numbers of children at risk of reading failure (Ainley & Gebhardt, 2013; Australian Curriculum Assessment and Reporting Authority [ACARA], 2017; Hempenstall, 2016; Meeks, et al., 2014). Australia's performance in the 2016 Progress in the International Reading Literacy Study (PIRLS) indicated that the reading skill of Australian students had improved by 20 points since 2011 but was still lower than the average scores for 13 other countries and there was no change in the percentage of children who failed to reach the lowest benchmark (Thomson et al., 2017).

Current instructional practices have been identified as a significant factor in the poor reading performance of Australian students (Buckingham et al., 2013; Hempenstall, 2016) and it has been asserted that teachers are not being adequately prepared to teach reading (Meeks & Kemp, 2017; Rowe, 2006; Washburn et al., 2011). Inaccurate conceptualisations of how to teach reading are frequently attributed to poor reading outcome and has engendered vigorous debate among researchers and educators (Castles et al., 2018; Cook et al., 2017; Pearson, 2004; Treiman, 2018). Contemporary debates about how to teach reading revolve around whether to use phonics on a continuum from embedded phonics, where sound-symbol relationships are taught incidentally through the reading experiences that are primarily for the purpose of information or pleasure not skills development; analytic phonics, where children identify the common phoneme in a group of words or text which contains the phoneme under study; to synthetic phonics, where individual letter sounds are taught in an order that facilitates early blending. Some critics of synthetic phonics focus on a perceived lack of distinction between decoding and reading in the research on reading instruction, suggesting that phonics should be taught with an emphasis on meaning and context if students are to develop good reading skills (Davis, 2013). However, this misrepresents the model of reading applied by proponents of systematic synthetic phonics as this includes both decoding and comprehension, with the contribution of each component changing as the reader becomes more proficient (Gough & Tunmer, 1986).

Synthetic phonics programs are also designed around the pedagogy of explicit instruction as both the content and the method of delivering has been shown to have a significant impact on students' performance (Hollingsworth & Ybarra, 2009; McGeown & Medford, 2013). Research has identified that students who receive decoding instruction via a synthetic phonics approach, for example; Project Follow Through (Becker & Engelmann, 1978) and The Clackmannanshire studies (Johnston & Watson, 2005), have better outcomes in other areas of reading development and, generally, the research supports the use of explicit systematic synthetic phonics as the most effective approach to teaching decoding (Archer & Hughes, 2011; Buckingham et al., 2013; Castles et al., 2018; de Lemos, 2013; Engelmann & Carnine, 1991; Johnston et al., 2012; Moats, 2000).

Wolf (2013), in supporting explicit and systematic instruction in phonics, argues that "an understanding of several basic principles about how the brain learns to read renders any such debate anachronistic, and more importantly, points the way in education to more

comprehensive methods and practices” (p. 3). Although reading researchers appear to have reached a consensus on the importance of phonics in effective reading instruction, evidence-based practice in teaching phonics is far from the norm in Australian schools. Buckingham et al. (2013) point to the ‘research-to-practice’ gap (p. 21) as a significant factor in teachers’ inability to teach reading effectively, suggesting that classroom teachers do not have the time or expertise to engage with the research in order to identify necessary changes in practice.

Conceptual Framework

The design of the CPL, drawn from the literature on effective professional learning (Fullan et al., 2006; Timperley, 2011), included engaging the teachers in identifying the students’ and their own professional needs and improving teachers’ pedagogical content knowledge (PCK) in teaching reading through an ongoing cycle of implementing their learning, assessing the impact on students and reflecting on practice. It was posited that a reciprocal relationship exists between teachers’ pedagogical content knowledge about reading instruction, their beliefs about how children learn to read, and how they respond to the content of the professional learning. In this conceptualisation, professional development, as part of the professional learning process, has the potential to influence beliefs directly, but beliefs also have the potential to influence how teachers engage with the professional development. Similarly, teachers’ existing PCK can influence how they interpret the information in the professional development but can also be altered by the information presented. The interplay between a teacher’s beliefs and PCK can be seen in classroom practice and it is through classroom practice that PCK is further developed. Children’s performance is also seen as an influential factor in professional learning (Timperley, 2011). The outside context band in this conceptualisation is informed by Bronfenbrenner’s systems theory (Bronfenbrenner, 1994) and includes the macro, exo and meso systems. At the macrosystem level is Australia’s social and cultural values in relation to learning generally and reading specifically. The exosystem level includes government policies and curriculum documents, while the mesosystem includes local family and community expectations and the school’s philosophy relating to teaching and curriculum priorities.

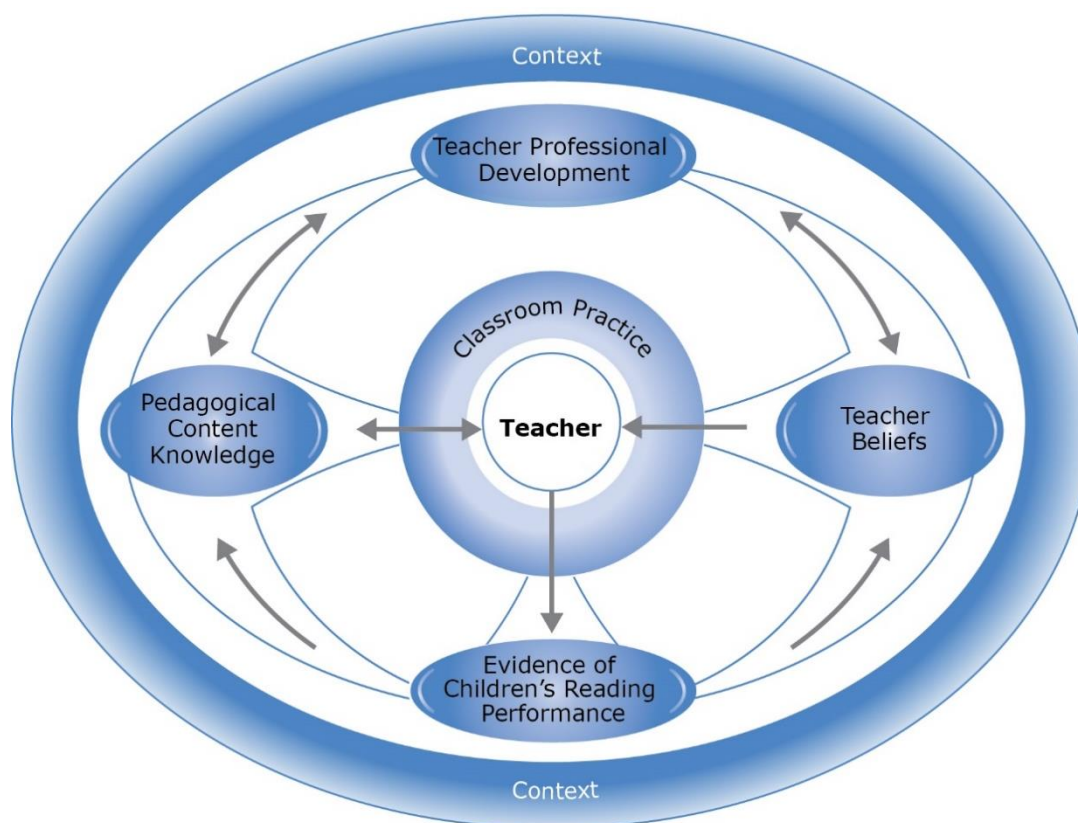


Figure 1: Conceptual framework for continuous professional learning

Research Context

This purpose of the research was to identify the factors that influenced teachers' engagement with a CPL program designed to support teachers to use evidence-based practice in reading instruction for Year 2 students. The CPL involved 49 teachers in 10 schools in an Australian capital city and the impetus for the program was concerns about poor National Assessment Program – Literacy and Numeracy (NAPLAN) results in reading at the participating schools.

The initial session of the CPL provided the opportunity for the CPL facilitators and the teachers to discuss what they hoped to achieve with the CPL and identify what might be needed to achieve these outcomes. Teachers were also presented with information on the current research around effective reading instruction and were encouraged to select an approach to teaching that aligned with this research. The CPL facilitators were aware that the approaches they were advocating were different to those advocated by the State's Department of Education at this time and were careful not to criticise existing practice. The facilitators were available to discuss possible approaches with the school with the intention of supporting teachers to implement evidence-based practices, while being respectful of their current teaching practices. Another professional development session was held to provide teachers with training in how to administer and interpret reading assessments. Throughout the CPL course, the facilitators were available for in-school consultation regarding interpretation of assessment data, planning and teaching, modelling teaching strategies and feedback on teaching observations. Literacy coaching was considered an important component of CPL and schools were encouraged to arrange coaching opportunities for their staff, but this was not a requirement of involvement in the CPL and very few teachers requested this support.

The purpose of the research was to identify the factors that influenced teachers' engagement with, and enactment of, the content of a CPL focused on improving reading instruction. In order to provide rich data on the phenomena being studied, a case study approach was adopted.

Methodology

Participants

All of the teachers involved in the CPL were invited to participate as case study subject in the research. Six teachers from three schools volunteered; two participants per school. All participants were female with a range of teaching experience, which was broadly representative of the population of 49 from which they were drawn. Anna, Beth and Clara were between 26 and 35 years old. Anna and Beth had been teaching between three and five years while Clara had been teaching between 6 and 10 years. Beth and Clara graduated with Bachelor of Education (Primary) while Anna was awarded a Graduate Diploma in Education (Primary). Alana was between 36 – 45 years old and had been teaching for more than 10 years after graduating with a Bachelor of Education (Primary). Bonnie was between 46 and 55 years old and had been teaching over 10 years. Carol was over 56 years old and had been teaching for more than 15 years. Bonnie and Carol did not supply their level of qualification. It could be assumed that the teachers who volunteered to be engaged in this research were confident in their teaching ability and/or willing to engage in the CPL.

Research Approach

A case study approach was employed to gain an insight into how specific teachers engaged with the CPL experience and to identify factors that supported and inhibited their enactment of the content. Case studies provide rich data on specific phenomenon in specific contexts (Lincoln & Guba, 2002; Yin, 2009) and Yin (2009) asserts that "the case study's unique strength is its ability to deal with a full variety of evidence" (p. 11). For the case studies in this research, this evidence included pre- and post-surveys, questionnaires, classroom observations and interviews with the teachers. The convergence of data from a variety of sources allows for triangulation within the data gathered and reduces the likelihood of data being misinterpreted (Denzin, 2002; Stake, 2013). Employing this approach enabled the researcher to explore the teachers' reactions to their CPL experiences and the impact it had on their practice. Consistent with the National Staff Development Council suggestion that it is necessary to gather information on how teachers' attainment of new knowledge and skills impacted on their teaching over time (Christie, 2009), data were collected from the case study teachers over an 18-month period; the 12 months in which the professional development sessions occurred and the first six months of the following year.

Ethics

The nature of case study research creates a unique relationship between the researcher and the participants. The researcher was interested in participants' personal stories; therefore, a high standard of ethical conduct is required. The researcher was careful to address concerns such as privacy, informed consent and anonymity as well as being mindful of minimising disruption to the physical setting and to the teachers' work. Respect for the participants was

also crucial and the researcher involved the participant in checking the accuracy of the reporting, attempting to anticipate any repercussions of the research, and ensuring results did not advantage one group over another (Creswell, 2013). Informed consent is based on participants having a clear understanding of the purpose of the research and their role in this research. To ensure that this was the case for all participants, letters were sent to principals, teachers, and parents informing them of the type of data to be collected, analysed, and reported, as well as of the potential uses of these data. Participants were informed that they could choose to withdraw at any time without giving a reason and with no negative consequences. As per university requirements, all research data are confidential and transcripts, observational notes and electronic files were stored securely and destroyed in accordance with the Australian Code for the Responsible Conduct of Research.

Instruments

Interviews and Observations

The purpose of the CPL was to support teachers to include evidence-based approaches in their reading instruction and the research sought to identify whether this was achieved by gathering information on teachers' practice through classroom observations, field notes and interviews. The *Literacy Practices Guide* checklist (Konza, 2012) and audio recordings were used in classroom observations to provide information about the literacy-learning environment, and the type of instruction being implemented by the teacher. Observations were undertaken by the researcher twice per school term and took place first thing in the morning, when literacy blocks were scheduled and explicit instruction of reading skills ideally occurs. Semi-structured interviews were conducted after each observation with questions relating to classroom practice and the factors that influenced whether teachers used approaches recommended in the CPL in their classrooms. Field notes, recorded after observation sessions, provided additional information including 'hunches' that the researcher wanted to explore and information provided by the teacher before or after the classroom observations. The digital recordings of interviews were transcribed and analysed utilising an inductive approach (Creswell, 2013). These classroom observations and interviews were used to elicit information about actual practice (Cunningham et al., 2009) and were subjected to repeated reading and constant comparisons in order to identify emergent themes.

Questionnaires and Surveys

The DeFord (1985) *Theoretical Orientation to Reading Profile* (TORP) questionnaire was administered pre- and post the CPL to compare changes in teachers' beliefs pertaining to teaching reading. The TORP uses a Likert scale 1-5 response system to determine the teachers' theoretical orientation to teaching reading and categorises teacher responses into three broad approaches to reading instruction; a decoding perspective, a skills perspective and a whole-language perspective. DeFord (1985) described the decoding perspective as systematic and controlled for phonemic consistency, thus it is aligned to a systematic synthetic phonics approach advocated in the CPL and described above. In a skills perspective there is also instruction in letter-sound correspondence; however, this tends to be based on the vocabulary used in classroom books, the emphasis is on analysing whole words, and the major word attack skill is looking for common patterns (DeFord, 1985). So, while the skills approach focuses on a number of useful skills, it does not emphasise the importance of systematically teaching decoding skills in reading development and is, therefore, more closely aligned with the analytic or embedded phonics approach. The whole language

perspective focuses on quality literature through which students develop an understanding of texts (DeFord, 1985). The TORP's currency and validity have been questioned (Cunningham et al., 2009) in part because teachers may respond to questions on the basis of approaches currently being promoted rather than their actual practice. Nevertheless, it continues to be used in studies (Bos et al., 2001; Hammond, 2015; McCutchen et al., 2002) as it provides a measure of theoretical orientation from which to compare classroom practice.

A post *Program Evaluation Questionnaire* (PEQ), based on the work of Ingvarson et al. (2005), was used to identify teachers' perception of the impact of the CPL program. The PEQ asked teachers to rate the impact of the CPL on their capacity to teach reading and on student outcomes using a five-point scale (ranging from 1 = *strongly disagree* to 5 = *strongly agree*) for each of the items. The 14 items were divided into sections on change in their practice for reading instruction, improved reading outcomes for students and teacher's sense of self-efficacy for teaching reading. The researcher was able to compare data from these different sources of information to explore the relationship between the content of the CPL, the teachers' beliefs about reading and the impact of the CPL, and their teaching practices.

Findings

Interviews and Observations

Observations of classroom practice and discussion of these observations with the teachers elucidated the extent to which the teachers implemented the content of the CPL. In School A, observation of Anna and Alana's classroom practice indicated that they made changes over the course of their involvement in the CPL that were consistent with the CPL's content. Anna and Alana taught in an open plan classroom and programmed collaboratively. The school's approach to literacy included using the *First Steps* literacy materials (Annandale et al., 2004), supported by the state's education department, as well as resources from a private provider that were based on systematic introduction of phonics concepts. Compared to initial observations of their practice, their later instruction included elements of explicit and systematic synthetic teaching of phonics as well as more explicit teaching of skills and the use of metalanguage as a teaching tool (see Tab. 1 and 2).

Activity	Emphasis (approach underpinning the activity)
Students reading text aloud	Fluency
Students struggling to read a word were directed to look at the sounds in the word to help them decode it	Phonics (embedded)
'Sound Hunters' involved the students scanning the text to find words with the /k/ sound. Students were reminded that the sounds could be spelt in different ways and could be in different positions in the word: for example, cat, king, duck	Phonics (analytic)
Recalling prior knowledge of spelling rules to support spelling activity	Grammar (embedded phonics)
Spelling, 'Look, Say, Cover, Write, Check'	Graphophonic (analytic phonics)

Table 1: Anna's teaching of reading observed at the beginning of the CPL

Activity	Emphasis (approach underpinning the activity)
Syllable clapping phonological awareness as part of a systematic synthetic scope and sequence	Phonological awareness (systematic synthetic phonics)
Difference between syllables and sounds phonological awareness as part of a systematic synthetic scope and sequence	Phonological awareness (systematic synthetic phonics)
'Sound Hunter' – syllables phonological awareness as part of a systematic synthetic scope and sequence	Phonological awareness (systematic synthetic phonics)
'Sound Hunter' - adjectives	Vocabulary
'Sound Hunter' - plurals	Grammar (analytic phonics)
Spelling - Recalling prior knowledge of 'ea' spelling of the /e/ sound as part of a systematic synthetic scope and sequence	Orthographic knowledge (systematic synthetic phonics)

Table 2: Anna's teaching of reading observed in the year following the CPL

Similarly, in the final observation of Alana's literacy session, explicit approaches to teaching phonics that had not previously been observed included directing students to identify specific sounds in their reading and using counters to indicate the number of sounds in a word when introducing new vocabulary. They had changed the sequence in which letters were introduced from alphabetic to the SATPIN order, indicative of a systematic synthetic approach to reading instruction, where students are taught the letters in a sequence that enables them to read words within the first week of instruction (/s//a//t//p/). There was another clear indication of change in Anna's knowledge of reading instruction when, during an interview with the researcher, she questioned the advice provided by the school psychologist on the teaching of consonant blends. She demonstrated her new knowledge about teaching this concept by highlighting the error in the recommendations made by another professional. Both Anna and Alana reported changes in their beliefs about what children were capable of understanding, including the metalanguage of literacy. Anna was observed to refer to vowel digraphs and split digraphs and it was clear that students understood these terms and were able to use them to discuss specific letter sound relationships.

In School B, the school's approach to literacy was predominantly guided by the First Steps literacy materials. Beth and Bonnie taught in separate classrooms on different sides of the school grounds. Beth reported that she was able to use more effective teaching and learning strategies, but did not believe the CPL made any difference to her knowledge or practice in reading instruction (see Tab. 3). This was supported by the lack of observed changes in Beth's practice over the course of the CPL.

Activity	Emphasis (approach underpinning the activity)
Recalling prior knowledge	Phonics (analytic)
Word hunt	Phonics (analytic)
'Look, Say, Cover, Write, Check'	Graphophonic knowledge (analytic phonics)
Sentence types and punctuation	Grammar
Think-pair-share	Listening and speaking

Table 3: Beth's teaching of reading throughout the CPL and into the following year

There was also no observable change in Bonnie's teaching approach (see Tab. 4), which was based on an analytic phonics approach to teaching reading. The decoding instruction in Bonnie's teaching of reading was consistent with the CPL's overall emphasis, but was not based on a specific sequence of letter introduction to support reading (e.g. SATPIN). Therefore, it was not consistent with the systematic synthetic phonics approach advocated in the literature and presented in the CPL.

Activity	Emphasis (approach underpinning the activity)
Reading notices	Vocabulary and Phonics (analytic)
Riddle	Fluency and Phonics (analytic)
Shared reading (natural language text)	Vocabulary
Guided Reading (rotation) - Levelled texts	Fluency and phonics (analytic) and whole language meaning-based strategies
Independent reading (rotation) - Levelled texts	Whole language meaning-based strategies

Table 4. Bonnie's teaching of reading throughout the CPL and into the following year

School C had a literacy support program utilising a systematic synthetic approach that was successful in improving the reading skills of the students accessing it and the kindergarten to Year 2 teachers were familiar with the program content. Carol also stated that the approach to teaching reading being advocated by the CPL was consistent with her beliefs about reading acquisition and had prompted her to reintroduce the use of a synthetic phonics resource that had been in her cupboard for a number of years. She used these materials when working one-on-one with students prior to the start of the day and parent helpers were also given the readers developed for this program to work with selected students. For Carol, it would seem that the CPL reactivated her existing practice for teaching reading (see Tab. 5 and 6).

Activity	Emphasis (approach underpinning the activity)
Reading with individual students	Fluency and phonics (analytic)
Shared Reading (natural language texts)	Fluency and vocabulary
Spelling as part of a systematic scope and sequence	Orthographic knowledge (analytic phonics)

Table 5: Carol's teaching of reading observed at the beginning of the CPL

Activity	Emphasis (approach underpinning the activity)
Whole class instruction in sounds as part of a systematic synthetic scope and sequence	Phonics (systematic synthetic)
Shared reading	Vocabulary and phonics (analytic)
Spelling as part of a systematic scope and sequence	Orthographic knowledge (analytic phonics)

Table 6: Carol's teaching of reading observed in the year following the CPL

Clara, in School C, reported that she did not need to change her practice, as children experiencing reading difficulties could access the withdrawal program, but that the CPL did make the approaches being used by this program clearer to her. As a result of this, she felt she would be able to teach reading skills explicitly if the additional support was not available. This belief is only partially supported by observations of her practice later in the year and in the following year in which she was including some explicit instruction of letter sound knowledge into her spelling instruction (see Tab. 7 and 8). Observations indicated that her knowledge of linguistic concepts was not extensive and this limited her ability to explain reading and spelling misconceptions to students.

Activity	Emphasis (approach underpinning the activity)
Reading	Comprehension and vocabulary development
'Look, Say, Cover, Write, Check'	Graphophonic knowledge (analytic phonics)
Writing	Comprehension and vocabulary development

Table 7: Clara's teaching of reading throughout the CPL and into the following year

Activity	Emphasis (approach underpinning the activity)
Reading	Comprehension
'Look, Say, Cover, Write, Check' (general)	Graphophonic knowledge
'Look, Say, Cover, Write, Check' (specific students)	Graphophonic knowledge (explicit instruction of phonics)
Writing	Comprehension and vocabulary development

Table 8: Clara's teaching of reading observed in the year following the CPL

Questionnaires and Surveys

Teachers' beliefs about reading instruction are important because they impact on what strategies and approaches they select when designing learning opportunities (Cunningham et al., 2009). The DeFord (1985) TORP survey was used to identify teachers' theoretical orientations to teaching reading and provide information on teachers' beliefs about what constitutes effective practice in reading instruction. The expectation was that teachers would align more closely with the decoding perspective on the TORP by the end of the CPL, as they were presented with research on the efficacy of approaches consistent with this perspective and support to use these approaches in teaching. However, pre- and post-CPL scores for all but one of the case study teachers indicated that they had moved further away from the decoding perspective over the course of the CPL (Tab. 9).

To understand this trend, it is relevant to consider the educational milieu at the time of this research as this provides an explanation for the teachers' responses on the TORP. At the time of the research, the State's education department had only recently moved from a whole language approach to the use of a 'balanced approach' to reading instruction (Department of Education (WA), 2010). The 'balanced approach' favoured at the time of this research was more aligned with the skills approach on the TORP than the decoding perspective and, it could be argued that, teachers responded to the CPL and the TORP on the basis of these system-wide expectations. The system-wide expectations could also be seen as an inhibiting factor for the use of explicit instruction as this was seen as a special education intervention rather than a whole class strategy. It was not until several years after the CPL had concluded that the Department began advocating for an explicit approach to teaching in regular classroom settings and, specifically, the requirement to provide "instruction in synthetic phonics in the early years" (Department of Education Western Australia, 2016, p. 3). Consideration also needs to be given to the influence of teachers' personal or entrenched beliefs about teaching (Argyris & Schön, 1974; Pajares, 1992) leading to confirmation bias (Kenrick et al., 2018). When presented with information about explicit and systematic approaches to teaching reading, some case study participants viewed this through their existing beliefs about reading instruction. Bonnie provides an example of this. Her response to the CPL was positive and she reported that the approach to teaching advocated in the professional development sessions was consistent with her beliefs about reading instruction. However, the approach that she was observed using was an analytic phonics approach, rather than the systematic phonics instruction advocated in the CPL. Beth reported that she was able to use more effective teaching and learning strategies as a result of the CPL, but continued to see systematic synthetic phonics instruction as an intervention strategy for children with difficulties learning to read, rather than a whole class strategy.

In the PEQ and final interview, completed at the end of the CPL, the case study participants responded positively to questions about the impact of the CPL, with the exception of Beth (see Tab. 9). Anna and Alana responded positively to the impact of the CPL on their knowledge and confidence but were less confident about the impact it had on their students' outcomes. Similarly, Bonnie's lowest response was to the impact of the CPL

on her students' outcomes but her overall ranking was also lower. Beth's overall ranking of the CPL was the lowest but her belief that student outcomes had improved was the highest. She attributed student improvement to parents/carers seeking additional support for children identified as reading below their peers on the testing conducted at the start of the CPL. Carol and Clara reported similarly positive outcomes across all areas. While Beth's less positive responses on the PEQ could reflect an understanding that the CPL did not change her practice, it is more likely that this is linked to her unmet expectations of the CPL. Beth explained that she thought one of the facilitators of the CPL would come in regularly to work with students experiencing reading difficulties and was disappointed that this support was not available.

Teacher	Program Evaluation Questionnaire mean /5	TORP* Beliefs about reading instruction	
		Pre	Post
Anna	3.7	64	74
Alana	3.9	62	71
Beth	3	86	96
Bonnie	3.5	82	81
Carol	4	65	70
Clara	4	74	75

Table 9: Case Study Teachers' Survey Results

Notes: * 0 - 65 points indicate a decoding perspective; 66 - 110 points indicate a skills perspective; 111 - 140 points indicate a whole language perspective

Responses on the PEQ were mixed with limited correlation between the content of the CPL, observed practice and theoretical orientation to reading instruction. In the interviews, all participants stated that they were teaching reading more explicitly and systematically, even though the classroom observations suggest that there was minimal change in practice for some of these teachers. This suggests that the teachers were not able to accurately evaluate the impact of the CPL on their practice and had differing interpretations of the characteristic of explicit and systematic synthetic phonics instruction than those intended by the CPL facilitators. This highlights a lack of alignment between what the CPL facilitators' intended to deliver and the interpretation of this content by some of the case study teachers.

Career stages have been suggested to impact on different perceptions of professional learning and different concerns relating to the implementation of changes in practices (Christou et al., 2004; Hall & Loucks, 1978). Huberman's (1989) stage model of professional practice provides a framework for understanding the engagement of teachers but, as he acknowledges, teachers can be at different stages than their years of teaching suggest. Bonnie and Carol had been teaching for more than 10 years and both expressed the opinion that they learnt little from the CPL and it would have been more suitable for graduate teachers. Alana, who had also been teaching for more than 10 years, did not express any concerns about the appropriateness of the CPL and readily engaged with the content. Anna and Beth, both teaching between three and five years, were confident in their teaching practices, but had markedly different levels of engagement with the CPL. Clara, who had been teaching longer than Anna and Beth, seemed to be at the same stage of professional practice. She was positive about her involvement in the CPL but appeared to make limited changes to her practice. Simply considering the career stage of participants did not provide an explanation of how they engaged with the CPL and enacted the content.

What the analysis of the case studies did suggest was that, in the schools where some of the practices advocated in the CPL were evident, teachers were more likely to attempt to integrate systematic synthetic phonics instruction in their practice. Further, when teachers valued the knowledge presented in the CPL they were more engaged and more likely to

change practice. In school A, Anna and Alana were open to the suggestions and support offered by the CPL facilitators. They requested additional contact with the facilitators and were willing to trial approaches recommended to them. In contrast, Beth and Bonnie reported that, during meetings of the literacy leadership group at school, there was criticism of the content and delivery of the CPL and the school did not seek additional support from the CPL team. There was no discernible change to Beth and Bonnie's practice over the course of the CPL, although Bonnie was already using some evidence-based practice in her classroom. The school context of Carol and Clara presented a different environment. The teachers at this school were supportive of the CPL and felt they had much to offer the other CPL participants. One of the key features of the teachers in this school was confidence that their withdrawal programs provided the instruction necessary to improve students' reading skills. The approach used in this program was aligned with the approaches advocated by the CPL and, therefore, there was a positive relationship between these teachers and the CPL team. However, the impact of having this support within the school was that Clara did not see the imperative to integrate more systematic reading instruction into her whole-class teaching of reading.

Limitations

When examining phenomena in real world settings like schools, tracing the patterns of influence is complicated. There are numerous factors that can influence teacher practice and student outcomes. This paper focuses on the impact of failing to address the influence of context. The use of observations, interviews and surveys provided different sources of data from which to explore how teachers engaged with the content of the CPL and enacted the recommended strategies in their practice, but there are limitations to these approaches. Self-report measures have been criticised for being unreliable (Onafowora, 2005) as teachers can be reluctant to articulate beliefs that may be considered unpopular or dated, and some may not have the ability to express their beliefs (Gess-Newsome, 2002). Additionally, when asked to report on their practice, teachers may report using practices that are promoted as effective practice, rather than their actual practice (Bos et al., 2001). Interview responses can also be influenced by what the teachers think the researcher wants to hear. Observations of classroom practice can serve to verify the participants' responses in interviews and surveys, but this approach also has its limitations as observations are undertaken at specific points in time and may not reflect the full range of teachers' practices. Limitation of the research also included self-selected participants although, in this situation, it could be argued that participants who volunteered to be part of the research were willing to engage with the CPL.

Review of Findings and Recommendations

This research highlights the challenge associated with delivering CPL designed to change the reading instruction of Year 2 teachers. Despite incorporating the features associated with effective CPL in the program, the change in teacher practice was inconsistent. The facilitators failed to appreciate the significance of the existing beliefs about teaching reading being promoted in the state in which the CPL was delivered, that is, the strength of the influence of context. Some researchers recommend that CPL should involve teachers being challenged and supported to explicitly examine their own knowledge and beliefs (Bransford et al., 2000; Timperley, 2011). They suggest that if beliefs are not suitably challenged, teachers may incorrectly perceive their current practice to be consistent with that

being advocated by the CPL and, therefore, make little or no change to their practice (Bransford et al., 2000). However, the literature also recommends working collaboratively and respectfully with teachers (Stoll et al., 2012). Walking this line proved to be difficult and ineffective in the CPL reported in this paper. In reconceptualising the development of CPL for curriculum areas where pedagogical approaches are contested, as it is in reading, the influence of context must be acknowledged including the significant impact of government policies and curriculum documents and the prevailing beliefs about teaching reading in schools.

Recommendations for those delivering CPL to in-service teachers on reading instruction, or other contested curriculum areas, include being cognisant of the contextual factors and explicitly addressing these in the initial professional development session with participants. During this session, CPL presenters need to respect the knowledge and experiences that teachers bring to the CPL and identify the current beliefs and practices of the participants. Where pedagogical approaches differ from those being promoted in the CPL, clear evidence for the need to ensure practice is aligned to the CPL recommendations is required. CPL presenters often rely on the research literature as justification for changes in practice, but teachers are notoriously resistant to utilising research in their practice (Buckingham et al., 2013). Joram et al. (2020) suggest that, in relation to high stakes teaching areas such as reading, this may be attributable to concerns about the certainty that the research findings can be applied to their classroom. Therefore, including evidence from teachers already implementing these recommendations, including examples of classroom practice, throughout the CPL may be a more beneficial approach than the traditional reliance on the research literature to address differences in beliefs and practice.

Concluding Comments

Professional learning is often advocated as a panacea for all that ails the education system and the teachers who work within this system are held responsible for making the changes necessary to revive the system. Reading is consistently identified as a specific area in need of improvement, and this has led to an emphasis on PL in reading instruction for teachers. CPL is a complex process, and while the models of CPL currently being advocated contain vital elements required for success, it is fundamentally about individuals and the way they engage with the experiences offered to them. Hence, the complex influence of context on engagement is often not fully appreciated by the CPL facilitators leading to less than satisfactory outcomes.

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