


Pedagogical choices to integrate theory and practice: Conceptualisation and insights for literacy teacher education

**Author:**Zelda Barends¹ **Affiliation:**

¹Department of Curriculum Studies, Faculty of Education, Stellenbosch University, Stellenbosch, South Africa

Corresponding author:

Zelda Barends,
zbarends@sun.ac.za

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Background: The theory and practice divide is a persistent conundrum in teacher education. Moreover, foundation phase literacy teacher education is no exception because such graduates are expected to acquire knowledge and skills to address the challenges of the classroom.

Objectives: This article focuses on the application of an integrated approach to literacy teacher education.

Method: This conceptual article is structured to reflect how common pedagogical choices such as service learning, situated learning, reflection, and student support were used to design and enable integrated student learning experiences within teacher preparation programmes.

Results: By exploring the educational value of these pedagogical choices that informed the integrated approach, I developed an integration framework to inform the pedagogy of literacy education.

Conclusion and contribution: The integration framework reflecting the catalytic pedagogical choices could guide teacher educators regarding the approaches to address the persistent conundrum in overcoming the theory and practice divide in teacher preparation programmes.

Keywords: pedagogical choices; theory and practice divide; integrate theory and practice; literacy teacher education; pre-service students.

Introduction

The question of which instructional strategies should be employed to integrate theory and practice needs to be addressed to contribute to meaningful learning experiences for pre-service students. Learning to teach is a complex activity that is premised upon the acquisition, integration, and application of different types of knowledge practices (Department of Higher Education and Training [DHET] 2011:10) to develop and supply skilled instructional practitioners (Ball & Forzani 2011:18). To supply these skilled practitioners, teacher education programmes are professional programmes offered at higher education institutions and consist of two core components: coursework and work-integrated learning (WIL). Practical learning which refers to learning from and in practice is a component of WIL and a vehicle that teacher education programmes could use to help student teachers to develop tacit knowledge which is an essential component of learning to teach (DHET 2015:10). Even though the Revised Policy on the Minimum Requirements for Teacher Education Qualifications states that practical learning should make provision for learning from and in practice, this policy does not describe how such learning could be emulated in courses. Nevertheless, it does link the learning of practice to WIL which is intended to enhance student learning by integrating formal learning (theory) and workplace learning (practice) (Barends 2015:65).

Appropriate pedagogical choices could enhance the quality of teacher education, an aspect that is questioned in literature as universities are still criticised for their unsatisfactory attempts to prepare teachers for the classroom, thus producing incompetent beginning teachers (Gravett 2012:2). Teacher education programmes are considered to be too theoretical and, as a result, teachers are not prepared for the reality of the classroom (Gravett, Henning & Eiselen 2011). These programmes appear to deal with the theory and practice division in two ways, one being the 'translating-of-theory-to-practice' approach (Gravett 2012:4). This simply means that theory is supplied in the coursework component of teacher education programmes and students then apply, implement, and test this knowledge through completion of assignments and practical experiences at school – the latter being the WIL component of the programme. This is a rather

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linear approach to teacher education. Another way in which teacher education programmes deal with the theory and practice divide is by simply increasing the practicum component of courses (Gravett 2012:4).

The gap between theory and practice has been a persistent issue. In fact, Korthagen (2011:32) asserts the relationship between theory and practice has remained the central problem of teacher education worldwide. According to Wubbels, Korthagen and Brekelmans (1997:76), the gap between theory and practice, or the difficulty to use or apply theoretical notions in classroom practice, exists because the context of practice differs from the context in which the theory was developed. In addition, theory is abstract and practice is concrete. Gravett (2012:4–5) notes that theory is the formal knowledge about ideas, declarative knowledge, or episteme while practice is the practical knowledge or knowledge of how to do the work of teaching, also known as procedural knowledge. Therefore, the National Council for Accreditation of Teacher Education (NCATE 2010:ii) suggests that teacher education must shift away from a norm that emphasises academic preparation (theory) and coursework loosely linked to school-based experiences (practice). Instead, it should move to programmes that are fully grounded in practice and interwoven with academic content. A growing body of evidence shows that student learning should take place in university lecture halls as well as be situated in workplaces and communities (Barends 2015:65). Due to the current reality of the disjuncture between context of theory and practice, educational theory as taught in teacher education programmes seldom gets a place in the practical teaching process.

The preparation of pre-service teachers should be approached with rigour and intentionality (Darling-Hammond et al. 2019). Moreover, literacy teacher education should be no different. Research in literacy teacher education has shown that teacher education programmes ought to connect coursework with contexts as pre-service teachers need not only to demonstrate the mastery of content and pedagogical knowledge but also to have extensive opportunities to enact their knowledge in practice settings (Feimen-Nemser 2001:1016). Furthermore, teacher education programmes should move away from programmes that are focused on what pre-service teachers need to know to a curriculum that is organised around core practices where knowledge, skills and professional identities are developed in the process of learning (Grossman, Hammerness & McDonald 2009:274).

Pre-service teachers should be exposed to learning opportunities where the focus is on skills, knowledge, and reflection. Taking guidance from Grossman et al. (2009) and in an attempt to lessen the separation between theory and practice I had to explore the pedagogical choices I needed to make within my teaching so that pre-service literacy teachers can master content and knowledge of teaching as well as enact this knowledge in practice and in essence integrate their learning and, in doing so, disrupt the linear approach to literacy teacher education. Since little is known about how

literacy teacher educators are connecting fieldwork and coursework, I argue that an integrated student learning approach for the preparation of pre-service literacy teachers is needed to respond to the theory and practice divide.

The purpose of this article is to explore the educational value of the pedagogical choices that informed a teaching initiative which led to integrated student learning within the literacy context. Beyond illustrating the scholarly decisions that influenced the design of the initiative and describing the student experience based on researcher reflections, this article proposes a conceptual framework to provide a strategy to integrate theory and practice by delving into the theory used to understand the pre-service literacy student teacher learning.

This conceptual article is organised into two sections culminating in the presentation of the integration framework. In the first I provide the background to the pre-service literacy teacher initiative and then illustrate how action learning was used as a lens to clarify the learning of the pre-service literacy teachers. In the second section I examine the pedagogical or scholarly decisions that informed the initiative and illustrate how the pre-service literacy student teachers learnt as a result of this learning experience.

Background: Description of the initiative

As a language and literacy education lecturer in the Foundation Phase Bachelor of Education (BEd) programme at a research-intensive university, I became increasingly aware that the programme was not preparing the pre-service literacy student teachers to become effective teachers of language and literacy. As a response to this, I developed an integrated learning initiative that forms part of a final-year language and literacy education module. This module is positioned within the Foundation Phase BEd programme which is an initial teacher education programme of which the primary purpose is to certify beginner teachers' teaching. These teachers are responsible for laying the foundation for 5–9-year-olds' literacy, mathematics, and beginning knowledge learning.

My initial goal was to adapt my teaching approach to address the theory and practice divide in teacher education programmes. I therefore planned and implemented the teaching initiative which resulted in the addition of a service component to the language and literacy module. This module aimed to equip students with the knowledge and skills required to use children's literature and teach literacy and language to Afrikaans home language users. Teachers of literacy have the responsibility to facilitate learning so that learners are taught to read and write. By implication, these teachers need to develop competence in teaching the essential literacy skills such as phonemic awareness, phonics, vocabulary, fluency, and comprehension (Department of Education 2008:12; eds. Snow, Burns & Griffin 1998). This module thus provided pre-service literacy students with an opportunity to engage in a situated, authentic teaching experience at a primary school in the vicinity of the university for 11 weeks.

Pre-service literacy student teachers ($n = 78$) worked in pairs which allowed them to form a co-teaching relationship. Each pair was assigned a group of learners ($n = 10$) and spent two afternoons in the workplace, an authentic context where Foundation Phase learners (Grades 1–3) are taught. During this time students could practise and develop their teaching repertoire for the teaching of phonics, a core literacy practice (Ball et al. 2009). In doing so, both the learners and the students were exposed to a concrete learning experience which also alludes to reciprocity within the service learning context (Billig & Eyler 2003:14). This initiative was grounded in an ‘accommodating-relationship’¹ partnership established between a primary school and the university. What eventually emanated from this partnership is what Billig and Eyler (2003:14) refer to as a symbiotic relationship since the initiative enabled advantages for both partners.

Parallel to engaging in the teaching of unscripted phonics lessons (the community activity or service), reflection, which is a central principle to teaching and learning (Harford & MacRuairc 2008), played an integral role in the lecture hall. Reflection was used to help students make meaning of their real-life work experience. The co-teaching relationship also provided another space for meaning making and much-needed student support. Supervision and mentoring played an integral part of the new module structure. At times I adopted the role of supervisor and mentor for students engaging in the initiative. I used reflection to facilitate the pre-service literacy teachers’ translation of the educational theory of teaching phonics into practice. During these reflective conversations I placed the students’ practice at the centre of their learning and through a process of analysis, helped them to make meaning of their experience. This is an example of inductive teaching and learning, an epistemological position in learning where students’ experiences are central to their learning (Prince & Felder 2006). Moreover, considering how the various pedagogical approaches were used in this initiative, a non-linear approach to student learning evolved.

Research methods and design

Illustrating the pre-service literacy student teacher learning as a result of this initiative is an easy task as it demands a mere explanation of the processes employed. However, understanding the student teachers’ learning experience requires an analytical lens – a lens that enables the separation of the hidden layers in practical work. To obtain an understanding of their learning experience, the action learning cycle was employed to extract meaning and understand the students’ learning within the initiative.

Action learning

When engaging in action learning, one creates an opportunity to learn from good practice, and to develop new ideas and solutions (Marquardt 2004). Action learning was to me as

¹There is no formal partnership established between the university and the school; however the partnership that does exist is one based on accommodation – both partners accommodate while recognising the combined role they fulfil in teachers’ professional development.

lecturer-researcher (teacher educator) to map out the ways the student teachers learnt while engaging in the initiative. In doing so, I could develop a strategy to support future teaching and learning activities within teacher education programmes.

Reflection, which is an important step in the action learning cycle (Rhodes & Brook 2021:75), demands that one makes sense of and reflects on past or ongoing experiences in order to change future practice (Reynolds 2011:6). For the context of this study, it was imperative that I reflect on my own initiative and establish if and how it enabled student learning. Understanding this would inform how the initiative should be adapted to enhance student learning. As part of the action learning process, reflection was used to inform my learning (Marquardt 2004) – learning that would inform the pedagogy of teacher education programmes.

By engaging in reflection, I thought deeply about what I was doing and why. I kept a teaching journal where I noted my ideas and thoughts on concepts. This was done from the inception of the initiative. Consequently, the journal allowed me to go back and extract meaning while analysing the reflective notes, keeping in mind the ideas that emerged. There were three questions that guided my reflections:

1. What are the students learning while engaging in the initiative?
2. How are the students learning while engaging in the initiative?
3. How is students’ learning enabled through this initiative?

Thematic analysis guided the inductive coding and identification of themes (Ayres 2008:868). I read the journal to identify preliminary codes (Benaquisto 2008:88). Furthermore, I grouped these codes into broader themes according to the questions mentioned above. I had a very tacit role in this study as I was searching for meaning in my own experiment. Inevitably, I was both the researcher and research participant while analysing my own data. I often became lost in this process, but this is expected within qualitative research as the researcher has a multiplicity of roles and responsibilities which are often enacted simultaneously (Leckie 2008:771). However, I discussed the data with colleagues and inductively looked at themes related to pre-service literacy student teacher learning. These discussions, a means to determine trustworthiness (Miller 2008:910), afforded me an opportunity to critically engage with and explore the data while refining my thinking during analysis.

The action learning cycle which consists of four steps, namely act, reflect, learn, and plan (Garratt 2011:30), was used to formalise, direct, and structure my thinking processes about student learning as a result of the initiative. As mentioned, I adopted the role of researcher and participant in this study. This may be considered a limitation; however, I strived to ensure that ethical considerations such as data accuracy and anonymity (Denscombe 2007:141) were adhered to. Ethical clearance was obtained before collecting any data for the purposes of this study.

Discussion

To extrapolate the learnings of the pre-service literacy student teacher while participating in the integrated learning initiative, I had to examine the pedagogical choices that informed the initiative. What follows is a discussion highlighting the pedagogical value of the integrated initiative.

Pedagogical choices informing the initiative

The concerns about teacher quality (DHET 2015:15) and teacher education (Gravett 2012) influenced the decision to develop an integrated learning initiative. Integration refers to the process of putting together formal learning and productive work (Cooper, Orrell & Bowden 2010:40). In other words, connecting theory and practice as it involves the application of theory with real-world problem-solving, abstract thinking, practical actions, and discipline-specific skills or what Shulman (1987) defined as 'Pedagogical Content Knowledge' (Cantalini-Williams et al. 2014:5; Cooper et al. 2010:40).

Darling-Hammond, Bullmaster and Cobb (1995) describe integration by stating:

Effective teaching is context based and must be adapted to individual students. Successful teacher preparation must involve not only a foundation of theoretical knowledge but also a rich array of classroom experiences that help teacher candidates integrate their formal knowledge of teaching and learning with the knowledge of adaptive practice that can be gained only by working with the guidance of experienced teachers. (p. 95)

Integration is not simply an action but rather a learning process which is encouraged for student learning in the workplace and university classrooms. This should require students to put theoretical knowledge into action and develop the ability to act knowledgeably and responsibly in the workplace context (Cooper et al. 2010:40).

Developing integrated learning experiences is complex as it is driven by opportunities for students to apply their knowledge. All teacher education programmes include practicums, teaching practice, or practice teaching activities throughout their curriculum. During these instances, students are placed at sites to learn in and from practice. Turney et al. (1985) state that such activities should be carefully planned like campus-based courses with a clinical curriculum. To achieve this, WIL or practice experiences must be re-evaluated, coursework should be reimagined, and pedagogical approaches to teacher education should be reconsidered (Grossman 2010).

Teacher education programmes are criticised for their linear approach to student learning (Gravett 2012). The traditional approach to teacher education is that students learn theory and aspects of theory in the lecture hall and then test or apply this theory in practice during various teaching practice or WIL experiences. These tests are executed through activities such as the teaching of lessons, the development of teaching

and learning materials, and the writing of reflective reports while student performativity in teaching is assessed. Research has criticised this approach to teacher education seeing as teaching is complex and learning to teach can only happen if practical content knowledge is central to teacher education (Young et al. 2001:1).

The balance between what is required of teachers and what is offered to them has a significant impact on the quality of their teaching and their capacity to implement effective instruction (Young et al. 2001:1). With this in mind, I reflected on what pedagogical choices I had to make to facilitate the integration of theory and practice as well as how I structure my module to put practical content knowledge at the centre of my teaching. Accomplishing this would disrupt the linearity within teacher education programmes. Service learning, situated learning, reflection, and student support were integral pedagogical choices that made provision for the various convoluted dimensions at play regarding learning within teacher education.

Service learning

Service learning was integrated into the language and literacy module to place practical content knowledge at the centre of my teaching. This integration was not only informed by service learning being renowned to advance student learning in general, but also because it strengthens the students' ability to apply what they have learnt in the real world (Petker & Petersen 2014:125).

Service learning, premised on experiential learning, is a reflective, relational pedagogy that combines community or public service with structured opportunities for learning (Petersen & Osman 2013:6). Pre-service literacy students were placed in a situated learning space (a school environment) for 11 weeks. This learning space provided an authentic workplace where students engaged in the teaching of phonics lessons to Foundation Phase learners (addressing learners' phonic knowledge was a need identified by the school). Parallel to the 11-week service learning, students engaged in finding research-based answers for teachers' phonics-related questions in the lecture hall. Materials drew on topics covered by lecturers which include the relevance of teaching phonics, instructional routines, lesson components, and the assessment of phonics knowledge and skills.

The purpose of the module of which this initiative formed part is to equip students with the knowledge, skills, and methods needed to use children's literature and teach literacy and language in Afrikaans as a home language. The service learning was structured in such a way to make provision for a literacy programme that focuses on the teaching of phonics. The content covered in the lectures was driven by guided reflection and conducted through robust discussions. Through reflection, student learning was supported in that students were helped to make meaning from their experiences. The experience was therefore central to their learning and allowed them to be actively involved in contributing to their

own learning. This is what Morton (1996) calls a service-orientated approach to service learning. This approach also illustrates an example of an inductive approach to teaching and learning (Morton 1996:279) which addresses the critique against teacher education as the focus is placed on practice as opposed to theory only. By implication, the pre-service literacy students were constructing and discovering knowledge while engaging in a process where they discovered theory as opposed to being taught theory and then being instructed to apply it at a later stage.

The application of theoretical learnings to authentic or real-world situations was the initial goal that informed the planning and design of the initiative. However, adopting service learning as pedagogy afforded me an opportunity to draw on the value of situated learning experiences to inform student learning while recognising the complexity of teacher education.

Situated learning

As mentioned before, it is the norm for student teachers in teacher education programmes to be placed at external sites for practical work. It is encouraged to ensure that through these placements, student teachers gain teaching experience in a variety of school contexts to reflect the socio-economic and cultural mix of society (Deacon 2015). However, for this initiative the sole focus was not exposure to diversity, but rather student learning. Therefore, intentional decisions had to be made about student placement for optimal student learning.

Students were placed at the service learning sites to grant them access to authentic workspaces so that they could draw on concrete experiences for their learning. Situated learning allows for this as a situated learning space is one where learning and application thereof take place in the same location (Lave & Wenger 1991:29–30). Students were assigned to teach phonics to learners at their specific service learning sites. Thus, they were situated in a real-world environment with their peers in a co-teaching relationship. This led to the establishment of a community of practice. The community of practice was further expanded to include experts such as myself as the lecturer and facilitator of learning, as well as invited teachers from the service learning sites. As experts, we facilitated lecture sessions and supervised the work sessions at the sites which ran parallel to one another. The students, who had varying levels of expertise in the teaching of phonics, participated in the stipulated teaching and learning activities under our guidance. The weekly engagements were guided by carefully developed teaching and learning activities that considered students' expertise at the time, and this evolved as student expertise progressed. Moreover, students' participation evolved and their responsibility for the teaching gradually increased. Lave and Wenger (1991) define this as legitimate peripheral participation.

In the traditional, linear approach to teacher education, students would have abstracted theory by synthesising facts gained in the lectures and would then be expected to demonstrate their understanding of the theory by completing an assignment and applying this knowledge at practice sites.

However, within this initiative, participation in this real-world environment broadened their learning to focus not only on theoretical content knowledge, but also on the rich tacit knowledge needed for explicit phonics instruction. This environment provided students with real-world teaching and learning scenarios. The prolonged engagement intended to foster their assigned group of learners so as to capture the group's interest as their interactions for the 11 weeks would result in the students' better understanding of the theoretical knowledge. Students would therefore develop the ability to recognise patterns within the authentic learning space. Through guided reflection they could judge the validity and reliability of new information as they acquired it. Moreover, their perceptions could be challenged about learners and how they learn. This teaches students that teaching approaches need to be flexible to ensure that all learners learn. Students should be able to identify conceptual coherence and make strong links between theory and practice, a characteristic of a good quality teacher education programme (Council on Higher Education 2011:59).

Furthermore, the students were provided with an opportunity to observe, analyse, prepare, and teach a set of phonics lessons in an authentic and real-world environment while being situated in a context they would not usually choose themselves (Robinson 2014). This experience was used to help students reason in practice and experience unfamiliar school contexts (Robinson & Rusznyak 2020), thus drawing on the strengths of situated learning as a pedagogical choice. Reflection played an integral role in helping students to reason or make meaning.

Reflection

Placing practice and the student experience at the centre of student learning demanded a different presence from the student in their own learning. Reflection was used to enable students to make meaning of their experience as well as to get students involved in contributing to their own learning. For the context of service learning, Bringle and Hatcher (1999:153) explain reflection as a process in which service learners think critically about their experiences as they look back on the implications of their actions and determine what they have learnt or achieved.

Reflection should be a process in which students examine and interpret their experiences in order to learn from them. Reflection was iterative in this initiative as it took place at various stages. Within the co-teaching relationship students were asked to reflect on and document their experiences in narrative form. In the narratives, students had to describe their experiences of teaching the unscripted phonics lessons by referring to what they did and illustrate the extent of learner participation. These descriptive narratives were used as a stimulus for the reflective conversations that emanated in the lecture hall. The reflective process demanded that students be analytical as they had to analyse concepts, evaluate their experience, and hypothesise theory (Rusznyak & Walton 2011).

This process of analysis highlights the complex learning rooted in teacher education (Cooper 2007). Reflection was an enabler for this process. As the students analysed their experiences of teaching phonics (their data) they developed a need to find the facts, rules, procedures, and guiding principles, which they either found in their data or were helped to discover for themselves through their co-teaching relationship.

This critical reflective process allowed students to ask questions about aspects of their teaching, the authentic learning space and about content. Reflection was used to encourage students to talk about their teaching experience to show the 'what, how and why' of their teaching, thus creating opportunities for meaning making and reflective learning. The thinking behind this pedagogical choice was to create opportunities to have conversations that were theoretically robust (Loughran 2019). These conversations took place parallel to the students' teaching. Upon reflection, the conversations seemed to allow for changes in their understanding of concepts and theory. The aim of the conversations was to allow students to revisit their practice while building a knowledge base for teaching. This learning informed their future practice, a process that Shulman defines as pedagogical reasoning (Shulman 1987).

Reflection was not used as a straightforward and uncontentious teaching and learning tool. Instead, it was used deliberately as a pedagogical tool to integrate theory and practice. Being able to reflect on teaching is a fundamental practice for teachers (Biggs 2003; Boud, Keogh & Walker 1985). Initially, reflection was an abstract concept for the students but through focused engagement, they learnt its value. The students used reflection to critically analyse and evaluate their own practice while learning through each opportunity.

Reflection enabled both the students and I to inductively explore their experiences which in turn contributed to their learning. This gave rise to what Black and Plowright (2010:246) describe as reflective learning for professional practice. Reflection was used as an empirical method to build pre-service literacy student learning and develop professional practice which inevitably aimed to disrupt the linear approaches to teacher education. Furthermore, the students were actively involved and engaged in the abstractions of learning to teach phonics while situated purposefully within supportive relationships with peers, exemplifying collaborative learning (Johnson & Johnson 1999) and the social construction of knowledge (Smith 2001).

Student support

This initiative necessitated a unique way of student learning which was embedded in an authentic and real-world environment reliant on collaborative learning. Co-teaching, supervision, and mentoring were used as a collaborative learning strategy to support the student learning while students were actively engaged in a contextual (situated) learning experience.

Co-teaching: Linking theory and practice is an intricate process and cannot be achieved without purposefully scaffolding student learning. For this initiative, the student pairs had to share the responsibility of teaching the group of learners that were assigned to them. They had to plan together, teach together, and evaluate their own teaching. This purposeful co-teaching relationship was dependent on collaboration and served as student support.

Research has illustrated the value of collaborative learning (Johnson & Johnson 1999; Slavin 1996). Co-teaching may be considered an application of collaborative learning (Friend et al. 2010) as it is a creative way to connect with and support peers while learning (Villa, Thousand & Nevin 2013). Furthermore, in a co-teaching situation multiple activities can occur simultaneously. Students could play around with various teaching scenarios while teaching phonics such as differentiated teaching, teaching while the partner observes or assists, or team teaching (Cook & Friend 1995).

Students applied a combination of these approaches as they deemed necessary in their learner group situation. Some students taught their phonics lessons and were able to analyse their experiences. As the students learnt to reflect on practice by engaging in the reflection sessions hosted during the lecture period, they constantly explored and discussed their experiences. In doing so, they made meaningful abstractions of their experiences and choices within the authentic learning space. This would not have been possible had students worked independently and in isolation.

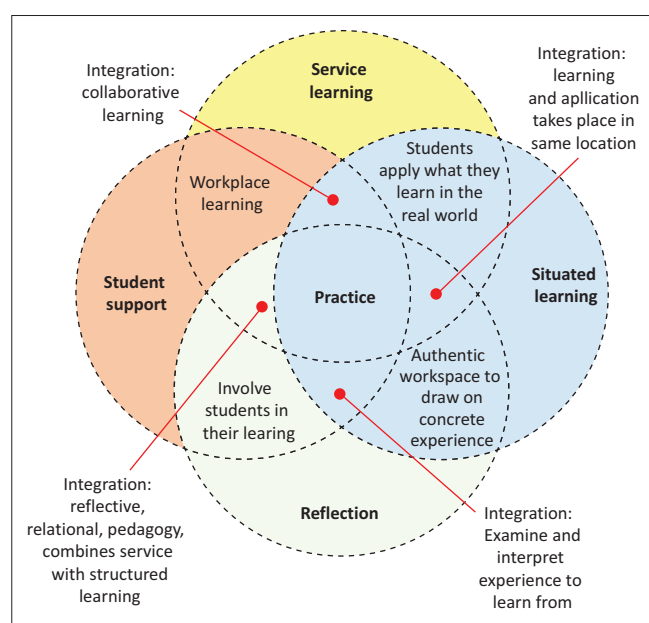
Co-teaching is usually drawn upon when a generalist (teacher) and a specialist work together to achieve an educational objective (Friend 2008:9). In this case, two novices worked together as equal partners who shared the responsibility towards obtaining a planned goal. The students managed the learning of the learners in their group as well as their own learning. The co-teaching relationship therefore enabled the students to be actively involved in their own learning, constructing their theoretical knowledge while reflecting and being situated in practice.

Supervision and mentoring: My reflection on this initiative suggests that the process could have been more efficient had the students been assigned a mentor teacher to supervise them with their group of learners and to help them make meaning throughout the process. However, sourcing such human capital within the boundaries of the initiative was difficult, and securing such help would speak to the ideology of teacher education. Teachers from the service learning sites did in fact supervise the work sessions at the sites; however, only nine teachers were available to support students by probing and encouraging their approach as well as understanding learner responses. Teachers also supported the novices to enact practices associated with teaching of phonics. These teachers were invited to the reflective conversations that happened on campus; however, the invitations were declined due to the teachers' own responsibilities.

Throughout the course of this co-teaching initiative, my role as lecturer evolved into supervisor and mentor. Students were presented with challenging experiences because of the situated learning space. Raised levels of anxiety and uncertainty were often noted among students during the lecture periods when they invariably first debriefed before being encouraged to reflect on their experiences. Research shows that students and workplaces require support before, during, and after practice-focused programmes.

Students needed support on how to approach learners as well as how to mitigate their expectations. Additionally, they needed ongoing support to navigate their way through this adapted approach to teaching and learning, since the nature of the learning was different to that to which they had become accustomed. Therefore, support was scaffolded through the weekly lectures and reflection sessions. Student mentoring was twofold: explicit guidance was given to students regarding what they had to do within the initiative and how this related to their campus-based coursework, and, during their reflection process, I tried to help students understand the learning process. The scaffolding of students' reflection allowed them to see the learning process holistically which meant I was able to help students identify good teaching practices associated with the teaching of phonics. As such they were not left to discover these lessons on their own (Darling-Hammond 2006).

In summary, this initiative used common pedagogical approaches such as service learning, situated learning, reflection, and student support to inform the pedagogy of a literacy and language education module that attempted to address the theory and practice divide. It was context-based and provided students with a prolonged opportunity of real-world experiences (see Figure 1). Structured and purposeful activities helped students to integrate their formal knowledge associated with the teaching of practice.



Adapted from Winn, M., 2014, *Ikigai Venn diagram. What's your Ikigai? The view inside me*, viewed n.d., from <https://www.performanceexcellencenetwork.org/pensights/finding-lifes-meaning-quest-discover-ikigai-pen-august-2017/>

FIGURE 1: Integration framework.

Figure 1 provides a framework of common pedagogical approaches used to inform the pedagogy of a literacy and language education module which attempted to address the theory and practice divide. This integration framework shows that adding service learning to the theoretical literacy and language education module presented an opportunity for practice to be placed at the centre of student learning. Because the service learning was actioned within a situated context, students could draw on their experiences to conceptualise knowledge for learning to teach phonics – a core practice for literacy teachers. Pre-service literacy student teachers had to document and analyse their experiences so as to better their understanding thereof. They had to put forward the ‘what, how and why’ of their teaching. Reflective conversations were used to facilitate this process, thus an inductive approach to teaching and learning was employed to enhance student learning. Considering that this is a different approach adopted within teacher education, it was imperative that the students be supported. Supervision and mentoring as well as the development of a co-teaching relationship served as a scaffold to student learning.

Integration is not simply an action but rather a learning process which is encouraged for student learning by considering the knowledge and practice of the workplace and university classrooms. Integration of learning is possible if purposeful reflection and carefully planned activities are incorporated (Cooper et al. 2010:40). For integration to be achieved, students should be required to put knowledge into action and develop the ability to act knowledgeably and responsibly in the workplace context (Cooper et al. 2010:40). While documenting the pre-service literacy student teacher learning experiences and integrating the reform of teacher education programmes with theory and practice, a framework emerged. The framework illustrates the educational value of service learning, situated learning, reflection, and student support as pedagogical choices to integrate theory and practice within a module in a teacher education programme. In addition, it highlights the convoluted dimensions at play and illustrates student learning within the literacy context while disrupting the linearity within teacher education programmes.

Conclusion

The preparation of teachers is a lengthy process which should be filled with high-quality learning experiences based on sound theoretical principles. Additionally, time should be allotted for the application of theoretical principles to practice, as well as for reflection on learning (Young et al. 2001:1). In this article I illustrated an integrated teaching and learning initiative which was planned as a high-quality learning experience as it was embedded within what Ball and Forzani (2009:503) consider a practice-focused curriculum for learning about teaching. The approach of this initiative disrupted the traditional, linear approach to teacher education.

The integration framework reflects the catalytic pedagogical choices that informed the initiative by combining service

learning, situated learning, reflection, co-teaching, and supervision as common pedagogical approaches within teacher education. This framework may enable teacher education programmes to move from common practice to good practice. Its pedagogical value encourages the integration of theory and practice. By relying on these pedagogical choices, attention could be drawn to the knowledge demands of teaching. Student learning was organised around practice. Students were afforded repeated opportunities to practice, carrying out the interactive work of teaching phonics – a core practice of literacy teachers. This granted students an opportunity to learn to teach by teaching and they did so by spending a prolonged period (11 weeks) in teaching practice embedded in a context that equates with the realities of the workplace. Learning in and through workplaces and communities was a determining factor in this initiative. Students learnt by teaching and not only by discussing the work of teaching.

For the purpose of this study, I drew on my reflections to clarify the learning of the pre-service literacy teachers. However, by gaining insight from the students' perspective of the initiative, as well as the assessment of students within the initiative, one could explore a different avenue to further inform teacher education programmes. By implication, based on the researcher's reflections, the findings of this study illustrated how the pre-service literacy student teachers learnt as a result of an alternative approach to teacher education programmes. The findings and the proposed integrated framework could inform the pedagogical choices to teacher education programmes and in so doing help bridge the theory and practice divide in teacher education programmes.

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Competing interests

The author declares that she has no financial or personal relationships that may have inappropriately influenced her in writing this article.

Author's contributions

Z.B. contributed to the design and implementation of the research, to the analysis of the results, and to the writing of the manuscript.

Ethical considerations

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