Contexts of work-integrated learning in schools for preservice teachers: Experiences of field placement in Zimbabwe

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Schools provide different contexts for pre-service teachers who are learning to teach under the guidance of mentor teachers as part of work-integrated learning (WIL). As a result, universities and teachers' colleges offer guidance to schools and classroom practitioners to ensure that pre-service teachers are provided with similar opportunities during WIL field experiences. This qualitative paper used semi-structured interviews, observations and document analysis to examine mentoring contexts in different classes, to gain a deep understanding of the mentoring practices, by using the socio-cultural-theory lens. The mentoring pair was used as the unit of analysis. The study analyzed three cases from Zimbabwean secondary schools with different mentoring contexts. Findings indicate that the contexts of WIL for pre-service teachers could be more conducive but are limited by the multiple roles of mentors and limited mentoring infrastructure and facilities. The paper recommends that pre-service teachers practice in different school contexts.

Keywords: Work-integrated learning, field experience, mentor teachers, pre-service teachers, Zimbabwean secondary schools

Schools provide different contexts for pre-service teachers who are learning to teach under the guidance of mentor teachers as part of work-integrated learning (WIL) in teacher education (Becher & Orland-Barak, 2018; Draves, 2013; Hudson, 2012). In some instances, the mentor and the pre-service teacher teach the same subjects in the same class. The pre-service teacher could be attached to one or more mentors, depending on different subjects allocated to him or her. The same applies to the mentor, who could be mentoring more than one pre-service teacher, depending on his or her teaching subjects at the school. If the mentor and pre-service teacher are teaching in different classes and, in some cases, different subjects, this could have implications for mentoring practices in terms of frequency of meetings and patterns of interactions (Helleve & Ulvik, 2019; Ramnarain, 2015). In some cases, the contexts of teaching differ at national level because the curriculum is decentralized, as revealed by the Wang (2001) study, which was carried out in the United States of America, United Kingdom and China. When the curriculum is centralized, the different contextual levels become more visible at the implementation stage (Chimbi & Jita, 2019). In a centralized curriculum, decisions concerning the curriculum design and content and its implementation processes are made by a central national unit usually housed in the ministry of education. Policy makers and the curriculum specialists who make all the important decisions are stationed at the central national office. On the other hand, in a decentralized curriculum, decision making is devolved to state or provincial structures to cater for the peculiar needs and conditions of the local community. The aim of this paper was to gain a deeper understanding of the context of mentoring at school level when the curriculum is centralized, to establish whether pre-service teachers are provided with the same opportunities to learn to teach during WIL in different secondary schools.

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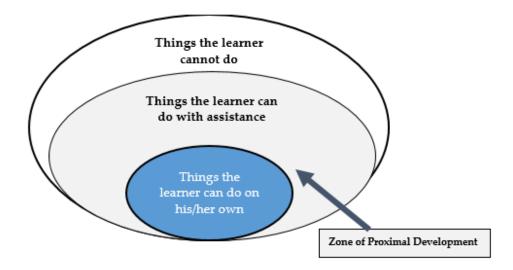
Schools differ, and have different cultures, which could be the result of certain factors, among which are leadership, the caliber of the learners or the location of the school (Helleve & Ulvik, 2019). The teaching practices at the school will also be related to the mentoring practices, as the mentors are teachers and the pre-service teachers are mentees who come to learn to teach in the mentors' classrooms as they are inducted into the school's practices and processes (Ramnarain, 2015; Reese, 2016; Yuan, 2016). Within these classes, there are also bound to be differences in the way they are organized for learning. The mentors could have different beliefs, goals and roles in relation to teaching and mentoring (Ambrosetti, 2014; Becher & Orland-Barak, 2018). The mentor is there to provide support to the mentee and to present situations in which the mentor models classroom instruction by working alongside the mentee and observing the mentee in action (Ambrosetti, 2014). In WIL contexts, the mentor has many roles, including providing regular supervision and assessing and teaching the pre-service teacher. In this study, during field placement, the mentors were not required to assess the pre-service teachers as this role is for university lecturers and other school-based supervisors such as the head of school, deputy head and heads of departments. The context relates to how, when and where the mentoring takes place. This study examined contexts of WIL in secondary schools for preservice teachers using their field placement experiences.

The contexts of WIL field experience refer to the environments and conditions that exist in schools where pre-service teachers are offered opportunities to learn to teach under the guidance of qualified teachers. The environment at a school comprises of the physical structures and the school climate that pre-service teachers experience during the period they are attached to teacher mentors. In this paper, WIL refers to the form of educational pedagogy that combines theoretical and practical knowledge that pre-service teachers utilize when they are in schools (Batholmeus & Pop, 2019). WIL provides opportunities for pre-service teachers to develop career-long learning skills, specific teaching competencies, and class-orientated managerial skills that enhance professional identity development (Zegwaard et al., 2019). These processes create contexts of mentoring for pre-service teachers during WIL field experiences in schools as the pre-service teachers put into practice their theoretical knowledge in a real classroom situation. At university, pre-service teachers complete module courses in philosophy, psychology, sociology, management, information and communication technology and teaching subject methodology as part of their education curriculum. In the last semester of the Zimbabwean teacher education curriculum, pre-service teachers are placed in schools under the guidance of selected mentors for field work. During the field placement, which is some form of WIL, pre-service teachers are expected to integrate theory from their module courses with classroom practice in a purposefully designed university curriculum (Dollinger & Brown, 2019). The selected mentors are experienced, qualified teachers and are expected to submit at least two reports to the host university on the professional development of their mentees, in addition to providing formal and informal mentoring sessions throughout the semester. Under the guidance of different mentors, the pre-service teachers are expected to have different experiences of WIL in schools (Gravett & Jiyane, 2019). Therefore, the current paper examines the contexts of WIL with reference to field experiences during mentoring of pre-service teachers that took place in secondary schools. The main research question was: How do pre-service teachers experience contexts of WIL during field placement?

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The theoretical framework for this paper was Vygotsky's socio-cultural theory, which is anchored on the tenets of social interaction: the more knowledgeable other and the zone of proximal development (ZPD) (see Figure 1).

FIGURE 1: Zone of Proximal Development (ZPD).



Note: Adapted from "Teaching mixed-level classes with a Vygotskian perspective," by M. Bekiryazici, 2015, Procedia-Social and Behavioral Sciences, 186, 913-917. CC BY-NC-ND.

During WIL, social interaction plays a critical role in the professional development of pre-service teachers as learners. In the case of pre-service teachers, social interaction occurs among classroom practitioners, where the pre-service teacher does things on their own with the help of the mentor teacher as the more knowledgeable other, enabling the pre-service teacher to move through the ZPD and carry out the tasks that they cannot do by themselves (see Figure 1). Through social interactions, pre-service teachers' experiences enable them to, initially, depend on others for guidance, before they gradually understand the context in which they can apply the knowledge as they learn to teach. The pre-service teacher depends on the mentor teacher, as the mentor provides emotional and technical support to the pre-service teacher (Ambrosetti, 2014; Son & Kim, 2012). The mentor assumes various roles during the interactional mentoring process, such as the practical and pedagogical aspects of teaching through discussions, reflections and feedback sessions, with the aim of assisting the preservice teacher to develop effective teaching skills (Ambrosetti, 2014; Greve et al., 2020; Usher, 2019). The assumption is that the mentor, as the more knowledgeable other, will provide more professional support if he or she is properly trained for the task of being a mentor teacher.

The pre-service teacher operates within the ZPD during field experiences. The ZPD represents the difference between what a pre-service teacher could do on his or her own, and those things he or she could not do, even with the assistance of the more knowledgeable other (the mentor teacher) (Shooshtari & Mir, 2014). The more knowledgeable other is expected to take the pre-service teacher from a lower level to a higher level within the ZPD. The more knowledgeable other provides opportunities to support the pre-service teacher to develop his or her teaching competencies through scaffolding, which resembles a technique of gradual withdrawal of support by the more knowledgeable other in the mentoring process, as the pre-service teacher gains confidence in the teaching process (Bekiryazici, 2015; Trif, 2015). Therefore, in this study, we explored the kind of support given to preservice teachers as they are given opportunities to combine the theoretical and practical knowledge that shape organizational contexts during field placement.

Organizational context relates to how teaching is organized and structured (Jaspers et al., 2014), for example, learners could have a special room for certain subjects. This would require that class movements are organized in such a way that learners are orderly and do not disturb learning in other classes. The pre-service teacher could be supported in organizing the learners for learning, and in the actual delivery of the lesson (Abiddin & Hassan, 2012). This kind of support in mentoring could be more suited to a specific context of WIL field experience that involves use of specialist rooms and movement of learners. This particular context could promote or influence specific classroom practices or routines.

Classroom practices are the instructional processes that take place in the classroom as part of the teaching and learning activities that are facilitated by the teacher's classroom management strategies, so that the learners acquire new knowledge, skills, values and attitudes (Li & Oliverira, 2015). However, instructional processes may be affected by certain factors that are situated either within or outside the classroom. One of the factors could be the mentoring process. Pre-service teachers' classroom practices are guided by the mentor; the mentor assists the mentee to learn how to teach (Denis, 2015). Classroom practices could also be affected by the availability of the mentor teacher during the pre-service teachers' lessons – this could have implications for the pre-service teachers' development of a teacher identity (Izadinia, 2015). Therefore, this study aims to understand how various contexts of WIL experienced by pre-service teachers shape classroom practitioners' practices during field experience.

Each context of WIL is likely to have its own limitations. The assumption is that the mentor, as the more knowledgeable other, would be aware of contexts that suit each setting. This assumption could have implications for the mentor's level of confidence in mentoring and the mentoring contexts that offer more enriched opportunities for the pre-service teacher. In support, Batholmeus and Pop (2019) argued that in WIL in teacher education, mentors lack confidence to pass on practical skills to their mentees and would benefit from practical upskilling interventions. The lack of confidence of mentors can be improved using various forms of professional development programmes in WIL. Furthermore, Gravett and Jiyane (2019) argue that the confidence of mentors can be boosted by them being exposed to a variety of schools ranging from under-resourced to well-funded schools. The theoretical framework guiding this study also assumes that the mentor takes his or her mentee to the next level in the ZPD (Shooshtari & Mir, 2014). However, in the absence of formal training in mentoring (Shumbayawonda, 2011), the current study sought to understand the contexts of WIL that were available to pre-service teachers as mentors supported and guided their mentees to reach the 'i+1' level explained by Krashen's (1982) input hypothesis theory (as cited in Bekiryazici, 2015).

The 'i+1' theory, also referred to as Stephen Krashen's input hypothesis, states that learning takes place in the ZPD on an incremental basis (Bekiryazici, 2015). In the theory, 'i' represents the pre-service teacher's present competence, and 'i+1' refers to competence that goes slightly beyond the pre-service teacher's current level. The small amount of new knowledge signified by '+1' takes the pre-service teacher to a new, higher level in the ZPD. The current study establishes the significance of the '+1' that is added to pre-service teachers' repertoire of teaching competence during mentoring, even though mentors were not specifically trained for the task. Nonetheless, any additional teaching competence during WIL signifies a new level in the ZPD. Therefore, the current study needed to explain why the new levels after the '+1' were different for pre-service teachers who were mentored in the studied contexts of WIL in secondary schools.

METHODOLOGY

This paper was part of the PhD thesis by the co-author (Muyengwa, 2018). It adopted a qualitative research approach using multiple case studies (Creswell, 2014). The three selected secondary schools enabled the researchers to investigate the organization of teaching and learning programmes at different schools, as well as participant and WIL contexts during the mentoring process (Yin, 2017). The three participating schools included: a rural single-session day school, a rural double-session day school, and a boarding school. A single-session day school has a single stream of classes, whereas a double-session day school has two streams of classes that alternate using the same classrooms during the day. The design enabled the researchers to interact with the pre-service teachers, who were paired with classroom teachers as their mentors. The schools provided different contexts for WIL in terms of type, size and participants, and the researchers gathered participants' views on the mentoring process while observing mentoring sessions at the schools.

During school visits, data was generated while pre-service and mentor teacher participant pairs were observed; participant pairs were also interviewed to gain insight into the mentoring contexts. A semi-structured interview with each pair guided the dialogue, so that it remained focused on the mentoring process during the data collection process (Leedy & Ormrod, 2013). During a period lasting five months, from July to November 2017, we conducted interviews and analyzed policy documents to understand the diversity in contexts of WIL, and to cross-check findings as part of methodological triangulation to ensure the credibility of the study (Clark & Ivankova, 2016). Interviews were audio-recorded and transcribed verbatim before content analysis was done. Observations and participants' responses were coded and classified into categories of different themes.

A purposive selection technique was used to choose the participants, who comprised three pairs of preservice teachers and their respective mentors from a population of 340 Postgraduate Diploma in Education students at one large university in Zimbabwe. The pre-service teachers were on field practicum in their final semester as part of their WIL at secondary schools. The selected pre-service teachers were experiencing the mentoring process, were considered information rich, and were expected to enable the researchers to obtain a deep understanding of the contexts of WIL in the participating secondary schools (Yin, 2009). All selected mentors had mentored pre-service teachers for at least three years and were also information rich.

Considerations relating to ethical issues included approval by the university's ethical clearance research committee, informed consent, voluntary participation, and anonymity and confidentiality, to protect the participants and the schools (Leedy & Ormrod, 2013). As a result, we used pseudonyms to protect the identity of participants and schools who participated in this study. The Zimbabwe Ministry of Primary and Secondary Education granted permission to conduct the research at the participating secondary schools. The limitations of this qualitative study are that the findings are unique to the schools and pre-service and mentor teachers who participated in this study. However, descriptions of the research settings and context enable the transferability of this study's findings (Creswell, 2014).

Table 1 below summarizes the three cases being presented for analysis under each of the stated subthemes. It presents details of the research sites and participants, depicting all their variations. The table also shows the mentoring pairs, their teaching designations and weekly teaching loads. The pre-service teachers were expected to teach daily as they were being provided with WIL opportunities that prepared them for authentic classroom practices and processes (Goldhaber, 2019).

TABLE 1: Summary of cases.

CASE	1	2	3
School	A	В	С
Mentor teacher (MT)	Zhou	Dhewa	Bhila
MT's age in years	41	50	55
Pre-service teacher (PST)	Mary	Rollo	Caesar
PST's age in years	27	28	32
Type of school	Single-session school	Double-session school	Boarding school
Teaching department	Sciences	Commercials	Mathematics
MT's designation(s)	Head of school, HOD¹ and subject teacher	HOD and subject teacher	HOD and subject teacher
PST's designation(s)	Student teacher and Chess Club coach and patron	Student teacher and ICT Club patron	Student teacher and form teacher
MT's teaching load (Number of periods per week)	24	28	18
PST's teaching load (Number of periods per week)	10	26	28

¹Note: HOD – Head of Department

FINDINGS AND DISCUSSION

To fully answer the research question in this section, the contexts of WIL, mentoring practices and preservice teachers' classroom practices, along with the relationship between mentor teachers (MTs) and pre-service teachers (PSTs) as mentees in school-based mentoring in Zimbabwe, needs to be described. The summary for each main theme to be discussed is displayed in Table 2 below.

TABLE 2: Summary of Findings and discussion

School	Source	A	В	С
(MT & PST pair)		(Zhou & Mary)	(Dhewa & Rollo)	(Bhila & Caesar)
The Contexts of Work-Integrated Learning	School type	Single-session school	Double-session school	Boarding school
	MT justification	Understanding of personal PST context, subject specialization	Mentoring specialist skills and experience	Excelled in public examinations
	MT other roles	HOD and head of school	HOD at two schools	HOD
Mentoring Practices During Field Experience	Meeting times	In the afternoons and/or delegated to other teachers	Before or after school hours	During evening study times
	Type of meetings	Informal and mostly interrupted	Informal and mostly initiated by PST	Formal and included checking of files
	Resources	Under-resourced with no modern technology	Adequately resourced with few modern technological tools	Well-resourced and included modern technology
Enhancing Pre- Service Teachers' Classroom Practices	Assistance	Observation and discussion	Received comments	Received comments with illustration
	Teaching methodologies	Supervision report applauded use of learner-centered methodologies	Through reflection learned the interactive methodologies	Supervision report indicated teaching well done and both parties agreed to have engaged during reflection discussion

The Contexts of Work-Integrated Learning

Table 2 above shows paired mentors and pre-service teachers in three schools A, B, and C. In School A, Zhou justified his own appointment as the mentor by saying: "Besides teaching the same subject, I have the relevant mentoring experience and understand Mary's situation better as she has other teaching duties at the nearby school." Subject specialization is important in mentoring, as the mentee needs to be guided in subject content during WIL at schools (Reese, 2016). At School B, Dhewa was of the view that her appointment as mentor was justified: "I have done this mentoring before ... I can now use my experience to mentor these pre-service teachers." Previous experience may equip a mentor with some of the specialist skills required by mentoring. Bhila was appointed as a mentor based on the excellent results he produced working with pre-service teachers in the past three years. He had also proved to be a good teacher by producing learners who excelled in public examinations. Bhila was one of the

good teachers who also excelled as a mentor. However, literature reports that not all good teachers are good mentors, because mentoring is more complex than teaching as it requires more specialist skills than teaching (Feiman-Nemser, 2001; Garza & Harter, 2016). We argue that good teachers with relevant subject specialization provide a conducive context for WIL for pre-service teachers. Subject-specialist teachers can easily relate subject content to practical knowledge as they support and guide pre-service teachers during WIL in schools. WIL aims to provide real-work learning experiences that the pre-service teacher would experience in schools as they marry theory and practical knowledge in real classroom situations (Zegwaard et al., 2019). The support that mentors provide also relates to pedagogical knowledge that enhances the professional growth of the mentee (Marimo, 2014). The newly added competencies in teaching could be considered as the "+1" in Stephen Krashen's input hypothesis, as the pre-service teacher has moved to a higher level in the ZPD.

The way teaching was organized at the schools meant there were different contexts for WIL during mentoring. For example, (boarding) School C had more time and resources for the mentoring pair to interact. This differed from School B, which operated with double sessions and classes that literally shared the learning time and learning facilities. In the last case, School A, a single-session school, with single-stream classes that were not well resourced, saw mentoring sessions being conducted in the head of the school's office. Consequently, there were frequent interruptions to mentoring sessions by other stakeholders who sought the services of the head of the school. The differences in the pairing of mentors and pre-service teachers, school resources that were availed for mentoring, organization of teaching programmes, time for mentoring, and the monitoring of pre-service teachers, epitomize the differences in contexts of WIL experiences at secondary schools.

Mentoring Practices During Field Experience

All the mentors were HODs who combined supervisory, mentoring and teaching duties. They mentored pre-service teachers when they had no classes to teach. During their 'free' time mentors attended to their other administrative duties. Therefore, 'free' time was not free time for the mentors. Of the three mentors (see Table 2), Zhou had more duties than the other mentors, since he was also the head of the school, in addition to being an HOD. As a result, Zhou resorted to scheduling Mary's mentoring sessions in the afternoons, though some of these sessions were still interrupted by school visitors.

To avoid mentoring sessions being interrupted, Rollo noted that they ended up having most of their mentoring discussions before and after school lessons. We also observed that these mentoring sessions were informal, and it was the pre-service teacher who initiated the discussions, because he needed guidance on how to handle specific teaching tasks. The way the teaching and learning was organized at School C allowed the mentoring pair of Bhila and Caesar more time for mentoring. Caesar explained some of their mentoring routines: "On some days I must consult my mentor before the start of the day's lessons as he may be busy throughout the day. The other advantage is that he checks my WIL file daily." Caesar considered the checking of his WIL file daily as a mentoring practice that enhanced his professional growth (Garza & Harter, 2016).

Resources played a fundamental role in influencing mentoring practices during field experience. For example, we observed that School B was bigger and better resourced than School A. As a result, Rollo was exposed to more resources and supervision styles and he interacted with more teachers than Mary did. School C was the best resourced of the schools, and the pre-service teacher made greater use of modern technology in his lessons, such as overhead projectors, computers, whiteboards and videos.

The mentoring pair at this school had more opportunities to make use of a variety of instructional media during WIL field experiences, including modern technology gadgets. Consequently, Caesar suggested "Mentoring practices should take advantage of the modern information technology so that there is constant interaction among the lecturers, mentors and pre-service teachers. Interaction among these key players would provide an innovative way of improving mentoring practices in schools." Caesar realized that some opportunities had been missed, as mentoring practices seemed to have failed to take advantage of the modern technology available at the school during his WIL field experience.

In all the cases, the mentors were eager and willing to assist the pre-service teachers. However, the mentoring pairs faced challenges, which included non-availability of some teaching resources, lack of time for mentoring, and shortage of offices to use for mentoring sessions. Comparatively, the schools faced the challenges on different scales, which, in turn, presented different contexts that yielded different mentoring practices.

Enhancing Pre-Service Teachers' Classroom Practices

Mentoring schools assisted the pre-service teachers to improve their classroom practices in different ways. This assistance related to mentoring tasks in which the mentors were seen interacting with colleagues, monitoring pre-service teachers, and reflecting on practice focused on improving pre-service teachers' classroom practices during WIL.

Schools in this study supported pre-service teachers' classroom practices in various ways. At School A, Mary explained how she was supported in her classroom practices:

When I teach the mentor observes some of the lessons and I have been assisted on how to make use of learning media and small groups during teaching. The mentor also provided a lot of guidance on the assessment of students using exercises and tests. In the beginning, I was not quite sure of how practicals were to be used to assess students' learning as I was poor on time and class management.

The arrangement that existed in the school, whereby a person was assigned to guide the pre-service teacher, and the mentoring pair then deciding to observe and discuss the lessons to improve Mary's classroom practices, is evidence of support. At School B, Rollo reported that he made use of his mentor's comments to improve his classroom practices: "I am now able to formulate measurable and specific objectives. Even the lesson development stages are now much detailed and reflecting content in the content column of lesson plans." With a supportive mentor and school, the pre-service teacher could change his classroom practices. Rollo was able to realize that his content analysis and breakdown in lesson plans were faulty.

At School C, an illustration of a typical supportive mentor was observed when Bhila helped Caesar to improve instructional processes through rephrasing the lesson objectives of a Form 3 mathematics lesson on enlargements of plane shapes. The provision of support and an enabling environment to facilitate professional growth of a pre-service teacher was in accordance with the socio-cultural-theory perspective and WIL philosophy (Fani & Ghaemi, 2011). The more knowledgeable other was also expected to lead on teaching methodologies as WIL aims to combine knowledge from course modules and practical classroom experiences. The more knowledgeable other who is the mentor has experienced both aspects of knowledge to support the pre-service teacher's classroom experiences during WIL in schools.

Teaching methodologies influenced pre-service teachers' classroom practices. In case 1, Mary was applauded for her "use of a variety of learner-centered methodologies which made learners to actively participate throughout the whole lesson using effective instructional media." The supervision report was based on a lesson that the mentor had observed, and the report was critically analyzed by the mentoring pair. Some of the mentor's comments on the lesson delivery report were as follows:

The teacher's introduction was motivating and academically appetizing. A variety of teaching methods were used by the teacher which were pupil-centered and catered for individual learning styles. A lot of teacher-learner and learner-learner participation was observed. The teacher concluded the lesson by asking questions to summarize the lesson.

The report captures the indicators of the classroom practices that resulted from the use of interactive teaching methodologies witnessed by the mentor when observing the lesson. The classroom practices were likely to influence mentoring practices, as the mentor could refer to what he had observed in this lesson when he planned and commented on subsequent lessons. We argue that reference to what was observed represents a form of reflection on action, which is important in the selection of teaching methods. This becomes more valuable if there is a deliberate attempt to engage the pre-service teacher in the mentor's reflection processes. In support, Gravett and Ramsaroop (2017) argue that in a teaching school, during WIL the mentee is made to understand the rationale for classroom practice since the teaching school operates a teacher-education laboratory.

Dhewa, a mentor, reflected on how she had found the teaching methods she observed Rollo using to be useful, to the extent that she had gone on to use these in her own classes. She said that, in practical terms, she had learned how to mentor using Rollo's teaching methods:

By observing Rollo's lessons, I have always learned something new, especially on the aspects of the interactive methodologies he uses in his lessons. He also seems to be quite comfortable with the use of some of the ICT tools, such as the computer, projectors and other electronic gadgets.

Using her experiences of these teaching methods, Dhewa was able to mentor Rollo. Hudson et al. (2013) highlight the notion of reciprocity in mentoring which is also evident in WIL interactions. Dhewa could not mentor Rollo on the methods per se but could advise him on their applicability in different scenarios relating to other related content. Consequently, Rollo's initial classroom practices were used by the mentor to influence her own way of teaching, which would, ultimately, be used to shape Rollo's classroom practices as a result of the mentoring process. It could be that reflection on the initial classroom practices influenced subsequent classroom practices.

Classroom practices were also evident in cases when participants reflected on their teaching experiences. Mary, a participant in case 1, reflected that:

I have used comments from my mentor to improve my teaching and I can say my teaching has improved in areas, such as chalkboard work, questioning skills, class and classroom management, use of teaching aids and assigning of written and learning tasks according to ability.

This illustrates that comments from mentoring can be used to reflect on teacher actions in the classroom. Classroom practices involving use of the aspects mentioned by Mary could determine the success or failure of a lesson. Mary reflected that her classroom practices involving these aspects improved her teaching. Similarly, in WIL contexts, mentees have realized the benefits of reflecting on teaching and

learning experiences, especially when scaffolding opportunities are availed during field placement (Gravett & Jiyane, 2019).

In case 3, an interview question elicited Caesar's reflection on what he had done differently as a result of mentoring:

My scheming and lesson planning have drastically changed in terms of how I break down the topics into teachable units per lesson and the way I formulate specific objectives for all my lessons. I now fully understand the logic behind the lesson stages, and this has greatly improved how I deliver lessons and assess learners' learning.

Caesar's views seem to corroborate comments in the supervision report when his teaching was supervised, which contained comments such as "clearly stated objectives that show the intentions of the lesson." The reflection could be considered as a good indicator of the classroom practices resulting from the mentoring practices. Thus, a favorable mentoring context may have provided opportunities for mentoring practice, which shaped Caesar's classroom practices. Reflection by mentors and preservice teachers is also useful during WIL field experience as mentors would have experienced this at various phases in their professional careers, firstly as students and secondly as mentors (Gravett & Ramsaroop, 2017).

CONCLUSION AND RECOMMENDATIONS

This study aimed to explore the contexts that exist at secondary schools in which mentoring of preservice teachers takes place during WIL in Zimbabwe, using interviews, observations and document analysis to collect information.

The existing contexts of WIL in schools in the current study showed that the mentor teacher was the more knowledgeable other. The more knowledgeable other has a superior level of understanding of the teaching and learning process, and the pre-service teacher depends on the mentor teacher for support during field experience while he or she is learning how to teach (Shooshtari & Mir, 2014). Bandaranaike and Willison (2015) also observed that through WIL, at the completion of work placement students had higher work skills than at the beginning. This could be attributed to the various mentor roles during WIL. This study has shown that the more knowledgeable other more knowledgeable other, the mentor in teacher education, plays a critical role in the transition of the preservice teacher into the teaching profession. The mentors provided technical support to the pre-service teachers during WIL. The mentors also assisted with the practical and pedagogical aspects of teaching during field placement. However, the mentors also need support to provide more enriching WIL contexts during field experiences. Mentoring could be improved if mentors have more time with the mentees and better facilities to fully prepare the pre-service teachers to be ready for teaching in various schools. In this study, each participant was restricted to only one school. The university curriculum designers may need to consider this limitation in terms of fully preparing pre-service teachers for future teaching assignments.

Though mentors seemed to be overloaded with other school duties besides mentoring, there were also cases of reciprocity in mentoring that benefited the mentors regarding aspects such as using modern technology and interactive teaching methodologies (Hudson et al., 2013). We are of the view that, to enhance their mentoring practices, mentor teachers may need to be exposed to staff development in these aspects for them to be able to add '+1' to the 'i' according to Stephen Krashen's input theory. This will signify professional growth, particularly for the pre-service teacher in transition to being a teacher,

facilitated through WIL during field experience. Future research may need to unpack WIL contexts for pre-service teachers and explore the instructional processes, such as leadership, management and assessment, in schools that can further support field placements.

An unexpected finding was that pre-service teachers' classroom practices probably provide some form of informal in-service education to classroom practitioners while they interact in different contexts of WIL, as expected from a socio-cultural-theory perspective. The contexts of WIL provided for pre-service teachers were varied and, to some extent, seem to have affected both the teachers' actions and behaviors in the process of teaching their classes, and the pre-service teacher, which ensure professional growth of the pre-service teacher and, at times, even the mentor. In conclusion, as the contexts of WIL during field experience differ, we argue that the context influences mentoring practices, and, at the same time, mentoring practices also shape the mentoring contexts in secondary schools.

It is recommended that pre-service teachers practice at different schools during field placement so that they are exposed to different contexts of WIL and are given opportunities to reflect in these contexts with mentors. This practice could also be extended to other professions with WIL, such as health professions, where students can be provided the opportunity to practice in different hospitals instead of only hospitals close to their study institutions. This will allow perceiving if different factors in the mentoring context and field experiences are the same. In addition, further research should focus on other contexts that exist in other types of schools not covered in this study, and be applied in other disciplines, since the contexts of WIL explored in this study were not exhaustive due to the small sample. Furthermore, more robust and explicit criteria may need to be developed for the appointment of mentor teachers who will be expected to provide a more supportive mentoring context for preservice teachers during WIL at secondary schools. Consequently, schools and universities will be expected to partner up to develop mentors who are role models, able to provide unequivocal classroom instruction for students of teaching during WIL wishing to join the noble profession.

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REFERENCES

- Abiddin, J., & Hassan, A. (2012). A review of effective mentoring practices for mentees development. *Journal of Studies in Education*, 2(1), 1-16.
- Ambrosetti, A. (2014). Are you ready to be a mentor? Preparing teachers for mentoring pre-service teachers. *Australian Journal of Teacher Education*, 39(6), 30-42.
- Bandaranaike, S., & Willison, J. (2015). Building capacity for work-readiness: Bridging the cognitive and affective domains [Special Issue]. *Asia-Pacific Journal of Cooperative Education*, 16(3), 223-233.
- Batholmeus, P., & Pop, C. (2019). Enablers of work-integrated learning in technical vocational education and training teacher education [Special Issue]. *International Journal of Work-Integrated Learning*, 20(2), 147-159.
- Becher, A., & Orland-Barak, L. (2018). Contextual factors informing mentoring in art initial teacher education. *Journal of Teacher Education*, 69(5), 477-492.
- Bekiryazici, M. (2015). Teaching mixed-level classes with a Vygotskian perspective. *Procedia-Social and Behavioral Sciences, 186,* 913-917.
- Chimbi, G. T., & Jita, L. C. (2019). Willing but unable? Teachers' Sense-making of curriculum-reform policy in the early implementation stage. *Pedagogy*, 135(3), 52-70.
- Clark, V., & Ivankova, N. (2016). Mixed methods research: A guide to the field. SAGE.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE.

- Denis, J. (2015). Key aspects of the student teaching: A triumvirate approach. *National Association for Music Education*, 1, 1-8. Dollinger, M., & Brown, J. (2019). An institutional framework to guide the comparison of work-integrated learning types. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 88-100.
- Draves, T. (2013). Transition from student to teacher-student teaching: The capstone experience. *Journal of Music Teacher Education*, 23(1), 50-62.
- Fani, T., & Ghaemi, F. (2011). Implications of Vygotsky's zone of proximal development (ZPD) in teacher education: ZPD and self-scaffolding. *Procedia-Social Behavioral Sciences*, 29, 1549-1554.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055.
- Garza, R., & Harter, R. (2016). Perspectives from pre-service mathematics and science teachers in an urban residency program: Characteristics of effective mentors. *Education and Urban Society*, 48(4), 403-420.
- Goldhaber, D. (2019). Evidence-based teacher preparation: Policy context and what we know. *Journal of Teacher Education*, 70(2), 90–101.
- Gravett, S. J., & Jiyane, L. (2019). The practice learning experiences of student teachers at a rural campus of a South African university. *South African Journal of Childhood Education*, 9(1), Article 702. https://doi.org/10.4102/sajce.v9i1.702
- Gravett, S., & Ramsaroop, S. (2017). Teaching schools as teacher education laboratories. *South African Journal of Childhood Education*, 7(1), Article 527. https://doi.org/10.4102/sajce.v7i1.527.
- Greve, S., Weber, K. E., Brandes, B., & Maier, J. (2020). Development of pre-service teachers' teaching performance in physical education during a long-term internship. *German Journal of Exercise and Sport Research*, 50, 343–353. https://doi.org/10.1007/s12662-020-00651-0
- Helleve, I., & Ulvik, M. (2019). Tutors seen through the eyes of mentors' assumptions for participation in third space in teacher education. *European Journal of Teacher Education*, 42(2), 228-242. https://doi.org/10.1080/02619768.2019.1570495
- Hudson, P. (2012). How can schools support beginning teachers? A call for timely induction and mentoring for effective teaching. *Australian Journal of Teacher Education*, 37(7), 71-84.
- Hudson, P., Hudson, S., Gray, B., & Bloxham, R. (2013). Learning about effective mentors: Professional learning communities and mentoring. *Procedia-Social and Behavioral Sciences*, 93, 1291-1300.
- Izadinia, M. (2015). A closer look at the role of mentor teachers in shaping pre-service teachers' professional identity. *Teaching and Teacher Education*, 52, 1-10.
- Jaspers, W., Meijer, P., Prins, F., & Wubbles, T. (2014). Mentor teachers: Their perceived possibilities and challenges as mentor and teacher. *Teaching and Teacher Education*, 44, 106-116.
- Leedy, P. D., & Ormrod, J. E. (2013). Practical research: Planning and design (10th ed.). Pearson.
- Li, Y., & Oliverira, H. (2015, July 10-15). *Research on classroom practice*. [Paper presentation]. 12th International Congress on Mathematical Education, College Station, TX, United States
- Marimo, T. (2014). Experiences and preparedness of school-based mentors in supervising student teachers on teaching practice in Zimbabwe. *British Journal of Education, Society and Behavioural Science, 4*(11), 1476-1488.
- Muyengwa, B. (2018). The context and practice of school-based mentoring of pre-service teachers in Zimbabwe [Unpublished doctoral thesis]. University of the Free State.
- Ramnarain, U. (2015). A pilot study on the mentoring of PGCE Physical Sciences students at a teaching school. *Procedia-Social Behavioral Sciences*, 167, 44-49.
- Reese, J. (2016). Virtual mentoring of pre-service teachers: Mentors' perceptions. *Journal of Music Teacher Education*, 25(3), 39-52. Shooshtari, Z., & Mir, F. (2014). ZPD, tutor: peer scaffolding: Socio-cultural theory in writing strategies application. *Procedia-Social and Behavioral Sciences*, 98, 1771-1776.
- Shumbayawonda, W. (2011). Mentoring in education: BECD107 Module. Zimbabwe Open University.
- Son, S., & Kim, D. (2012). What makes proteges take mentors' advice in formal mentoring relationships? *Journal of Career Development*, 40(4), 311-328.
- Trif, L. (2015). Training models of social constructivism: Teaching based on developing a scaffold. *Procedia-Social and Behavioral Sciences*, 180, 978-983.
- Usher, A. (2019). Modeling resilient and adaptable work-integrated learning practice: The importance of learning dispositions in initial teacher education [Special Issue]. *International Journal of Work-Integrated Learning*, 20(2), 113-126.
- Wang, J. (2001). Contexts of mentoring and opportunities for learning to teach: A comparative study of mentoring practice. *Teaching and Teacher Education*, 17, 51-73.
- Yin, R. K. (2009). Case study research: Design and methods (4th ed.). SAGE.
- Yin, R. K. (2017). Case study research and applications: Design and methods (6th ed.). SAGE.
- Yuan, E. (2016). The dark side of mentoring on pre-service language teachers' identity formation. *Teaching and Teacher Education*, 55, 188-197.
- Zegwaard, K., Johansson, K., Kay, J., McRae, N., Ferns, S., & Hoskyn, K. (2019). Professional development needs of the international work-integrated learning community [Special Issue]. *International Journal of Work-Integrated Learning*, 20(2), 201-217.

About the Journal

The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues dealing with Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE). Since then the readership and authorship has become more international and terminology usage in the literature has favored the broader term of WIL, in 2018 the journal name was changed to the International Journal of Work-Integrated Learning.

In this Journal, WIL is defined as "an educational approach that uses relevant work-based experiences to allow students to integrate theory with the meaningful practice of work as an intentional component of the curriculum. Defining elements of this educational approach requires that students engage in authentic and meaningful work-related task, and must involve three stakeholders; the student, the university, and the workplace". Examples of practice include off-campus, workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (Co-op), and on-campus activities such as work-related projects/competitions, entrepreneurships, student-led enterprise, etc. WIL is related to, but not the same as, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's main aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, co-op/WIL practitioners, and researchers. The Journal desires to encourage quality research and explorative critical discussion that leads to the advancement of effective practices, development of further understanding of WIL, and promote further research.

The Journal is ongoing financially supported by the Work-Integrated Learning New Zealand (WILNZ), www.nzace.ac.nz and the University of Waikato, New Zealand, and received periodic sponsorship from the Australian Collaborative Education Network (ACEN) and the World Association of Cooperative Education (WACE).

Types of Manuscripts Sought by the Journal

Types of manuscripts sought by IJWIL is primarily of two forms; 1) *research publications* describing research into aspects of work-integrated learning and, 2) *topical discussion* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider best practice submissions.

Research publications should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed description and justification for the methodology employed. A description of the research findings - tabulated as appropriate, a discussion of the importance of the findings including their significance to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data, and a conclusion preferably including suggestions for further research.

Topical discussion articles should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical and scholarly discussion on the importance of the issues, critical insights to how to advance the issue further, and implications for other researchers and practitioners.

Best practice and program description papers. On occasions, the Journal also seeks manuscripts describing a practice of WIL as an example of best practice, however, only if it presents a particularly unique or innovative practice or was situated in an unusual context. There must be a clear contribution of new knowledge to the established literature. Manuscripts describing what is essentially 'typical', 'common' or 'known' practices will be encouraged to rewrite the focus of the manuscript to a significant educational issue or will be encouraged to publish their work via another avenue that seeks such content.

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