

Review

Research on student teacher learning, collaboration and supervision during the practicum: A literature review

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This paper presents a review of research literature on the practicum, interchangeably called teaching practice, specifically on student teacher learning, collaboration and supervision. The paper first introduces teaching practice as an important aspect of teacher education. Next, the paper situates research on the practicum in general within the historical trends in the broader field of teacher education. Then the actual review follows under four subtitles: research on student teacher learning, research on collaboration amongst student teachers, research on collaboration between student teachers and cooperating teachers then research on supervision of student teachers. The paper then concludes by highlighting certain gaps in research on the practicum that future researchers in the field might want to address.

Key words: Practicum, teaching practice, teacher education.

INTRODUCTION

Many institutions offering Initial Teacher Education (ITE) programmes require their students to take part in a teaching experience in a school or a college or any other learning institution where they can interact with actual learners. This is the session that is usually referred to as teaching practice (TP) or practicum (e.g. Derrick and Dicks, 2005; Liston et al., 2006). In some literature it is called induction (e.g. Collinson et al., 2009) or internship (e.g. Darling-Hammond, 2006b). In this paper, the terms teaching practice (TP) and practicum are used interchangeably to refer to these field placements of student teachers.

Generally, the practicum is considered as one of the most important aspects of a student teacher's education (Clarke and Collins, 2007; Farrell, 2008). Several reasons have been cited for the importance of TP as may be summarised thus:

i) The practicum is important as an induction into the profession "both to improve teachers' skills and to extend the body of knowledge on effective teaching practices" (Collinson et al, 2009: 9).

ii) Teaching practice plays a role in education similar to internship or field attachment in other professions such as medicine, law, and engineering by offering exposure to practical classroom experiences in the context of a mainstream school (Purdy and Gibson 2008).

iii) "For most preservice teachers, the TESOL [teaching English to speakers of other languages] practicum is considered to be one of the most important learning experiences in learning to teach" through reasoning about their practices, supported by their educators (Johnson, 1996: 30).

iii) Extended teaching practice could give the student teachers considerable "exposure to practices of experienced teachers" (Zeichner, 2006: 333).

TP may provide feedback to the TE institution regarding the progress to their students and provide a basis as to whether they should be qualified to teach or not. It also enables the TE institutions to identify aspects of their pro-

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gramme to improve (Derrick and Dicks, 2005).

Situating research on the practicum in trends in teacher education

Research on the practicum has gradually shifted in focus since the 1960s. This shift has generally followed a similar trend to research in the field of teacher education (TE) in general. Hence, in this section, in order to understand the developments in research on the practicum, we start with a short review of the research trends in general TE. Before the 1970s, the research in TE was mainly concerned with what has been referred to as process-product designs which “examined teaching in terms of the learning outcomes it produced...the aim was to understand how teachers actions led - or did not lead to student learning” (Freeman, 2002:2). During this time, there was a general belief that “learning to teach involved mastering the specific content one was to teach and separately mastering methodologies for conveying that content to learners” (Ibid:3). From the mid 1970s to the 1980s, questions started to be raised about the efficacy of this process-product approach to research considering the recognition that teaching is a complex phenomenon (e.g., Borg, 2006, 2003; Freeman, 2002; Freeman and Johnson, 1998). Borg indicates a shift from that thinking towards “the recognition that teachers are active, thinking decision makers who play a central role in shaping classroom events” (2006:1) and “make instructional choices by drawing on complex, practically oriented, personalised, and context sensitive networks of knowledge, thoughts and beliefs” (2003:81).

Consequently, the mid 1980s through to the 1990s saw research in TE shift from the process-product paradigm to investigation of teachers’ knowledge, beliefs, perceptions, perspectives, thinking, reasoning etc. These have been termed the hidden side of teaching (Freeman, 2002:1), teacher cognition (Borg, 2006:1); pedagogical reasoning (e.g. Johnson, 1999; Maclellan, 2002; Richards, 1998). Other writers have referred to them using different terms. Borg acknowledges that “the study of teacher cognition is generally characterised by a multiplicity of labels which have posited to describe wholly or in part, the psychological context of teaching” (2003:83) noting that the “proliferation of terms” in TE could cause “conceptual ambiguity” (ibid). In spite of this, he observes that the trend is not necessarily a negative development in the profession. In what has been referred to as the era of consolidation in TE research, in the 1990s and the 2000s, “the notion of teacher’s mental lives and indeed the concept of teacher learning itself was firmly established as a matter of public policy” (Freeman, 2002:8). Accordingly, most research has continued to focus on teacher knowledge (Borg, 2006). Borg explains that:

As we moved into a new millennium, interest in

the study of teacher cognition showed no sign of abating...As we moved past the mid point of the current decade, the contents pages of key research journals in education, and particularly in teacher education, highlight continuing interest in the study of teacher cognition...the predominant focus today is on understanding teacher knowledge (used as an umbrella term for a range of psychological constructs) its growth and use. Teacher cognition research today is aligned particularly closely with work in teacher education; a key role for such research is to support teacher learning at both preservice and in service level (2006:32 - 35).

Turning to research on the teaching practice (TP), there has been a similar shift in focus from concern with finding out how best the student teachers were succeeding in imitating the perceived “best” practices of their experienced colleagues (Stones and Morris, 1972). Literature in TP research in the last two decades shows a major expansion in focus, covering about five related and sometimes overlapping topics: student teacher learning during TP, collaboration between student teachers and their peers, support by cooperating teachers and supervision during TP. In the next section, research on student teacher learning is reviewed

Research on student teacher learning

Research on student teacher learning during TP has covered such areas as student teachers’ main concerns, student teacher’s experiences, what and how student teachers learn and how specific innovations by particular universities contribute to teacher learning. To begin with, some studies have shown that most student teachers are initially more concerned with their own survival in the classrooms and how to control the learners than how they could facilitate the learning of their own students (e.g. Kagan, 1992; Numrich, 1996). For example, Numrich (1996) concluded, after using diaries to find out the views of English as a second language (ESL) student teachers over a ten-week teaching term, that during “the first weeks of the practicum, the teachers were preoccupied with their own teaching. Little if any mention was made of their students’ needs or learning in their diary studies” (p.135). However, such studies have also shown that with time, especially if the practicum session is extended (about one year) and if the student teachers were well supported (worked closely with their cooperating teachers and teacher educators), they were able to make quick progress from primary concern with survival to thinking about how they could facilitate learning among their own students (e.g. Tann, 1994). Related to the issue of student teachers’ preoccupation with themselves some research on student teachers’ ex-

periences has shown that initial teacher education (ITE) did not seem to prepare student teachers adequately for practice (e.g. Johnson, 1996).

Nevertheless, some studies have shown that the amount of preparation at university notwithstanding, most student teachers still face huge challenges during TP. For example, studies by Caires and Almeida (2005) in Portugal, Johnson (1994) and Liston et al. (2006) in North America reported that one of the major challenges student teachers reported was the need to perform according to the procedures taught at the university, which took their attention away from reasoning about teaching based on their experiences. McCormack et al. (2006) also conducted a study in Australia that examined the experiences of fifty beginner teachers and reported the challenges posed by a weak relationship between coursework and practice which included fitting within a dominant school culture, getting used to formal supervision for accreditation, and developing their own effective approaches to teaching. They reported that for most student teachers, these were very difficult to achieve during teaching practice.

Intrator (2006) also identified one key challenge student teachers faced during TP as how to balance between portraying themselves as qualified professionals who know what they are doing, against the need to be humble and to portray the desire to seek support from experienced teachers in the spirit of "commitment to inquiry and willingness to learn from error" (p.233 - 238). He observed that this challenge if not addressed could inhibit student teachers from learning well from their experiences. One possible reason for such challenges that has been identified by previous research is poor induction and socialisation of student teachers in placement schools (Farrell, 2001).

Researchers have also explored the question of what student teachers learn or fail to learn during the practicum. Some of the things research has identified that they learn are the skill of planning (e.g. Dellicarpini, 2009) and the ability to make instructional decisions (Johnson, 1992; Kohler et al., 2008). These writers however reported that the student teachers in their studies were not able to give clear explanations for the decisions they took during teaching. Other aspects of teaching that research has also revealed as being problematic to student teachers are testing of learners (Maclellan, 2004) dealing with learners with different competencies in particular subjects in the same classrooms (Otero, 2006). Still related to the issue of what student teachers learn, some studies dealt with the issue of personal practical knowledge (PPK). One such study was conducted by Golombek (1998) in North America using classroom observations and stimulus recall to explore how two student teachers' PPK informed their ELT practice. She defined PPK as "personal philosophies, metaphors, rhythms and narrative unity as representing forms in language of practice" (p. 448). Golombek found out that:

the student teachers' personal practical knowledge informed their practice by serving as a kind of interpretive framework through which they made sense of their classrooms as they recounted their experiences and made this knowledge explicit...L2 [second language] teachers' personal practical knowledge shapes and is shaped by understandings of teaching and learning (p. 459).

Another study was conducted on PPK in Hong Kong by Tsang (2004). Tsang investigated how the student teachers' PPK influenced their decision making during their interactions with English language learners. Her analysis showed that "during classroom teaching, the participants did not always refer to their personal practical knowledge" (p.194). Nevertheless, Tsang discovered that PPK featured during the student teachers post-lesson discussions as they discussed how the lessons could be improved. She attributed this scenario which she termed a "delayed access to personal practical knowledge" to competition between several issues including circumstances of the classroom, thoughts on teaching, coursework at university and the PPK.

Other studies have suggested that student teachers arrive at their LTE courses or teaching practice with prior beliefs that need to be uncovered as these could hinder their learning during TP (e.g. Borg, 2005; DaSilva, 2005; Warford and Reeves, 2003). For example, Warford and Reeves interviewed nine student teachers during a one semester practicum in North America in order to "understand preconceptions novice teachers might have about teaching English language" (p.47). The study revealed the existence of preconceptions that tended to influence student teacher learning during the practicum. They concluded thus:

Results suggest that...teacher education students do not enter with a *tabula rasa* (italics in original). This does not mean, however that the coherence systems that they are nurturing exert an omnipotent influence on their actual practice of teaching. At the very least, these preconceptions ought to be addressed openly in teacher education courses through discussion or written reflection (p. 61).

The findings above on influence of student teachers' prior experiences and beliefs were also consistent with some findings from Numrich's (1996) study mentioned earlier. Numrich also suggested, based on her study that "in a practicum, student teachers could be asked to develop a needs analysis for the first day of teaching...if we begin with where student teachers are when they set out to acquire expertise in teaching, we may be able to offer more" (p. 147 - 149). However, a recent study in The Netherlands has shown that student teachers could successfully overcome their prior beliefs and embrace new ideas about teaching during the practicum (Buitink,

2009). Buitink's study involved eight student teachers of Mathematics enrolled in a one year post graduate training in education course. The author stated that "looking at the content, we can conclude that the student teachers who participated in this research developed a new practical theory in which they pay attention to pupils' learning". (p. 125). Nevertheless, Buitink cautioned that such development was only possible because of close coordination between the universities based teacher educators and the cooperating teachers which enabled a shared understanding of what the student teachers ought to learn from their experiences.

Another issue that has been reported in recent research is the development of teacher efficacy among student teachers defined as "the teacher's belief in his or her capability to organise and execute courses of action required to successfully accomplish a specific task in a specific context" (Tsachannen-Moran et al., 1998:233; cited in Liaw, 2009:177). Both Liaw's study (2009 in Taiwan and Atay's, 2007) study in Turkey showed that the practicum enabled student teachers to improve in teacher efficacy, as defined above, especially when the practicum is extended (lasting about one year) and well supported involving close collaboration among student teachers and between student teachers, cooperating teachers and teacher educators.

Another recent study conducted in Ethiopia by Degado (2007) reported that involving student teachers in writing weekly journals during the practicum is an aspect of practice that could enhance their reflection on experiences which in turn could facilitate more teacher learning. Following his longitudinal study which involved evaluating the success of the journals, Degado reported that "Journal writing enables student teachers to disclose their concerns about their teaching experiences and deepen their understanding of the complexities involved in teaching" (pp. 354 - 355).

More recently, there have been some studies on pedagogical reasoning of student teachers during the practicum (Phelan, 2009; Youngs and Bird, in Press). Phelan studied practical reasoning - defined in the study as "a teacher's capacity to discern particulars and make wise judgement about how to act in pedagogical situations and contexts" (p. 93). Phelan used semi structured interviews and observations as sources of data and from this study, suggested that the student teacher (Douglas) was engaged in two types of reasoning, instrumental and practical. She argued that instrumental reasoning was based on "propositional knowledge of literature and teaching methods" (p.109). In her analysis, Douglas also engaged in practical reasoning while teaching in the classroom, based on "his perceptiveness in reading particular situations, and to imagine possible actions" (p. 111). She concluded that practical reasoning is possible to develop during the practicum but on condition that the student teacher already has a sound mastery of propositional knowledge in the subject matter

and teaching methodology as well as consistent support by both teacher educators and co-operating teachers who have similarly sound (or even deeper) propositional knowledge. The point to note from this study, however is that the student teacher in question had earlier had a successful career in the publishing industry and therefore, as Phelan explains, transferred some reasoning skills from the previous occupation.

Youngs and Bird (In press) analysed assessment documents of about 180 undergraduate student teachers at a TE institution in the United States of America during a 30 week practicum. The student teachers were enrolled in a five-year TE programme for certification to teach at secondary school level. The practicum was organised in two phases with the first phase mostly involving observation of cooperating teachers while teaching only two lessons a week – in close collaboration with the cooperating teacher. The next phase involved taking full teaching responsibility for one to two classes. The embedded assessments that the researchers analysed involved asking student teachers to identify and discuss a pedagogical issue involving one or more learners in terms of causes, possible reasons, to suggest ways of dealing with the situation and to identify, implement and assess two or more courses of action. These embedded assessments were done during the two phases of the practicum with the second phase assessment being pitched at a "more advanced level of pedagogical reasoning" (p.4). After analysis of the rubric of the assessments and interviews with the participants, the researchers concluded that:

The data seemed to indicate that, when provided with the support of specified assignments and the opportunity to work with instructors, the secondary teaching candidates in this sample were able to engage in pedagogical reasoning that would be expected to help them move toward mastery of teaching...many of the candidates were able to turn their attention away from themselves and aspects of classroom management to hypothesise about factors that seemed to be affecting their pupils' performance, to modify their instruction accordingly, and to analyse the consequences of their decisions and actions (p.7).

The researchers concluded that one of the possible reasons the student teachers developed pedagogical reasoning was because the assessment challenged the candidates to engage in thinking about their work, trying to understand different aspects of their practice, deciding what changes to make and explaining the reasons for them.

Cumulatively, the studies on teacher learning during the practicum have highlighted a range of issues that indicate the complexity of the practicum. The issue of how teachers may learn through collaboration with peers

is another aspect of TP that has been explored in research as we review next.

Research on collaboration during the practicum

In this section, we review literature on teacher learning through collaboration - by which we mean - working with others for example in terms of planning, observations and discussions aimed at learning from the experiences. Learning through collaboration during the practicum is increasingly gaining support in TE literature. For example Lieberman and Mace (2008) explain that while in the past, learning has been considered to be an individual affair, it has become clear more recently that learning may be better facilitated when it is more social; that is, involving others doing the same or similar practice. They argue that "professional learning...is rooted in the human need to feel a sense of belonging and of making a contribution to a community where experience and knowledge function as part of community property" (p. 227). Two main forms of collaboration are identified in literature as very valuable during the practicum - that amongst student teachers and between student teachers and their cooperating teachers in the placement schools. To start with, we briefly review research literature on collaboration amongst student teachers.

Research on collaboration by fellow student teachers

Research specifically on peer support is rather minimal compared to the other aspects of TP. One of the issues research in this area has dealt with is the advantage of paired placements during TP (e.g. Nokes et al., 2008; Hsu, 2005 and Numrich, 1996). All these studies found out that paired placements enhanced student teachers' learning opportunities during the practicum especially through discussions on shared teaching and observations of each other. The studies revealed though, that at some stage most student teachers wanted the experience of teaching whole lessons alone. Another aspect of collaboration among student teachers reported in recent research is peer teaching. For example Wilson and l'Anson (2006) conducted a study in the UK, which evaluated the success of a model of teaching practice "which uses micro teaching as a preparation for school experience" (p. 356). The micro teaching involved student teachers teaching peers and discussion their video-recorded lessons as a way of improving on their teaching before facing actual learners. It involved a survey of the views of the former student teachers of the university who had studied under such a model. The authors reported that the former students found the experiences in the peer teaching as important in reducing the complexity of the actual TP.

A recent study done in Taiwan by Liaw (2009) explored

the impact of group discussions among student teachers and their cooperating teachers on their teaching experiences. The researcher found that group discussions provided more opportunities for student teacher learning. She stated that "the sense of performance accomplishment expressed in the classroom and the verbal persuasion (*italics in original*) received in the group discussions enhanced their personal teacher efficacy" (p. 179).

More recently, Britton and Anderson (In Press) have reported a study in which student teachers collaborated during a practicum in a model called peer coaching. This model involved pre-observation discussions amongst student teachers, observing each others' lessons during which the observing colleague took notes; then conducting post-observation conferences with the observed peers, followed by discussions. The student teachers then analysed both the teaching and the observation notes and discussed the way forward. They would then interchange roles and repeat the exercise a number of times. In this study, the student teachers had been involved in the process of choosing their partners and the main points to consider in their choice had been acquaintance with each other, interest in working together and sharing of the same teaching subject. The student teachers had been trained in peer coaching, and were supported by supervisors from their university who monitored the progress. The researchers, who were supervisors during the practicum, observed the peer coaching process, interviewed the participants and analysed the data thematically. Their findings were that the student teachers were able to learn both the principles and the practice of peer coaching with ease and that the peer coaching enabled them to develop a deeper understanding of pedagogy. This in turn improved their practice considerably over the practicum semester. Consequently, Britton and Anderson recommended "the addition of peer coaching as a requirement in the pre-service teacher training process" (p.7). However, the researchers cautioned that any implementation of the peer coaching model needs to be done with much care, especially as it requires a long time to train the student teachers and supervisors, and an extended practicum.

It is notable that the study by Britton and Anderson was some kind of innovation by a particular university and involved a small number of student teachers (four) on a pilot basis. The resources put into the training and monitoring of the process were enormous and the student teachers were not subjected to assessment by the university based teacher educators. Clearly, implementation of such a model, in TP sessions in developing countries would therefore need to take into consideration the high number of student teachers, and the resources, among other factors. That notwithstanding, the key strategies emphasised in the peer coaching model, just like in the other studies reviewed in this section, are that observations of peers' classes, analyses of the lessons and support by the supervisors of such strategies, could

enhance teacher learning during the practicum. Such strategies could be explored with appropriate variations depending on availability of resources in different contexts.

Unlike collaboration amongst student teachers, the issue of collaboration between student teachers and cooperating teachers during the practicum has been widely researched, as revealed in the next section.

Research on collaboration between student teachers and cooperating teachers

One of the issues that research in this area has explored is the contribution of cooperating teachers to teacher learning during the practicum. Some of the studies already referred to above (e.g. Atay, 2007; Hsu, 2005) also reported that cooperating teachers effectively facilitated student teacher learning in many aspects. For example, Atay (2007) reported how observation of cooperating teachers assisted student teachers to develop in efficacy. Another researcher who reported a similar finding is Darling-Hammond (2006b) following her study (together with others) of practica in several teacher education programmes in North America. She reported that in programmes where collaboration between student teachers and cooperating teachers was well structured and emphasised, there was very powerful impact on student teacher development. Similarly, several research papers from many different countries in the world spanning over thirty years reviewed by Hobson et al (2009) have generally supported the importance of structured collaboration in student teacher learning during the practicum.

Other studies on this issue have indicated that where the collaboration is not well structured, where there is no shared understanding among the participants on teaching approaches, and if cooperating teachers are not prepared for their roles, there is usually no productive learning for the student teachers and that the student teachers might end up with very negative practicum experiences (e.g. Farrell, 2008/2001; Graham, 2006; Tsang, 2003; Rajuaan et al, 2008).

Some studies have also examined impacts of specific innovations intended to enhance support by cooperating teachers. For example, Wilson (2006) studied the impact of a model used by one TE institution in North America involving a replacement of university educators as regular supervisors during TP with experienced teachers who were referred to as clinical master teachers (CMTs). Wilson concluded that "the results of this study indicate that the participants considered the CMT model more positively than the triad model" (p.28) The CMTs had been trained for that role. A similar study examined the effectiveness of a model of supervision at a TE institution in the USA (Rodgers and Keil, 2007). The model involved a paired-dyad where teams of six people: two cooperating

teachers, two student teachers and two university based supervisors worked together in a placement school. After analysis of focus group discussions, minutes of their meetings, field notes and interviews, the researchers concluded that the "model provided an opportunity to develop, test, refine, and inform the practice of supervising and mentoring student teachers in potent ways that situate schools and colleges of education along with teachers and the university faculty as the nexus of reform" (p. 79).

The studies on cooperation between student teachers and their experienced colleagues above generally show the potential of collaboration to enhance student teacher learning. However, they also identify a number of issues that the field of TE needs to resolve to improve such collaboration like enhancing a shared understanding of the objectives of the practicum between the cooperating teachers and student teachers, having a systematic approach to collaboration and preparation of cooperating teachers for their roles of working with student teachers.

Research on supervision during the practicum

In most teacher education programmes, student teachers are supervised by teacher educators from their institutions. The process usually involves the supervisors observing the student teachers' teaching in classrooms, and then talking about the lessons during what is commonly called post-observation conferences (e.g. Bailey, 2006; Intrator, 2006; Stimpson et al., 2000). Stimpson et al. state that "supervision is an integral part of the teaching practice or teaching practicum undertaken in schools by part-time or full-time students seeking professional initial teaching qualifications" (p. 3). Intrator (2006) explains that the main goal of supervision should be to support novice teachers to form the correct mental disposition and be ready to improve during the time. He says further that such support is important because the "journey novice teachers experience is especially intense, conflicting, dynamic and fragile" (p. 234).

Research on supervision by university based teacher educators, like other aspects of TP has also covered a range of issues. One of these has been the process of supervision. For example, Proctor (1993) investigated how educators supervise students during TP. Proctor established that teacher educators focused on aspects of teaching such as confidence, mastery of content and classroom management but different educators put emphasis on different aspects with potential confusion to the student teachers. Based on this study, Proctor suggested more studies on the conduct of TP citing "the need for better understanding of the way tutors operate when they are supervising" (p.95). Similarly, Gal (2006) reported a study done in Israel on the role of practicum supervisors in enhancing behaviour management skills among their student teachers. Among her findings was that student

teachers had difficulties managing behavioural problems in their classrooms, yet supervision did not deal with this adequately.

Related to the process of supervision, there has also been research on the student teachers' preferences regarding mode of feedback (e.g. Tang and Chow, 2007; White, 2007). These studies have generally revealed that student teachers prefer to be actively involved in the post-observation discussions. Some studies have also found out that assessment focused supervision threatens student teachers and creates a situation generally where the student teachers pay more attention to pleasing supervisors than on learning (e.g. Brandt, 2006; Farrell, 2007; Walkington, 2005). There has also been research on how supervisors are supported during TP. For example Swennen et al (2008) conducted a study in The Netherlands which showed that teacher educators lacked professional language to articulate expected practices coherently and consistently to their student teachers. Swennen et al. concluded that: teacher educators need to be supported to develop "the ability to link their expertise to their own practices and the practices of their student teachers" (p. 541). A similar study was conducted in Israel by Smith (2005), who investigated the student teachers' views on the expertise of the teacher educators in guiding them in their pedagogy during a practicum. The researcher also asked the teacher educators to evaluate their own expertise in supervising the student teachers. The findings were that the student teachers and educators had conflicting views on the conduct of supervision. Smith concluded that there was need to identify the required expertise for supervision and support educators in them.

Another recent study conducted in Australia also reported the need to support supervisors on how to deal with their emotions as well as those of the student teachers which often arise during the practicum (Hastings, 2008). Hastings argued that this was necessary because according to their findings, a supervisor often "finds herself having to address both the personal and professional demands of her 'charge' while navigating her way through the complex and often competing discourses that make up the work of a teacher" (p. 508).

There have also been investigations on the value of supervision on teacher learning during the practicum. For example, Fayne (2007) carried out a survey on this issue in USA involving 222 student teachers on TP sessions for over five years. Fayne's study revealed that student teachers regarded most supervisors as playing very important roles in their learning. The student teachers identified some of these roles as managing the process of TP, serving as people they could trust with confidential information, and giving comments on their teaching that usually contributed to improvement of their performance. Fayne established that "although supervisors established the rules and had the final say on whether or not the students met programme standards, they were viewed as

benevolent authority figures who took the time to understand both the student teacher and the classroom context" (p. 62). Fayne however identified certain conditions necessary for supervision to make this kind of contribution:

The key to success was to know when to be prescriptive, interpretive and supportive - three types of supervisory behaviour... striking the right balance increased credibility. Once rapport was established, student teachers in the study did not challenge the supervisor's ability to evaluate them fairly and were not disappointed with the feedback that they received (p. 66).

Like research on the other aspects of TP, studies have also investigated the effectiveness of specific models of supervision piloted by particular universities. One such study, which has already been referred to in the previous section with respect to cooperating teachers, is that by Rodgers and Keil (2007) who evaluated an approach called paired-dyad model of supervision. As stated earlier, the researchers reported that the new model was more effective than the triad model (usually involving one student teacher, one cooperating teacher and one teacher educator) which had been used by their university before.

A similar innovation was studied in Canada by Ralph (2002) who examined a model called the contextual supervision. This model involved "attention to the unique contextual circumstances of the placement in terms of participants...the tasks...and the physical and psychological environment in which it occurs" (p.192). After analysis of several cohorts of student teachers participating in 16-week practica, Ralph reported that "the accumulating results of the contextual supervision model have demonstrated that it is a useful conceptual and analytical guide with potential to assist supervisory personnel in their mentoring practices" (p. 202).

Generally, studies on supervision reviewed in this subsection apparently add valuable insights to the field. Some of the significant issues that arise are that supervision is an important aspect of TP but needs to be regular and consistent, pay attention to contextual circumstances, more supportive of the student teachers, it ought to involve student teachers actively in reviewing their lessons and there is need for close collaboration between supervisors and cooperating teachers.

Overall, the review of research literature on all aspects of TP covered in this paper reveal that the practicum is considered an important aspect of teacher education that is getting increased attention of researchers in the field. The research so far done reveals that the practicum is a complex stage which is approached very differently in various parts of the world. The key issues that have been raised by the research on the practicum are summarised thus:

Research on student teacher learning

- i) Most student teachers (STs) are initially more concerned with their own survival in the classrooms than how they could facilitate the learning of their own students,
- ii) Most STs start TP with prior beliefs that inform their activities during TP; such beliefs need to be uncovered as they could hinder their learning,
- iii) With good support STs could learn important skills during TP including planning, instructional decisions, practical knowledge of teaching and the skills of pedagogical reasoning

Research on collaboration amongst student teachers

- i) Paired placements tend to facilitate a richer learning context than individual placements; STs tend to seek more support from peers than CTs and supervisors,
- ii) Some STs do not want team teaching arrangements as it denies them the 'real experience' of solo teaching" which they would be involved in after qualification.

Research on collaboration with cooperating teachers

- i) Cooperating teachers CTs can effectively facilitate ST's learning in many aspects but could also cause harm to the learning process, if collaboration is not well structured,
- ii) There are often conflicting views between STs and CTs on the way support should be carried out and also on how to teach

Research on supervision during the practicum

- i) Supervisors tend to emphasise different aspects of student teaching with potential confusion to the student teachers,
- ii) Supervision that is mainly assessment-focused has a negative effects on the student teacher learning as it creates fear and desire to conform,
- iii) STs regard supervisors as important in their learning; but some supervisors lack the expertise to support STs appropriately; hence also need support

Research on organisation of teaching practice

- i) Poor coordination between universities and schools (and sometimes policy makers) often leads to conflicting views on guidance for student teachers
- ii) Link between coursework at university and curriculum in schools helps to reduce practice shock during TP.

Conclusion

The review of research literature on student teacher learning, collaboration and supervision during the practicum

reveals some important points for researchers, educators and policy makers to take note of when planning future research, field placements and TE programmes for their student teachers. Specifically in terms of future research, most of the studies reviewed above involved particular approaches to or models of the practicum being piloted by specific TE institutions in developed countries. Hence there is clearly need for more studies on practicum experiences involving ITE programmes run by state universities, which are perhaps the more common especially in developing countries around the world. It is important to point out that our literature search revealed very little research on the aspects of the practicum reviewed here from Africa.

In relation to this, most researchers whose publications have been reviewed above, and other writers on the practicum have consistently made suggestions for further research on different aspects of the practicum, explaining that there is paucity of research on the practicum. These suggestions were stated as early as twenty years ago; for example by Richards and Crookes (1988) who stated that "we still possess little information on the effectiveness of current practicum practices (p.24). Since then, there have been consistent pleas for further research on various aspects of the practicum, some key ones of which are cited below.

- i) A substantial search of worldwide databases, both educational and discipline-based, using a range of keywords,
- ii) revealed a surprising paucity of good-quality research on the practicum ...in higher education ... that no clear recommendations can be made with confidence (Rhyan, 1996:370).
- iii) There has been less research within the black box of the (TE) program - clinical experiences...and about how the experiences and programmes designed for candidates cumulatively add up to a set of knowledge, skills, and dispositions that determine what teachers actually do in the classroom' (Darling-Hammond, 2006a:303).
- iv) The volume of research in this area [practicum in LTE] remains small; additionally, given the global nature of language teaching, the geographical spread of this work is limited too (Borg, 2006:71).
- v) Within English language teaching (ELT) there is a paucity of research that specifically examines the experiences of learner teachers concerning the role of support they expect, need and obtain during their practicum experiences (Farrell, 2008:226).
- vi) There is need to answer this question through research: What are the requirements for the learning environment in school-based teacher education if student teachers are to develop a broad, high quality practical theory? (Buitink, 2009:126).

Finally, it is discernible from the review above that research on the practicum has tended to target different aspects such as supervision, cooperation or particular

issues in student teacher learning like practical pedagogical knowledge, teacher- learner efficacy and assessment of the success of particular models of the practicum. The review therefore suggests the need for more holistic studies that explore how collaboration, supervision and other relevant issues during single TP sessions in public schools - organised by state run TE institutions impact on student-teacher learning.

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