
Jay Anand¹, Elizabeth Gangmei²

¹Research Scholar Ph.D In Education, Rie (Ncert), Bbsr Under Utkal University
²Associate Professor, Regional Institute Of Education (Ncert), Bbsr

Abstract
Reflective practice has become a buzzword in teacher education as a mark of professional competence. The purposes of using reflection in their practices for pre-service teachers are not only for illuminating their pedagogical and professional learning experiences, but also critically reflect to their values, beliefs, attitudes, and evaluate learning experiences. Although the significance of reflective practice has long been acknowledged, a mutual agreement has still not reached on how it should be defined or what processes should be initiated in teacher education programs. It serves as a bridge connecting the gap between theory and practice as it allows pre-service teachers to apply the theoretical knowledge and teaching techniques that they acquire in their coursework in the real classroom setting. As a result, pre-service teachers gain a better understanding of teaching in the real-world context, recognize the students’ needs, and acknowledge the difficulties in teaching that they may face in the future (Smith & Lev-Ari, 2005). This article discusses concept of reflection, reflective practices and how it is implemented in educating pre-service teachers on their early stage of professional learning. Besides this article has also highlighted some perceived difficulties to implement reflective practices, as well as the way how reflective practices are employed in teacher education for overcome the gap between theory and practices.

Keywords: Reflective Practices, Pre-Service and In Service Teacher Education, Teaching Practicum, Models of Reflective Practices

Introduction
In 1904, John Dewey noted a gap between theory and practice in teacher education (Dewey, 1904), and he discussed possible approaches to bridging this gap (see also Shulman, 1998). Nevertheless, during the whole of the twentieth century, it has remained the central problem of teacher education worldwide (Lanier and Little, 1986). In various analyses of this problem, the focus has often been on the question of how practice can be better linked to theory. Only relatively recently, has attention focused on the possibility that theory can be better linked to practice. During the late nineteenth and early twentieth century as psychological and pedagogical knowledge developed, academics wanted to offer this knowledge to teachers in order to change education and adapt it to scientific insights. This is how the idea of the professionalization of teachers began. Indeed, as Hoyle and John (1995) point out, the availability of a recognized body of knowledge is one of the most important criteria for categorizing an
occupational group as professional (see also McCullough, 1987). It seemed only logical to teach
important theories to pre-service and in-service teachers, who could then apply this knowledge base in
about the “theory-to-practice approach”.

Causes / Reasons for the Gap in Theory and Practice

1. Theory Practice Divide -Theory-practice divide has to do with the learning process within teacher
education itself, even before the stage in which theory can be applied to practice. Student teachers’ prior
knowledge plays a powerful role in their learning during a teacher education programme (e.g., Wubbels,
1992), and their preconceptions show a remarkable resistance to change (Joram & Gabriele, 1998). In
the literature, this has been explained by the many years of experiences that student teachers have had as
pupils within the educational system (Lortie, 1975; Brouwer & Korthagen, 2005). Preconceptions also
shape the way new knowledge is being understood. Stofflett and Stoddart (1994), for example, argue
that teachers’ conceptions of how subject matter should be taught are strongly influenced by how they
themselves learned the subject content. These authors inferred that student teachers who themselves
experienced learning in an active way, are more inclined to plan lessons that facilitate students’ active
knowledge construction. Huibregtse et al., (1994), found that, even with experienced teachers, there is a
strong relation between their preferred way of teaching and the way they themselves are used to
learning; they have a limited view of the learning styles of their students, and tend to project their own
way of learning onto the learning of their students.

2. The Feed-Forward Problem: “Resistance from the student teacher at the time of exposure to given
learning’s and, later, protestations that the same learning had not been provided in stronger doses” (Katz
et al., 1981, see also Bullough, Knowles, & Crow, 1991). This problem can also be stated as follows: in
order to learn anything during teacher education, student teachers must have personal concerns about
teaching or they must have encountered concrete problems (Korthagen et al., 2001), otherwise, they do
not perceive the usefulness of the theory.

When they do come across problems, there is often no opportunity to acquire the relevant theoretical
insights. Teaching is a profession in which feelings and emotions play an essential role (Nias,
1996;Hargreaves, 1998), but “the more unpredictable passionate aspects of learning, teaching and
leading (. . .) are usually left out of the change picture. The problem of promoting fundamental
professional change is first of all a problem of dealing with the natural emotional reactions of human
beings to the threat of losing certainty, predictability, or stability.

3. Epistemologically and Ontologically Rooted

The epistemologies of student teachers can often differ greatly from the dominant epistemology of a
teacher education institution. Pre-service teachers’ often adopt the modernist principle that human
beings do not differ greatly and are essentially the same which often differs from the core ontological
belief of teacher educators. Often it is student teachers’ ontological beliefs that essentially determine
what they perceive as “working” and the criteria by which the evidence for this is determined (Sugrue,
1997).
4. Quest for Legitimacy of Educational Theory within the Academic Milieu. For example, Carr’s (2006) discussion of the historical foundations of educational theory describes its inception in the nineteenth century, with the appropriation of philosophical texts such as Plato’s (2003) Republic or Rousseau’s (2007) Emile, as ‘nothing less than an act of gross historical misrepresentation’ in order to achieve a sense of academic legitimacy. Similarly, Goodson and Hargreaves (1996) discuss the ‘devil’s bargain’ engaged in by teacher education departments to acquiesce to the University milieu and gain academic status within it. This quest for legitimacy and status has arguably resulted in distancing educational theory from teachers’ practice and the realities of the classrooms challenge associated with the theory-practice divide relates to the long apprenticeship of observation of teaching (Lortie, 1975). For teachers these teaching archetypes or “lay theories” (Sugrue, 1997) of teaching based on their own schooling experiences often inhibit their engagement with theory as new theories can be narrowly assessed through the lens of past experiences. In essence, student teachers may intend to teach as they were taught and therefore dismiss educational theory that challenges this intention.

5. Student Teachers’ Acceptance or Rejection of Educational Theory: 
The theory-practice gap, and more specifically student teachers’ acceptance or rejection of educational theory, relates to the acceptance of the authority of the teacher educator to define what appropriate educational knowledge is. Defining what is ‘appropriate’ and ‘relevant’ educational theory within an ill-defined discipline highlights the dimensions of power underpinning teacher educational curricula. In the Foucauldian sense, the educational theory espoused by teacher educators could be seen as ‘a means of controlling what is permitted to count as knowledge’. From this perspective student teachers acceptance or rejection of educational theory may have little to do with its perceived relevance and instead may reflect their willingness to accept the authority of the teacher educator in determining what is legitimate and relevant ‘educational theory’.

6. Complexity of teaching. Hoban (2005) states: what a teacher does in a classroom is influenced by the interaction of many elements such as the curriculum, the context, and how students respond to instruction at one particular time.” Hoban continues by saying that this view of the nature of teaching necessitates holistic judgment (cf. Day, 1999) about what, when, and how to teach in relation to a particular class, and this is something for which it is hard to prepare teachers. Moreover, practice is generally ambiguous and value-laden (Scho¨n, 1983). Different theories may each have their value in explaining a certain aspect of the situation, and lead to different perspectives.

Directions for Bridging the Gap between Theory and Practice 
The gap between theory and practice has been a perennial issue. As early as the beginning of the 20th century, Dewey (1904) noted this gap and discussed possible approaches by which it might be bridged (see also Shulman, 1998). 
The aim of bridging the gap between theory and practice to improve the theory-into-practice approach through pedagogical strategies, such as the promotion of reflection (e.g., 1990; Scho¨n, 1987), or through tools like (video) cases, portfolios, etc. Each of these has its merits in helping teachers develop useful action-guiding theory with a small t, or in supporting them to make connections between existing theory and their own implicit thinking about education. However, a fundamental solution to the theory–practice divide may require more radical changes in program structure, in which “greater continuity
exists between teacher preparation and the schools where beginning teachers begin their teaching careers.

The relationship between theory (knowledge) and practice (experience)
Reflection is often perceived as a means to address the theory - practice dichotomy in teacher education. İmsen (1999) refers to reflection as a core concept in bridging the gap between the descriptive (is) and the normative (should be). Loughran (2002) shows in his article “Effective reflective practice: in search of meaning in learning about teaching” how knowledge can be developed through experience as a result of using effective reflective practice. However, in order to understand the role reflection can play in integrating theory and practice, it is first necessary to look at the roles of theory and practice and their relationship in teacher education. The gap between what teachers do and what teaching is supposed to be has been connected to a gap between ‘theory’ and ‘practice.’

ALACT – a model to integrate theory and practice
The “ALACT Model” (Action – Looking back on the action – Awareness of essential aspects – Creating alternative methods of action – Trial) of the University of Utrecht (Korthagen, 2001& 2010) is an example where the process starts with the practical – the students’ own experiences. According to Korthagen this five phase model of reflective practice in teacher education was designed with the principles of a realistic approach in mind:

• Starting with the concrete practical
• Promoting systematic reflection on student teachers’ own and their learners’ feeling, thinking and acting, the role of context and the relationships between these aspects.
• Building on interaction amongst students and between students and teacher educators.
• Using a three-level model (gestalt, schema and theory).
• Integrating theory and practice as well as several disciplines (Korthagen 2010)

ALACT MODEL ( Korthagan 2001)
It is an inductive process, part of professional development and designed to incorporate students’ assumptions, their feelings and their perceptions right from the beginning of their professional development. They look back on the action (reflection-on-action), become aware of the “essential aspects” of the action (including theoretical aspects), then go on to create alternative methods of action.
and start again, now with alternative methods. The student educator calls on theoretical aspects when needed. Central to the approach is a feeling of “safety” for the learner, created through the encouragement of the teacher educator. Thus the student “owns” the learning (Korthagen 2001). It is about knowledge creation rather than given knowledge. Whereas the process starts with technical competence, it works towards evidence-based practice, life-long learning and learner-independence (Korthagen 2001). Korthagen refers to this approach as a “Pedagogy of Realistic Teacher Education”. The guidance of the teacher is prominent since it makes provision for links between cognitive, affective, social and the context.

What is Reflective Practices?
Schon (1993) suggested that reflective teaching practice is a continuous process and involves learner thoughtfully considering one’s own experience in applying knowledge to practice while being taught by professionals. It helps the individual’s to develop their own personality. Gibbs’ (1988) reflective practice suggests that individuals develop analysis of feelings, evaluation of experience etc. Jasper (2003) associated reflective teaching practice with lifelong learning resulting in the development of autonomous, qualified and self-directed professionals. Engaging in reflective practice is associated with the improvement of the quality of care, stimulating personal and professional growth and closing the gap between theory and practice.

Why Reflective Practice in Teacher Education?
Shulman and Shulman (2004) as one of five clusters of generic attributes essential for “accomplished teaching”. They define reflection in teacher education as “evaluating, reviewing, self-criticizing and learning from experience”. Korthagen (2001) maintains that the idea of using reflection to bridge the perceived gap between theory and practice originated in the 1980’s as a result of research reporting on the “gap”. In a developing country like South Africa universities have to defend and justify their teacher education programmes to a society constantly made aware by the media of the ongoing challenges in education. The implication is that at least part of the problem lies in teacher education offering inflexible and static programmes to students who have to be change agents in a fast-changing world. One of the criticisms is that university courses are not relevant or responsive to the challenges in the “real” world of the classroom since it consists mostly of theory and, as Korthagen (2010), points out; theory only becomes useful to student teachers when they themselves look for a better understanding. To this I would like to add: “and are willing to consult theory to improve their understanding”. This would serve the dual purpose of creating opportunities for shifts in own worldview but also to ultimately enable their own learners to do so in future. Such an approach would concur with the view of helping prospective teachers to come to terms with ”a wide array of things about learning, social and cultural contexts, teaching and be able to enact these understandings in complex classrooms serving increasingly diverse students” (Darling-Hammond, 2006).

The Role of Reflective Teaching/Practices in Teacher Education
Reflective practice is used at both the pre-service and in-service levels of teaching. Coaching and Peer involvement is two aspects of reflective practices seen most often at the pre-service level. Kettle and Sellars (1996) studied the development of third- year teaching students. They analyzed the students' Reflective writings and interviewed them extensively about their reflective practices. They found that
the use of peer reflective groups encouraged student teachers to challenge existing theories and their own preconceived views of teaching while modeling for them a collaborative style of professional development that would be useful throughout their teaching careers. Several research studies have proved that critical reflection upon experience continues to be an effective technique for professional development. Freidus (1997) describes a case study of one teacher/graduate student struggling to make sense of her beliefs and practices about what constitutes good teaching. Her initial pedagogy for teaching was based on the traditions and practices of direct teaching. Jasper (2003) associated reflective teaching practice with lifelong learning resulting in the development of autonomous, qualified and self-directed professionals. Engaging in reflective practice is associated with the improvement of the quality of care, stimulating personal and professional growth and closing the gap between theory and practice. Han (1995) stated that, the process element of reflection emphasises how teachers make decisions, content stresses the substance that drives the thinking and reflective inquiry may set the stage for learning how to be a good teacher. Reflective teaching is a significant element in student teachers’ initial training programme. It has also been widely acknowledged by many researchers as an approach that could promote teachers’ professional development and improves the quality of teaching and learning. Griffiths (2000) argues that reflection is taken for granted rather than being made explicit. There is an assumption that student teachers will automatically reflect on their practices.

**Caution in Implementing Reflective Practice in the Teaching Practicum**

The teaching practicum, or as it is sometimes called teaching practice, field experience, or internship, has become one of the most critical aspects of teacher education programs today (Zeichner, 2002). It serves as a bridge connecting the gap between theory and practice because it allows pre-service teachers to apply the theoretical knowledge and teaching techniques that they acquired in their coursework in the real classroom setting. As a result, pre-service teachers gain a better understanding of teaching in the real-world context, recognize the students’ needs, and acknowledge the difficulties in teaching that they may face in the future (Smith & Lev-Ari, 2005). The teaching practicum is also recognized as one of the most stressful times in a pre-service teacher’s life since it is his or her first formal attempt at teaching. The pre-service teachers in Jusoh’s study (2013) mentioned a long list of problems that they experienced during the teaching practicum, such as their inability to apply the theory learned into practice and lack of professional support. As such, pre-service teachers are usually overwhelmed by stress and fear, including fear of failure and fear of uncertainty (Harscher et al., 2004). Such struggles may be shared among pre-service teachers from different cultures (e.g., Chinokul, 2012; Nguyen & Baldauf, 2010). According to Loughran (2002), a problem or a puzzling situation can provoke pre-service teachers’ curiosity. Reflective practice has proven to help pre-service teachers develop their repertoire of teaching and to help them survive the beginning year of teaching. Past studies have shown that reflective practice can support pre-service teachers’ ability to overcome their fear of performing in a real classroom setting, become more resilient in handling the reality shock (Slade et al., 2019), and become more adaptive in addressing the challenging issues in the classroom (Wlodarsky & Walters, 2010). For example, Ragawanti (2015) has reported on how reflective practice helped pre-service teachers improve their classroom management skills. One of the study participants struggled with dealing with a noisy class. In response to the problem, the participant chose different methods to keep her students silent, such as warning, scolding, and giving direct orders; however, she/He failed. After reflecting on and evaluating the methods that she used regarding this issue.
Challenges of Reflective Practice in Teacher Education
When engaging in the process of reflective practice, pre-service teachers can encounter a number of challenges, which are presented as four major questions with the answers provided as follows.

How to Foster Pre-service Teachers’ Reflection
There are various tools that pre-service teachers can employ in order to reflect on their teaching, such as reflective journals, collaborative learning, recording of lessons, peer observation, etc. However, reflective journals are discussed here as they are widely used in the field of teacher education (Jaeger, 2013). Goker (2016) conducted a study with 16 pre-service teachers in Turkey and asked the participants to write reflective journals on their teaching experiences for a semester. At the end of the semester, all of the participants were interviewed and were asked about their perceptions of journal writing. It was found that writing reflective journals helped the participants increase their awareness of their teaching practice and its evaluation.

Reflective journal writing constructs and expands pre-service teachers’ personal understanding of their teaching. Reflective journals serve as a personal space for pre-service teachers to clarify their own thinking process and to create a connection between their theoretical knowledge and the real classroom (Lee, 2008).

How to Engage Pre-Service Teachers in Reflective Practice
One of the main challenges when using reflective practice in teacher education is that reflection is a concept that can be “too big, too vague, and too general for everyday application” (Korthagen & Wubbels, 1995). This is why asking pre-service teachers to reflect without careful guidance may prevent them from actually engaging in reflection.

Although the concept of reflective practice is usually presented as an individual matter, it is not necessarily carried out in isolation. The literature suggests that sharing individual reflection with a supervisor or peer enables pre-service teachers to establish new understanding about their teaching. Specifically, their peers can ask reflective questions, help scaffold underlying values and thoughts, voice alternative perspectives, and challenge the assumptions of everyday practice (Karnieli-Miller, 2020).

Similarly, the results of Smith’s study (2002) also revealed that supportive comments from supervisors and peers helped pre-service teachers in the study develop concrete ideas.

How to Nurture Pre-Service Teachers’ Reflection in Emergency Remote Teacher Education
The COVID-19 outbreak has impacted education and teacher education. This global crisis has forced an unexpected transition from face-to-face to remote teaching as many schools and universities are closed at the time of this writing, and teacher education is no exception. There is a need to provide a more systematic approach to teacher education that facilitates remote teaching and learning experiences.

Although teaching practicum may vary from one teaching education program to another, supervision, classroom observation, and reflective practice are considered common practices shared among most programs. During the practicum, pre-service teachers are assigned to teach in real classrooms under the observation and supervision of a supervisor. Classroom observation is usually divided into three stages: pre-lesson observation, observation, and post-observation which require pre-service teachers and the teacher supervisor to meet face-to-face and in a one-to-one manner. To exemplify, pre-service teachers
and the supervisor meet in the university setting for a specific meeting where they discuss lesson plans. Later on, the supervisor observes pre-service teachers’ teaching in an actual class. After the class is dismissed, they meet face-to-face to discuss the strengths and weaknesses of the lesson observed in order to elicit a better solution. In this scenario, the opportunity for reflective practice is hindered because of several obstacles, such as time and travel constraints (Hixon & So, 2009). To deal with this concern, various technologies have been introduced in order to offer pre-service teachers more opportunities to reflect. In addition to providing students with access to technology, computer-supported courses have to include clear explanations, scaffolding, and effective feedback, as well as opportunities for peer interaction and collaboration. They should also equip students with strategies to work independently at home (Bond, 2020). Suphasri (2015) has proposed a model that illustrates how pre-service teachers’ reflection can be assisted during the teaching practicum with the use of technology.

**Blended-learning Supervision Model (Suphasri, 2015)**

In contrast to the traditional classroom observation process mentioned earlier, different technologies implemented at each observation stage offer pre-service teachers opportunities to engage in reflection despite limitations of time and place. At the pre-observation stage, the supervisor can provide pre-service teachers with support regarding their lesson planning through e-mail or via an online chat platform. A conversation during this stage helps pre-service teachers prepare their actual teaching. At the observation stage, a video of pre-service teachers’ lesson can serve as a stimulus for activating their reflection during the post-observation stage. Feedback from the supervisor is useful as it can encourage pre-service teachers to consider their teaching practice based on a perspective of an expert. Watching the recorded video can also enable pre-service teachers to assume the third-person role when going over any teaching. Elements or incidents that might have gone unnoticed. Afterwards, writing a reflective journal means an opportunity for pre-service teachers to have a mental dialogue with themselves. Finally, sharing their written journal online allows them to make a useful contribution to the community and watching and giving comments to their peers’ videos and reflective journals can make pre-Service teachers engage in meaningful reflection as well.
Considerations Regarding Using Reflective Practice in Teacher Education

As our society navigates through the 21st century, technology is playing a prominent role in everyone’s life. A growing number of studies have explored how technology can be employed to promote pre-service teachers’ reflective practice. The benefits of using two types of technology, namely, video and social media, are explored below.

The power of using digital videos as a means to facilitate pre-service teachers’ reflection has been widely accepted. Videos allow for the complexities of the classroom to be captured in real-time (Wang & Hartley, 2003). Taking the benefits of technology and interaction with others into account, social media is another promising means for pre-service teachers to develop the ability to reflect. This is social media creates a sense of community where people are encouraged to collaborate, discuss, share, and challenge ideas and beliefs (Iredale et al., 2020).

Implications of Reflective Practice in Relation to Teacher Identity and Teacher Quality

Farrell (2003) has described the situation that pre-service teachers are facing during their first year as a “sink or swim” experience. This connotes the frustrations and difficulties they have to encounter during that time, which leads to two critical questions that pre-service teachers need to answer so that they can establish an identity as a teaching professional (Graham & Phelps, 2003). The first question is “Who am I?” and the second is “What do I have to do?” Obtaining answers to these two questions would help pre-service teachers gain a better understanding of the connection between their inner self and their teaching practice. Therefore, teacher education programs should strive to provide pre-service teachers with the tools that would help them investigate and understand the outer context, such as the school and classroom where they teach, and how these might interact with their own processes of becoming a teacher (Trent, 2010). Reflective practice is a key method that encourages pre-service teachers to become more in tune with their sense of self and with their understanding of the context in which they work (Beauchamp & Thomas, 2009). Introducing pre-service teachers to different tasks that encourage them to discuss, justify, and reason with their community of practice not only helps them look back and examine their identity (e.g., beliefs, commitments, emotions, etc.) but also allows them to look ahead at future practice with the intention to improve their professional development (Conway, 2001).

Conclusion

The reflective practice is a cyclical process, because once we start to implement changes, then the reflective and evaluative cycle begins again. As a result of reflection, the teacher may decide to do something in a different way, or may just decide that what she/he has been doing is the best way. Therefore, being a teacher one needs to reflect on the experiences or activities one is doing for one’s growth. In short, by developing knowledge and understanding the setting practice and the ability to identify and react to the problems the student teachers can become effective teachers. Teachers can deal with the needs and different issues of the learners and demand of time if they reflect on their daily teaching learning activities for their professional growth. To deal and survive in their professional field, the student teachers need to grow and bring changes in their behavior and style. Reflection is a flash back that the teachers need to mediate for their development.
References


61. Gibbs (2004) pointed that reflective teaching suggests that individuals develops analysis of feelings, evaluation of experience etc.