

Chapter 10

Teacher Educators and Reflective Practice

Jennifer Harrison and Elka Yaffe

Introduction

In this chapter, we emphasise the importance of sustained conversations and activities between beginning and expert teacher educators, which can encourage a critical and investigative stance towards teaching and learning. This is based on an extensive international research literature on mentoring in general, and on our own research projects with beginning teachers, investigating what happens if we try to intervene in mentoring dialogues to promote deeper levels of reflective practice. We know of no reported empirical work in the literature that investigates the conditions that might support the acquisition of professional knowledge, the development of critical thinking and problem-solving (or problem-setting) skills, or other aspects of professional learning by beginning teacher educators. Thus our chapter attempts to focus and speculate on some of these conditions through the examination of the impact of two specific research projects, one in England and one in Israel, involving a range of mentoring practices with beginning teachers and their school mentors. Through these, we highlight the opportunities that structured support programmes in higher education institutions might offer to beginning teacher educators to meet their specific needs at the very beginning of their career. We emphasise the crucial part to be played by the particular mentoring arrangements (both formal and informal) and associated relationships that can be put in place in order to value, and to model, reflective thinking and promote critical reflection on practice. Throughout our writing in this chapter, we explore the extent to which our developing knowledge and ideas of effective mentoring with new teachers can also encapsulate a professional framework for beginning teacher educators. As teacher educators, how can we benefit from the pedagogical and educational discourses which we expose in these two studies?

J. Harrison
University of Leicester, Leicester, United Kingdom

Modelling Experiential Learning, Reflective Thinking and Critical Reflection on Practice

For the last 25 years, reflection and reflective practice have been held, internationally, as important aspirations for student teachers and their mentors, and more experienced teachers in schools. There is now an extensive body of research and literature that focuses particularly on the needs of the beginning teacher and their mentors (see, e.g., Calderhead, 1996; Dymoke & Harrison, 2006; Gore & Zeichner, 1991; LaBoskey, 1994; Rodgers, 2002; Yaffe, 2003). There is much less research and writing about reflective practice and the beginning teacher educator. Korthagen, Loughran and Lunenberg (2005) write about the value of social interactions in their different settings between academics, student teachers and teachers and the part to be played by ‘critical conversations’ (p. 165). Our chapter attempts also to redress that balance in order to highlight the importance of understanding what reflective practice actually means, and how the process itself can be encouraged both in oneself, as a new beginning teacher educator, and in turn, with student teachers in their training.

Teachers’ thinking during interactive teaching is determined by decisions made in their planning of these teaching sessions. We argue in this chapter that there must be a similarity and continuity between these two phases in beginning teacher educators’ thinking as well. It is generally recognised that teachers’ thinking is tacit – teachers tend to be fully engaged in their activities with their learners and that there is rarely the need or, indeed, the opportunity to articulate to themselves the thinking that is underpinning their actions.

The key question we pose in this chapter is ‘How can we best support the beginning teacher educator to articulate to themselves (or to others with whom they work) their reflections in and on and about their past, current or future practices?’ Schön (1987, 1991) has been particularly influential in our developing thinking about the importance and use of reflective practice. He likened reflection on practice to being situated in a hall of mirrors, in which we can both learn about ourselves and about others’ teaching. An important aspect of reflective practice has to be in relation to the shared moral frameworks within which individual teachers (and, we argue, beginning teacher educators) gradually learn good practice. The particular professional community of practice in which a teacher learns good practice is, therefore, an important aspect of professional development too (see Calderhead, 1996; Loughran, 2006; Olson, 1992). A further characteristic of reflective practice is that it is very personal. Connolly and Clandinin’s work showed how teachers’ thinking and practice were given coherence by the images that informed them (see Connolly, Clandinin & He, 1997). Grant (1992), too, illustrates this aspect with teachers’ use of metaphors. A third characteristic is the complexity of teachers’ practical thinking. McIntyre and others refer to this as professional craft knowledge (see Brown & McIntyre, 1993) and argue that beginning teachers need to engage in practical theorising with others, as a particular form of reflective practice. There is a growing interest in the notion of reflection in order to research and better understand the complex nature of teaching and learning about teaching.

We now need to explore the meanings attached to some of the terminology we are using in this chapter. Reflection and reflective practice are both terms that are in danger of overuse and are open to a number of interpretations. Field (1997) described reflection as ‘a means to self-development (that is) so embedded in professional development that being able to reflect has become an end in itself’ (p. 27). Here, we consider the various meanings of reflection from ‘learning to make sense so we better understand it’ to ‘the purposeful, deliberate act of inquiry into one’s thoughts and actions through which a perceived problem is examined in order that a thoughtful, reasoned response might be tested out’ (Loughran, 1996, p. 21). Kolb’s (1984) cycle of reflection (see Fig. 10.1 below) provides the rationale for some of the interventions described in the next section. We, therefore, believe that beginning teacher educators, like beginning teachers in schools, develop into expert teacher educators by acquiring skills incrementally that depend on gaining concrete experiences, engaging in reflective observation, being able to reflect meaningfully upon them (i.e. abstract conceptualisation) and by taking part in further active experimentation. In this way, the experiential learning cycle (Kolb, 1984) bears similarities to a model of action research (Carr & Kemmis, 1986) with its focus on active problem-solving, implementation of new practice and reflective accounts of the outcomes of that practice.

It is during the period of pre-service education that most teacher educators expect the use of reflective practices by their student teachers. Thus we persuade, and advise, our student teachers to be reflective, to use associated critical thinking skills, and thus set them on a path of self-study (Loughran, 2006). But, in asking this, what exactly do we require of our student teachers and what exactly do we model ourselves in our own teaching practices with these student teachers and other teachers as our learners? Some further illumination of this range of reflective practices is now needed since it follows that beginning teacher educators have to be critically

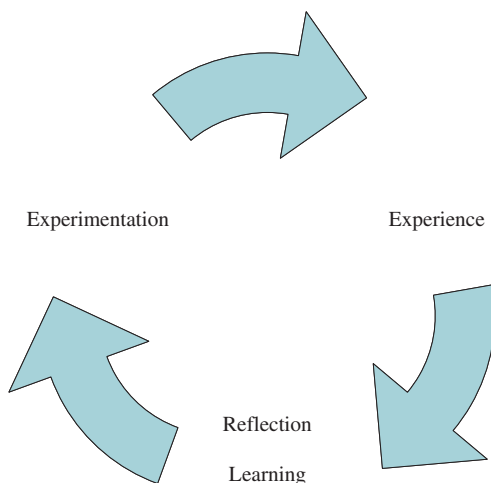


Fig. 10.1 The reflection circle

reflective practitioners themselves in order to demonstrate, or model, the practices to their student teachers (see Lunenberg, Korthagen, & Swennen, 2007).

Beginning teacher educators acquire experiences very rapidly. Boud, Cohen and Walker (1993) attempted to describe experience as an event with meaning. Here, we argue that beginning teacher educators need to be helped to apply the brakes in order to be self-aware and, after some time, also to be self-critical of their own practices and bring about a deliberative habitual reflection put forward by Eraut (1995). Thus a formal mentor or, alternatively, a more experienced teacher educator who can act as an informal mentor could provide some peer scrutiny and, through systematic processes of reflection, can help to move a beginning teacher educator from a position of dependency to one of greater independence and professional autonomy and professional development (see Dymoke & Harrison, 2006; Yaffe, 2003, for a further discussion of these two concepts in relation to newly qualified teachers in England and Israel).

Critical analysis, critical awareness, critical consciousness and critical reflection are all forms of critical thinking. All these processes lie also at the heart of critical reflective practice. They clearly involve some challenge to existing thoughts, internal schema or attributes, and imply some change with improvement. Brookfield (1995) argues that peer support underpins critical thinking since the process is person-specific, emotion-centred, and both intrinsically and extrinsically motivated, and often leads to unexpected critical insight. Maudsley and Scrivens (2000) pose an important question: 'How can educators ensure that reflective thinking is critical thinking?' In other words, is there critical reflection on practice? We can argue that a range of professional skills (ones of evaluation, problem-solving, analysis, judging and using inferences, use of inductive and deductive logic, judging the validity and reliability of assumptions, data or other information) are all part of this complex process. Pithers and Soden (2000) usefully summarise some necessary dispositions for critical thinking in education as being 'open-minded, drawing assumptions cautiously, and weighing up the credibility of evidence' (p. 239). We shall illustrate through our own research projects, in the sections below, some particular activities that can promote the use of the higher-level thinking skills that are part of critical reflection on practice. In the next sections of this chapter, we refer to a schema proposed by Van Manen (1977), which recognises three levels of reflective thinking – technical, practical and critical. We have found this framework useful for distinguishing improvements in critical reflection on practice.

In conclusion, reflective practice is defined as a process of learning by observing others and engaging in discussion of practice with others so as to expose tacit beliefs, to question decisions, and to gain insights, and has been central to the goal of developing reflective practitioners amongst beginning teachers. In so doing, teachers and, we argue, teacher educators need to bridge discrepancies that are caused by lack of experience (1) to make explicit the tacit knowledge that guides their perceptions, judgements and decision-making (2) to question the coherence between generally accepted theories of teaching and those employed in their own practices. By assuming the perspective of an external observer on events, we propose that the beginning teacher educator, together with a more experienced colleague acting as mentor, can

begin to identify the underlying assumptions and feelings and speculate how these can affect practice. It follows, too, that these more experienced teacher educators acting as mentors will also need to have a deep understanding of reflection and the skills to help others reflect.

Generally, we have tried to highlight the central importance of the interpersonal dimension of any mentor–mentee relationship and the person-centred ways of working that may be most effective for bringing about professional development. In particular, the nature and type of feedback given is a key feature that we shall explore in the following two sections. We recognise that reflective practice is a process that integrates thought and action with reflection. It involves thinking about, and critically analysing, one’s own actions with the ultimate goal of further professional development.

Research Project 1: Using Reflective Practice Strategies to Enhance Professional Autonomy and Improve Critical Reflection on Practice

In this section, we describe a research project carried out in England which explored the effectiveness of designated mentors (who were experienced teachers working alongside beginning teachers in their first year of teaching after qualification). It was supported over the two-year period by funding from the Esmee Fairbairn Foundation. The project director wished to provide some strategies – or aids – which might (1) help bridge the gap between theories and practices; (2) could provide for more thorough systematic reflection on practice; and (3) could illustrate the potential for the scaffolding of work in which novice and experienced teacher educators can work alongside each other. In the course of the project, various models of mentoring were presented and explored (for further details see Harrison, Lawson & Wortley, 2005). We believe that the approaches used successfully in this project could be equally well applied to situations where beginning and more experienced teacher educators can develop the necessary skills of critical reflective practice and where the experienced teacher educator can model critical reflective practice processes during critical conversations with new beginning teacher educators.

We first need to draw distinctions between two particular types of reflection. Schön (1991) distinguished between reflection in action (the capacity for making predictions from particular actions and adapting practices as they arise) and reflection on action (looking at practice with the benefit of hindsight). The theoretical framework for the research project started with the recognition that looking back on practice is an important part of the process of critical reflection on practice. Loughran (1996), for example, refers to the concepts of retrospective reflection and anticipatory reflection. In this project we used these ideas to unpick the conversations between mentor and mentee in order to begin distinguishing between the teachers’ attempts to de-construct and construct practice.

Thus, in de-constructing practice, we expect to find, in a critical conversation, a study of a situation, some personal insights, a development of one's own rationale (new theory or new conclusions) and a change in personal understandings. In constructing practice, we expect to find some deliberation of alternative course of future action, and planning and anticipating what might happen as a result of that planning. The notion is that through a combination of reflection followed by practical action, a teacher's practice can develop:

Reflection + Action → Developing Practice

This formed the basis of provided strategies and interventions in the course of the project.

The researchers provided the target teacher mentors with three training meetings, designed as interventions, during the year. In the first training meeting at the start of the induction year for the new teachers, researchers provided the target teacher mentors with a booklet of several reflective practice strategies, which might also be described as critical incident exercises. Teacher mentors were asked to choose one of the selections of strategies and use this in their first professional review meeting with the new teacher (note that this was the first meeting of up to six in the course of the induction year). They were also asked to record, either on video- or on audio-tape, the content of each review meeting during the year. They would then return the recordings to the research team for transcription, and the transcripts were returned to the participants. A selection of these materials then formed the basis of a second training meeting at the start of the second term. The transcripts also provided an opportunity to consider the impact of the interventions on the professional practice of these teacher mentors in the series of the critical conversations. The two strategies most commonly used throughout the year are shown in Fig. 10.2.

Critical Incident Method	Story-telling method
<p>Choose a significant event in the life of the new teacher. Ask him/her to:</p> <ul style="list-style-type: none"> ● Describe the incident to you. ● Say <i>why</i> it was critical. ● Identify some assumptions being made (e.g. about the pupils' prior learning). ● Discuss these assumptions with the new teacher; draw up a new set of assumptions to allow, e.g., the next lesson to be planned with these in mind. ● Cycle repeats next time. 	<p>Focus on a key event with the new teacher. Ask him/her to:</p> <ul style="list-style-type: none"> ● Construct a narrative (written or oral) to demonstrate <i>what</i> happened and <i>why</i>. ● Ask what was expected to happen. ● What did this event and its consequences mean to the narrator? ● How will it affect their future teaching /learning?

Fig. 10.2 Examples of provided reflective practice strategies

One powerful impact of returning these personal transcripts of the early meetings to the teacher mentors was the revelation of the extent to which the teacher mentor monopolised the talking time in the meetings. This aspect was discussed at length with the mentors at the second training meeting. At that stage, relatively few of the target teachers had chosen to use a reflective practice strategy at their first professional review meeting. Evidence showed that they prefer the well-recognised route of providing feedback on a recently observed lesson taught by the new teacher. While recognising the importance of such feedback, it emerged in the subsequent analyses of the conversations that resulting critical reflection on practice by the new teacher was much more limited where the traditional lesson debriefing was adopted. This was a particularly striking aspect of the findings.

One teacher mentor was invited by the researchers to make a video recording of her use of the storytelling reflective practice strategy in her first professional review meeting with her new teacher. They then invited her to watch extracts of her recorded meeting with them and to respond to a series of open-ended questions from them. For the second training meeting, they assembled a training video that included her recorded responses following particular sequences recorded from the actual mentor–mentee meeting. This training tool allowed the project director to explore, in the training meeting with all the teacher mentors, aspects of what might constitute good mentoring practice and to stimulate further insights into the use of reflective practice strategies. The uptake of the use of reflective practice strategies increased in subsequent professional review meetings.

There were some pitfalls and unforeseen impacts of our chosen methods for participatory action research. As academic researchers, we had to deal with two aspects. One was maintaining the cohort of target teacher mentors throughout the lifetime of the project. The second was dealing with the reality that just a minority chose to adopt reflective practice strategies. Thus, in order to make sense of the processes of interaction within the professional review meetings, there had to be ways of negotiating and gaining access to the content of the review meetings. Our request to ‘go public’ with the products of the review meetings (i.e. by using the audio- and video-tapes in the training session) revealed an unanticipated tension for some in their willingness to cooperate in the recording process. Our conclusion was that the ‘struggle to make sense’ is the research process and that our own critical

A	Information-seeking. <i>E.g. Describe ... What? Where? When?</i>
B	Clarifying. <i>E.g. Describe further ... Add details to that ... What instances? Whereabouts? How often?</i>
C	Probing for explanation. <i>E.g. Describe and comment ... Tell me what you felt about that; How? Why?</i>
D	Probing for further insights. <i>E.g. Describe and judge (evaluate). What are the broader implications of ...? Would you do that again? Explain why (justify) ...</i>

Fig. 10.3 Classification of prompts (questions) used by the teacher mentors

reflection on our research practice was a central part of the work (see Harrison, Lawson & Wortley, 2005).

The researchers developed various frameworks for analysing the professional review meeting transcripts. One framework involved looking at the type of questions posed (see Fig. 10.3) and another looked at the type of mentoring style(s) that appeared to be adopted in different meetings (see Fig. 10.4). Researchers were also able to demonstrate for those that used the reflective practice strategies, the increased use of type C and D prompts by the mentor and a greater use of constructing of new practice compared with deconstructing of practice by new teacher and teacher mentor. In other words, the overt use of reflective practice strategies appears to develop the teacher mentors' use of a wider range of types of questioning. This helped the new teachers open up themselves for scrutiny, and to create new ways of working in which the new teacher is enabled to become more autonomous in the de-constructing and constructing of practice. There were some similar changes for the teacher mentors as well.

The rationale for the mentoring framework was a recognition of a probable continuum of the four styles that can bring about a change in the relationship of mentor–mentee, extending from the professional dependency of the mentee towards professional interdependency and finally to full independency (professional

Telling	Teacher mentor is the 'expert' offering tips rather than drawing out ideas from the new teacher. Mentor suggests areas for further work. Mentor offers opinions and judgements rather than analysing and exploring the available evidence base.
Coaching	Teacher mentor allows new teacher to fully articulate their experiences. Mentor 'intervenes' frequently; makes planned, systematic, analytical and meaningful interventions on the new teacher's reflections on practice. Mentor sifts out the significant features and highlights the important values and assumptions being made by new teacher. Mentor <i>may challenge</i> the new teacher's version of events and present possible alternatives.
Guiding	Teacher mentor acts as a 'critical friend'. Focus for discussion tends to be on <i>pupils' learning</i> rather than on new teacher's teaching performance, so mentor questioning emphasises the 'Why?' rather than the 'How?' in relation to teaching performance. Mentor drives the process, though the planning and intentions are examined and challenged by both parties.
Enquiry	Teacher mentor and new teacher operate together through a process of co-enquiry. They investigate the causes or possible solutions and look for new situations in which to test ideas. Both draw on the available evidence base. Mentor allows the new teacher to take the lead in the evaluation on many occasions.
Reflecting	Teacher mentor operates as the 'experienced teacher', drawing on a wide range of relevant contextual knowledge and experiences. Mentor allows new teacher to engage in self reflection throughout. Mentor probes, questions and responds by drawing on and reflecting on own experiences as further material for 'learning about' a new situation.

Fig. 10.4 Framework of mentoring styles applied in the analyses of the transcripts

autonomy). Thus, mentoring styles such as *telling* and *coaching* involve ‘talking to’; *guiding* involves ‘talking with’; and *enquiry* and *critical reflection* involve ‘talking about’.

We begin to understand that when mentors are encouraged to adopt different ways of thinking they may reach different levels of reflection. We learned that there are similarities between the intuitive ways of thinking of the mentors and the three levels of reflection that Van Manen distinguished. The researchers were able to produce evidence that it is the type of mentoring relationship, the particular functions of mentoring and, in turn, the mentoring activities themselves that appear to influence the extent and nature of critical reflection on practice (Harrison, Lawson & Wortley, 2005). Thus, the new teachers were assisted through the use of specific reflective strategies and types of questioning to move from the lower levels of reflective thinking (technical–practical) to more critical and forward-looking thinking and action. As we speculated in the first paragraph of this section, there is clearly considerable scope for the similar professional training and use of reflective practice strategies, for example, in developing critical conversations between beginning teacher educators and more experienced teacher educators.

Research Project 2: Using a ‘Video-Taping Learning Strategy’ to Enhance Critical Reflection on Practice

In this section, we illustrate some professional development ideas for encouraging critical conversations between beginning and more experienced teachers. The recommendations that follow, for the induction of beginning teacher educators as well as for new teachers, are derived from a study in Israel that explored the promotion of professional self-awareness of new teachers during their first year of teaching.

We refer to the theory of Vygotsky (1978, 1986) in order to emphasise the importance of practising and gaining self-awareness at an early stage of professional development. The researchers took a psychological approach to the notion of critical reflection, in which the psychological complexities of self-awareness and of professional development were considered to be very important. This contrasts with the views of others in which critical reflection has been taken to mean no more than the constructive self-criticism of one’s actions with a view to improvement and understanding pedagogy (Calderhead, 1996; Van Manen, 1999; Berry & Loughran, 2005). The researchers promoted a professional development structure that allowed for facilitating reflection, deepening personal understanding and stimulating critical thinking and reflection.

The study took a qualitative approach, using an innovative videotaping learning strategy. The innovation involved the use of specially made video spectacles, which permitted a video recording of the lesson from the teacher’s point of view without observers in the classroom (Yaffe, 2003). Thus, the video recording represented the classroom as the teacher would see it. This recording, in turn, provided a valuable focus for critical conversation about the classroom practice between the teacher and the mentor. Importantly, it also provided a focus for further critical conversation at

later stages (over a period of months) of the teacher's professional development, because it served as a stimulated recall of all that occurred in the recorded lesson.

The researchers based their work with the new teachers on the exploitation of a crucial stage in professional development (Vygotsky, 1986) and the use of a specially mediated dialogue (Feuerstein, 2000). The first year of teaching represents a professional stage of learning and development of thinking – referred to as zone of proximal development (Vygotsky, 1978, 1986). This means that there is a gap between what the new teacher and the new beginning teacher educator) can perform independently in practice and what he/she can achieve with support or mediation by another expert and experienced colleague. Vygotsky recognised the crucial role of communication, social interaction and instruction in (here, professional) development. Thus we can argue that it is a new professional's state of readiness for further self-study and professional development that reflects their existing knowledge and skills and also their capacity to reflect with additional help.

The structure of the Israeli study with beginning teachers recognised that there were three stages leading to critical reflection: micro-reflection, macro-reflection and meta-reflection. We suggest that this way of working might provide some constructive ideas for beginning teacher educators (see Fig. 10.5).

Micro-reflection

Following the video recording of the lesson, the new teacher wrote some reflections on the lesson without any mediation from another person. This first stage of the reflection cycle appeared very personal, and almost intuitive, as the following extracts shows:

Nothing succeeded. I wanted them so much to be interested. I tried to activate the children, to move them out of their seats – that is to get them to be active and to try out all sorts of scientific experiments. I prepared lots of materials on trays. When I allowed them to get up and take the materials I saw that there was a big mess. That was what I felt when I conducted their learning, but now, in the video-tape, I also see that they worked quite well ... at least some of them ... so not everything was a catastrophe.

Thus, this teacher reflected technically on the group-work that she conducted. The researchers found that for most of these new teachers, in this first stage of reflection, these reflective monologues demonstrated just the first two of Van Manen's (1977) levels – the technical and the practical levels. Sometimes the monologue was only a description of the lesson, a report about what happened (rather than why or how).

Macro-reflection

The second stage of the reflection cycle took place after a specified period of time (usually 1 or 2 weeks) and was mediated (Feuerstein, 2000) by an experienced teacher educator. The teacher and the teacher educator watched the video recording

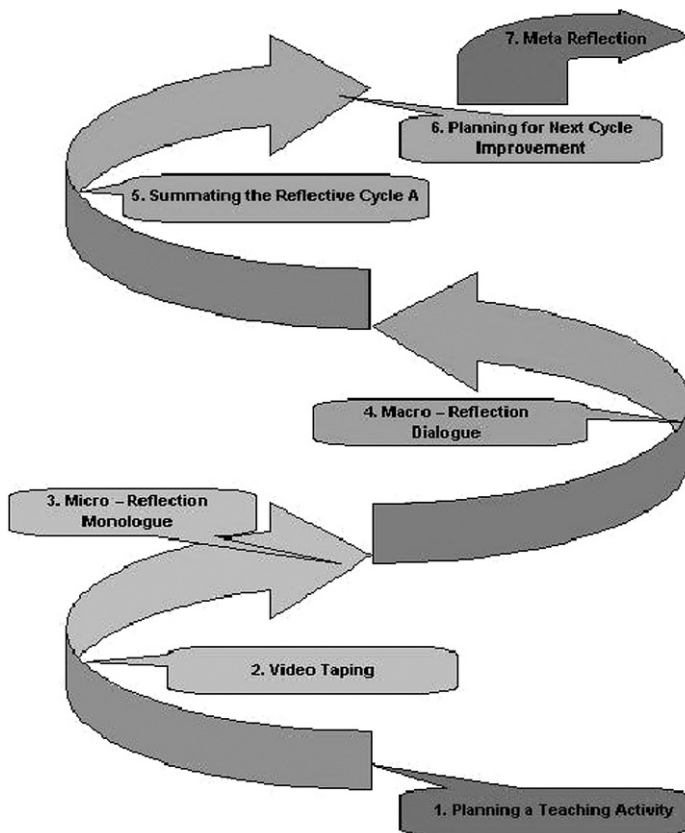


Fig. 10.5 Three stages of reflection – seven steps to meta-reflection

together, looked for patterns of strength and weakness in the teaching and considered alternative ways to respond to the situation. This was a pedagogical dialogue about teaching principles, educational dilemmas and alternative approaches. The session was recorded or the teacher educator took notes. The beginning teacher wrote a reflective monologue about the progress during these two stages and shared it with the teacher educator. The following is an extract from Rona’s reflective monologue (stage 1). She writes:

It was a terrible lesson; they didn’t let me teach; it was noisy all the time; everybody talked and chattered; there really isn’t anything to see here and nothing to think about.

The experienced teacher educator subsequently observed the recorded lesson with this new teacher (stage 2). The new teacher remained very frustrated with her performance but the mentor, who noticed that there were several quiet moments during the lesson, asked:

Shall we talk about those moments when the class was quiet? You tell us what happened then – what caused them to be attentive?

So we stopped there and Rona said:

During these moments of quiet I simply changed subjects and read them a short poem so that, afterwards they could read it by themselves and analyze the content in groups. During these moments they were curious about what was going to happen. Maybe my lessons really aren't interesting enough, not stimulating enough? Maybe I should devote more time to preparing and planning the way subjects flow from one thing to another? to try and make them more intrigued and motivated? From the videotape I can see that this is possible, and in fact, this is what I did for a few moments but I just didn't pay any attention to it.

Here we can see clearly evidence of the technical, practical and critical levels distinguished by Van Manen (1995). Mediation (Feuerstein, 2000), leading to self-awareness, enabled a raised level of critical thinking by the new teacher.

Meta-reflection

Only the mentors participating in the study and the researcher took part in this final stage of reflection. Together they observed clips from video recordings and examined new teachers' monologues from stages 1 and 2. The emphasis of the study was now placed on these mentors' reflections with their new teachers. In further critical conversations, these mentors began to pose new questions and identified particular observations for further discussion with the new teachers. The mentors, collectively, gained insights about the kinds of questions that have the power to facilitate reflective practice, such as: What are other alternatives? What do you think now, after examining (it) a second time? How can it be improved? Can you see it now from another point of view?

In conclusion, we argue that a wider recognition of these three stages of professional development in relation to critical reflection on practice must also be valuable to professional development programmes supporting beginning teacher educators. The study in Israel did not emphasise strongly enough the meta-reflection stage. For teacher educators, it is this stage particularly that could provide more insights into their professional development. Other limitations and problems of the study are due to the qualitative paradigm it adopted (only 14 participants were explored in depth) and it could have been improved and enhanced by combining data from some quantitative research. But, as is suggested here, we can see its overall potential for student teachers and, in turn, beginning teacher educators even in this first study. Beginning teacher educators can be helped to gain a range of insights into their own practice in a variety of professional settings. By concentrating on promoting the professional self-awareness of the beginning teacher educator, we could better emphasise the importance of their role as mentor in guiding critical reflection with their student teachers, and in the self-study of their own practice (see Berry & Loughran, 2005). This links to the importance of making tacit knowledge more explicit – whether it is knowledge of thought or deed. The reflective dialogue can help to acknowledge and make explicit many implicit understandings for beginning teachers and teacher educators as well. More research is now needed to explore the complexities of the

professional development of beginning teacher educators and the way they perceive and promote the use of critical reflection on practice.

Conclusion and Some Recommendations

While we have to recognise that the pedagogy of teacher educators working with student teachers (adult learners) in a range of contexts is different from the pedagogy of teachers in schools working with pupils (young learners), there are a number of important commonalities. All sectors of education are aiming to prepare individuals to be able to think well and think for themselves. The notions of good thinking and thinking well seem to be closely connected with the concept of critical thinking in the literature (see, e.g., Entwistle, 1994; Laurillard, 1993; Ramsden, 1992; Loughran, 1996).

The traditional view of reflective practice is premised on an assumption that reflection succeeds when the reflector (the mirror) and the reflected (the reflection) are both held still. A more modern view of reflective practice opens out the possibility for on-going change and interaction. Reflective practice becomes more a matter of flexibility and, importantly, of the interdependence of one's movements with those of others on and beyond the reflected scene (Van Manen, 1995; Lesnick, 2005). This view of reflective practice begins to take more account of the dynamic aspect of communication between generations of teachers and teacher educators in particular communities of practice in which reflective practice is taking place. As Palmer (1998) wrote: 'Mentoring is the dance of spiralling generations, in which the old empower the young with their experience and the young empower the old with new life' (p. 25).

Both research projects described in this chapter indicate to us that, within their communities of practice, teacher educators must initiate work with others in order to develop a common understanding about what we mean by critical reflection on practice. Mueller (2003) has noted that 'Many teacher educators have no script for nurturing reflective practices' (p. 68). Thus we need to develop our own understanding and strategies to promote critical reflection on practice with our own community of teacher educators in higher education, with our student teachers and with other teacher mentors in schools. It is clear to us that facilitating sequential stages and levels of reflection by beginning teacher educators in specific pedagogical settings can empower their career development.

We have noted, too, that the body of research on the professional development of beginning teacher educators is rather limited and professional development is not yet grounded in practice or personal experience. Importantly, and in terms of promoting the use of self-study, Mueller (2003) concludes 'When teacher educators engage in dialogue with their colleagues about critical learning experiences future teacher and teacher educators are enriched personally and professionally. We are then always becoming teacher educators' (p. 82). The dispositions and attitudes associated with critical thinking skills as well as the ability to think well are clearly the key to successful self-study: those who are willing to be problem-solvers, who

believe they have a lot to learn from their students, who are quick to learn and are flexible will contribute most to the community of practice in which they work (Berry & Loughran, 2005; Murray & Male, 2005).

We have suggested various frameworks for supporting and enhancing professional development of new teacher educators. We have pointed to the kind of questions that can promote self-awareness and critical reflection and can facilitate powerful mentoring. Our main conclusion is that all teacher educators who support models of professional development that are rooted in critical conversations need also to create programmes that reflect their vision of teaching and learning. They themselves must adjust their role as well as their pedagogical approaches and test them every day. This is the basis of self-study. Self-study (Chapter 14 of this book) should be helpful in all the different and new roles that beginning teacher educators take on: supporting the student teachers in schools, teaching in different areas of the teacher education curriculum, teaching in different types of grouping (seminars, tutor groups, one-to-one, and so on) and providing different types of personal support and mediation for adult learners.

We have not been able to focus in this chapter on all the variety of reflective practices that teacher educators might adopt, such as journal or diary keeping, maintaining professional portfolios, peer group meetings, etc. However, we have been able to illustrate the importance of the reflective dialogue (i.e. critical conversations) and the levels of reflective thinking using recorded periods of teaching that can also help a new learner to think more deeply and critically. The two research projects presented in this chapter, therefore, go some way to providing possible ways and tools forward for the professional development of beginning teacher educators. We recommend the following four actions for the support of beginning teacher educators:

1. Professional development programmes for groups of beginning teacher educators.

These might use scenarios and recordings of teaching sessions within higher education institutions in order to model strategies that promote critical reflection on practice by student teachers and in turn stimulate discussion, deeper levels of thinking and action by beginning teacher educators.

2. Structured formal support for a beginning teacher educator by a more experienced teacher educator with skills in critical reflective practice.

We realise that in many settings, formal mentors are not routinely allocated to a new beginning teacher educator. We advocate strongly, if the beginning teacher educator is not assigned an appropriate mentor, that he/she might find one! Ideally a more experienced teacher educator should be formally attached to the new beginning teacher educator for at least the period of probation. At one author's own higher education institution in England, this period is 3 years. In Israel, the probation period is also 3 years but with the first year treated as an induction year involving close support by a mentor who is more experienced in the field plus an expert from the college or university who is in charge of the induction programme. Beginning teacher educators will soon, of course, also establish other collegial relationships with experienced academic staff. All are potential assets

to the newcomer as they help steer him/her through unknown, as well as charted, waters.

3. The explicit use with student teachers of audio- or video recordings of parts of student teacher's teaching sessions.

Audio- or video recordings of student teachers teaching sessions can be used for student teachers to provide written reflective monologues; input for reflective and critical dialogues about episodes of teaching; and input for examination of critical incidents and decisions on possible subsequent actions.

Such work can take place one-to-one, or in groups. Recordings can also be used with new teacher educators to assist in organising their professional portfolios where these are appropriate for staged professional development.

4. Promotion of problem-based learning and critical inquiry.

The examples of questions, or prompts, that we provide in Fig. 10.3 include 'looking back' with the help of a stimulated recall, 'looking at' fully recorded actions during practice and 'looking ahead' to future practice with the use of critical thinking. In addition, although we have concentrated in this chapter on the particular role of critical conversations, we should recognise the potential in critical reflective practice for systematic inquiry and practical theorising. For many teacher educators, it can serve as a catalyst for self-study (Berry & Loughran, 2005). The beginning teacher educator can facilitate this process in their student teachers by encouraging the student to pose the problem and think how to solve it. In so doing, the student teacher is developing his or her meta-cognitive knowledge and skills – that is, weighing evidence, looking for interrelatedness or interrelationships and developing stable hypotheses. The beginning teacher educator can also model ways of thinking, scaffold students' attempts to understand and use concepts, and encourage students to reflect on the strengths and weaknesses of the thinking processes that they are using.

Throughout this chapter, we have tried to draw attention to the important link between the induction of teachers and the first years of becoming a teacher educator. We now recommend adopting an open-mind to situations and searching alternative ways to facilitate reflection. These may be new approaches to the professional development of beginning teacher educators in relation to reflective practice and create many challenges for institutions and professional communities of practice. Time is an important commodity for reflective practice, but not the only aspect. Pedagogical approaches and a recognition that people learn at different rates and in different ways with the use of scaffolding of learning are key factors in the promotion and use of reflective practice. The role of the lecturer – here, the beginning teacher educator – and their professional duty to develop their own abilities in reflective practice also plays a crucial part. Thus teacher educators, who have grown in confidence about the value of learning from self-study and through reflective practices, can contribute to the enhancement of wider institutional and professional practices. We hope this chapter goes some way to meeting some of these challenges.

References

- Berry, A., & Loughran, J. (2005). Teaching about teaching: the role of self-study. In C. Mitchell, S. Weber, & K. O'Reilly-Scanlon (Eds.), *Just who do we think we are? Methodologies for autobiography and self-study in teaching* (pp. 168–180). London: Routledge Falmer.
- Boud, D., Cohen, R., & Walker, D. (1993). *Using experience for learning*. Buckingham: Society for Research into Higher Education/Open University Press.
- Brookfield, S. D. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.
- Brown, S., & McIntyre, D. (1993). *Making sense of teaching*. Buckingham: Open University Press.
- Calderhead, J. (1996). Teachers' beliefs and knowledge. In D. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 709–725). New York: Simon Schuster MacMillan.
- Carr, W., & Kemnis, S. (1986). *Becoming critical: education, knowledge and action research*. Basingstoke: Falmer Press.
- Connolly, F. M., Clandinin, D. J., & He, M. F. (1997). Teachers' personal practical knowledge on the professional knowledge landscape. *Teaching and Teacher Education*, 13(7), 665–674.
- Dymoke, S., & Harrison, J. K. (2006). Professional development and the beginning teacher: Issues of teacher autonomy and institutional conformity in the performance review process. *Journal of Education for Teaching*, 32(1), 71–92.
- Entwistle, N. (1994). *Report on seminars organized by the Committee of Vice-Chancellors and Principals and the Society for Research into Higher Education (SRHE)*. London: SRHE.
- Eraut, M. (1995). Outcomes and professional knowledge. In J. W. Burke (Ed.), *Outcomes, learning and the curriculum: Implications for NVQs, GNVQs and other qualifications* (pp. 260–272). London: Falmer Press.
- Feuerstein, R. (2000). The coherence of the theory of modifiability. In A. Kozulin, & Y. Rand (Eds.), *Experience of mediated learning: An impact of Feuerstein's Theory in education and psychology* (pp. 147–165). Oxford: Pergamon Press.
- Field, K. (1997). You and your mentor. *Mentoring and Tutoring*, 4(3), 25–32.
- Gore, J. M., & Zeichner, K. M. (1991). Action research and reflective teaching in pre-service teacher education. *Teaching and Teacher Education*, 7(2), 119–136.
- Grant, G. E. (1992). The sources of structural metaphors in teacher knowledge: three cases. *Teaching and Teacher Education*, 8(5/6), 433–440.
- Harrison, J. K., Lawson, T., & Wortley, A. (2005). Action research and the professional development of induction tutors: some unforeseen impacts and pitfalls. What do we learn? *Journal of In-service Education*, 31(1), 83–103.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs: NJ, Prentice Hall.
- Korthagen, F., Loughran J., & Lunenberg, M. (2005). Teaching teachers: Studies into the expertise of teacher educators. *Teaching and Teacher Education*, 21(2) 107–115.
- LaBoskey, V. K. (1994). A conceptual framework for reflection in pre-service teacher education. In J. Calderhead & P. Gates (Eds.), *Conceptualising reflection in teacher development* (pp. 23–38). London: Falmer Press.
- Laurillard, D. (1993). *Re-thinking university teaching*. London: Routledge.
- Lesnick, A. (2005). The mirror in motion: Redefining reflective practice in an undergraduate field-work seminar. *Reflective Practice*, 6(1), 33–48.
- Loughran, J. (1996). *Developing reflective practice*. London: Falmer Press.
- Loughran, J. (2006). *Developing a pedagogy of teacher education. Understanding teaching and learning about teaching*. London: Routledge.
- Lunenberg, M., Korthagen, F., & Swennen, A. (2007). The teacher educator as a role model. *Teaching and Teacher Education*, 23(5), 586–601.
- Maudsley, G., & Scrivens, J. (2000). Professional knowledge, experiential learning and critical thinking. *Medical Education*, 34, 535–544.

- Mueller, A. (2003). Looking backward, looking forward: always becoming a teacher educator through self-study. *Reflective Practice*, 4(1), 67–84.
- Murray, J., & Male, T. (2005). Becoming a teacher educator: Evidence from the field. *Teaching and Teacher Education*, 21(2), 125–142.
- Olson, J. (1992). *Understanding teaching*. Milton Keynes: Open University Press.
- Palmer, P. J. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco, CA: Jossey-Bass.
- Pithers, R. T., & Soden, R. (2000). Critical thinking in education: A review. *Educational Research*, 42(3), 237–249.
- Ramsden, P. (1992). *Learning to teach in higher education*. London: Routledge.
- Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers College Record*, 104(4), 842–866.
- Schön, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Schön, D. A. (1991). *The reflective turn: Case studies in and on educational practice*. New York: Teacher College Press.
- Van Manen, M. (1977). Linking ways of thinking with ways of being practical. *Curriculum Inquiry*, 6, 205–228.
- Van Manen, M. (1995). On the epistemology of reflective practice. *Teachers and Teaching: Theory and Practice*, 1(1), 33–50.
- Van Manen, M. (1999). The language of pedagogy and primacy of student experience. In J. J. Loughran (Ed.), *Researching teaching. Methodologies and practices for understanding pedagogy* (pp. 13–27). London: Falmer Press.
- Vygotsky, L. S. (1978). Interaction between development and learning. In L. M. Cole, M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society: The development of higher psychological processes* (pp. 79–91). Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1986). *Thought and language* (Rev. ed.), Cambridge, MA: The MIT Press (Translated by A. Kozulin).
- Yaffe, E. (2003). *The reflective beginner: promoting professional development of newly qualified teachers* (Thesis). University of Bath. <http://www.bath.ac.uk/~edsajw/yaffe.shtml> (Accessed 17 December 2007).

Useful Websites

For a description of the ‘video-spectacles’, see: <http://people.bath.ac.uk/edsajw/elka/eyapp1.doc> (Accessed 17 December 2007).

For further information about tests see: <http://www.tda.gov.uk/skillstests/numeracy.aspx> (Accessed 17 December 2007).