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WHICH ONE IS BETTER: SAYING STUDENT TEACHERS DON'T REFLECT OR SYSTEMATICALLY UNLOCKING THEIR REFLECTIVE POTENTIALS: A POSITIVE EXPERIENCE FROM A POOR TEACHER EDUCATION FACULTY IN ETHIOPIA

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ABSTRACT

This paper is informed by Dewevean pragmatism, critical pedagogy, Marxist humanism and social constructivism, all of which see teacher professional learning as a process of constructing knowledge and identity through critical interdependence. In addition to presenting the philosophical root of the reflective approach to teaching and the structure for engaging student teachers in reflective processes, I present the outcome of my own and my colleagues' attempts to unlock the reflective potentials of student teachers at a poor teacher education faculty in Ethiopia and a theoretical/methodological framework to deal with the reflective data. I hope that teacher educators who work with student teachers in the practicum can benefit from the experience presented in the paper. The implication of the paper for teacher educators is that before they complain that student teaches are unreflective. they should set clear objectives and expectations for themselves as well as their student teachers and supply their student teachers with methods of structuring and evaluating their reflections. They also need to be careful and flexible when they employ theoretical frameworks proposed by some teacher educators to identify, structure and determine the reflective levels of what their student teachers write.

INTRODUCTION

At the heart of critical pedagogy are the humanistic conception of people as learners and active participants in their world and the view of education as a practice of freedom. Critical pedagogues argue that: 'The educator is not the found of wisdom' trying to fill the empty buckets: education is not a process of banking received knowledge. Rather education is an active process in which the teacher controls neither the knowledge nor the learning outcomes' (Jarvis, 1995, p. 151). This view urges us to redefine or to carefully examine what we mean by: **teachers are at the centre of educational enterprise** or, in the words of Beyer (1987), the 'linchpin of educational improvements' (p. 26, emphasis added).

If the main reason why we offer education is to help people liberate themselves we have to shift teacher education from a place where student teachers collect a grab-bag of techniques and tricks to a place where they start to think critically about issues surrounding the social and individual purposes of schooling. Any democratic teacher education program transgresses beyond the process of essentialising purportedly justified moral views that in fact merely serve individual or factional interests and strives to inculcate open-mindedness and free expression.

We have to see classroom not only as an arena of indoctrination and enforcing submission into the dominant beliefs and ideologies, but also as ' a cultural terrain that promotes learner empowerment and self-transformation' (McLaren, 1989, p. 167). This position calls for teachers who look at 'teaching as an activity of great complexity and perceive its practice as an 'open-ended exploration in which they express their pedagogical knowledge in action that will not only improve the conditions of learning for their pupils, but also enlarge their theoretical understanding' (Stones, 1994, p. 15). Teacher education programs must encourage student teachers to build the knowledge of teaching and learning through critical reflections, professional

renewal and self-reconstruction. We must understand that (1) learning is a process, not a product (2) learning is continuous, a process of on going adaptation to an environment which itself is in constant flux (3) learning should be grounded in learner's own experience and (4) learning involves unlocking learner's existing beliefs and theories, testing them against new experiences and insights, and reintegrating the new, more refined ideas that evolve through a continual process of reflection (Head & Taylor, 1997, p. 24). 'Through the process of reflection individuals may become conscious of realities other than the one they into which they have been socialized' (Jarvis, 1995, p. 84).

The position of this paper is that student teachers experience a meaningful learning only when they make sense of their new experience in relation to their pre-existing one and see learning as a process of making meaning through articulation and reflection on what they know and how they know. Like any other form of learning, teacher learning is continual process of self-reorganization. Teachers are expected to participate not only in their own process of change, but also in the task of solving the socio-political problems of their society and seek deeper knowledge and understanding of the impact of the macro social and political factors on their day today practice. Their profession requires them to possess not only discrete sets of competences, but also the courage and willingness to deal with the complex system within which people are socialized for their existence in the society and the role of gender, class, ethnicity/race and other social and institutional classifications to mediate power relationships in the society. Only inquiryoriented teacher education programs can create transformative teachers.

The following heuristic questions were adapted from Giroux (1997) who posed them in relation to the production, distribution and evaluation of classroom knowledge: (1), What counts as knowledge and experience of student teachers?; (2), How is that knowledge and experience produced?; (3), Where does the espoused knowledge come from? : (4) Who is going to legitimize the different ways of knowing?; (5), Whose purpose does it primarily serve? ; (6), To what extent do the student teachers have access to the source of this knowledge and experience and its prime purpose?; (7), How is the knowledge and experience distributed?; (8), What evaluation system is used to assess the acquisition of the knowledge and experience or to legitimize it?; (9), Is there any room for the student teachers and their evaluators (for example, university supervisors and school cooperating/associate teachers) to discuss over the contradictions inherent in what was set as teacher knowledge and experience and ways of legitimizing it?; (10), Is there any room for student teacher to question and examine the values embedded in the teaching strategies, pedagogical views and the syllabi they are made to follow?

THE INTENTION OF THIS PAPER

The paper is an experience-based reflection on the process of reflection in an initial teacher education context. It discusses what we have to do before we ask our student teachers to reflect and what we can do to involve student teachers in a meaningful reflective thought and the methods the educator can use to identify and analyse the themes in the reflections.

The idea of reflective practice has been with us for thousands of years. As a welldeveloped educational rhetoric, the concept of reflectivity is connected with John Dewey and became more popular in 1980s. Dewey argued that through reflective practice one could obtain more meaningful solutions to situational problems. The reason why we have to reflect on established ways of carrying out things is that we cannot us them as 'sufficient justifications for continuing a practice' (Jarvis, 1995, p. 161). Dewey's expression, which has nearly become an adage, is: 'Experience plus reflection equals growth'. The main premise of reflective teaching is that: 'The teaching profession will begin to lose its cutting edge if systematically deprived of opportunities for critical reflection, self

evaluation and the extension of perspective beyond the confine of one classroom' (Swanwick & Paynter, 1993, p. 7). Today, reflective teaching appears in various guises. Dewey, who is known throughout the world as the initiator of the concept, used it to distinguish the difference between teaching as a process of pouring down a pre-packaged piece of information in a mechanical way and that which links educational actions with judgement, reflection and personal responsibility of the teacher. He made a clear distinction between what he called 'routine action' and 'reflective action.' A teacher who is guided by impulse, intuition, tradition and authority is an uncritical practitioner engaged merely in routine teaching. This type of teaching takes place when the means are problematic, but the ends are taken for granted (Dewey, 1933, p. 9). A teacher obsessed with routine teaching takes everything for granted, including the content and instructional procedures in the curriculum and the relationships between him/her and the students in the classroom. Teaching becomes a process in which the teacher (the knowledgeable) deposits information into the minds of students (empty objects) who receive the information passively. Freire (1970) used the banking concept of education to capture this model of dehumanising educational actions. According to Freire, the characteristic feature of the traditional notion of education is that it is seen 'an act of depositing, in which the students are the depositories and the teacher is the depositor.' In the framework (the banking concept of education), the teacher tells information as an unquestionable fact for students who 'receive, memorize, and repeat' it (p. 58).

Unlike the teacher who works within the banking model of education and who see knowledge as unquestionable truth, a reflective teacher questions the historical and contextual bases of the knowledge he/she teaches and his/her instructional activities. The reflective teacher recalls, categorises, interprets and evaluates consciously his/her experiences as a basis for his/her short and long-term thoughts and interventions. In addition, a reflective teacher investigates the contexts under which the teaching and learning is carried out and examines the explicit as well as implicit impacts of the wider social. economic, cultural and political factors on the educational practices in general. Carr & Kemmis (1986. p. 113) use the phrase 'reflective consciousness' to capture a new perspective that develops out of inquiry into one's practice and from one's deliberations into variables that impact on practice. The important thing is that 'exploration of consciousness is a prerequisite to knowledge of reality' (Godonoo, 1998, p. 33).

THE ISSUES OF CENTRAL CONCERN IN THE LITERATURE ON REFLECTIVE PRACTICE

Over the last three decades, teacher educators have been debating the following four issues about reflection: reflective thinking versus reflective action; the time frames for reflective practice; the relationship between reflection and problem solving, and the levels of reflections and the degree of reflective consciousness each level involves (Hatton & Smith, 1995).

Reflective thinking versus reflective action

One concern is related to whether reflection is limited to thought processes about action, or is more inextricably bound up in action (Hatton & Smith 1995). Some say that it is largely concerned with a practitioner's mental deliberation about what he/she does and the nature of the factors that affect practice. For example, in his definition of the aim of reflection, Dewey (1933) himself argued that, unlike routine action that is guided by impulse and untested assumptions and traditions, reflective action is a thought process that targets at analysing the historical and contextual roots of educational practices and their ideological goals. In his own words, reflection is an 'active, persistent and careful consideration of any belief and supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends' (Dewey, 1933, p. 6). Dewey pointed out that

reflection is a thought process that targets at analyzing the historical and contextual roots of educational practices and its ideological goals.

The time-frames for reflective practice

The second point for debate is the time frames within which reflection should take place. This argument focuses largely on whether reflection is relatively immediate and short term or more extended and systematic. Schön (1983, 1987) introduced what he called 'reflection-in-action' and 'reflection-on-action.' He uses the first to refer to the reflective actions that the practitioner carries out while attempting to interpret, evaluate and analyze problems and find solutions to the identified problem. It is apparent that reflection-inaction requires simultaneous reflecting and action. To become successful, a practitioner engaged in reflection-in-action may not necessarily require new, external knowledge: he/she can exploit 'materials or problematic situations that are puzzling, troubled and unclear' (Schön, 1983, p. 46). The implication is that the practitioner is someone who has the necessary professional competence to think consciously about classroom events and then to modify actions virtually on the spot (Hatton & Smith, 1995). As it allows the practitioner to derive theory from specific situations of thoughts, events or actions, reflection-in-action makes possible inductive learning, which is the opposite of deductive learning through technical rationality (Schon, 1983). According to Schön (1983, 1987), a reflective practitioner is a vigilant actor who thinks while he/she is engaged in actions and then responds instantaneously to the perceived problems, puzzles and uncertainties that are characteristics of his/her day-to-day professional routines. The other concept of reflection relating to time-frames for reflective practice is reflection-on-action. This occurs when the practitioner deliberates over the educational actions, events or thoughts, after he/she has left the classroom. This involves reconstructing, reviewing and tracing the historical and contextual preconditions of the identified issues (e.g. actions and events).

The other unique quality of reflection-onaction is that it includes the practitioners' reflective mediation on the pedagogical interventions he/she has made, including reflections-in-action and their degree of soundness. The other concept that is concerned with the time frame for reflection is reflection-for-action. This is not concerned with how one has to intervene in educational or social problems one has encountered while engaged in practice; neither is it concerned with the practitioners' reflections on past events/actions. While it is the outcome of reflection-in-action and reflection-onaction, reflection-for-action is undertaken when the practitioner is involved in the critical examination of how to make plans and decisions for future interventions.

The relationship between reflection and problem solving

Another debate is about whether reflection is or should be problem-centred. According to Schon (1983) a practitioner is engaged in reflection for problem solving. Clift, Veal, Johnson & Holland (1990, p. 54) use the concept '*professional reflective activity*' to signify the situation of those professionals who work towards identifying, investigating or solving problems. But, the main reason for reflection should not be only to solve problems. It should be a normal component of the process of learning in the profession. That is whether or not the practitioner has encountered a problem: he/she should be engaged in reflection. It is the nature of an uncritical practitioner to perceive realities as unproblematic, looking only at the uninterrupted continuity of everyday life. Perceiving realities as unproblematic blocks the opportunity of recognising and experimenting with alternative thoughts and actions (Grant & Zeichner, 1984, p. 4).

Getting obsessed only with routines such as writing lesson plans, adapting materials, developing courses, arranging subject matter content, teaching and evaluating, none of which is done critically and reflectively inhibit practitioners to participate in transformative education. The philosophy behind reflective approach is that practitioners should think not only about what they do, but also about why they do it; they need to be aware of the contingent conditions affect their positions that positively or negatively and the multidimensional contradictions inherent in their professional practices.

The levels of reflections and the degree of reflective consciousness each level involves

The fourth debate concerns the issue of how deep and wide or shallow and narrow reflective practice should be. The three well-known levels of reflective practice are technical reflection, practical reflection and critical reflection (Hatton & Smith, 1995). The first level is concerned with the efficiency and effectiveness of the means used to achieve certain ends. The focus of reflection at this level is on making effective utilization of available skills and technical knowledge to tackle a problem or a challenge. The practitioner's fundamental interest is in 'controlling the environment though rule following action based upon empirically grounded laws' (Grundy, 1987, p. 12). It is an aspect of technical rational (Schön, 1983) in which the practitioner discovers a problem and seeks solutions for it through making procedurally strict observations and investigations and reaching conclusions.

Practical reflection is a slightly more advanced reflective practice that involves the practitioner in the process of examining his/her practices and the values and assumptions upon which that has informed his/her practices. The practitioner's fundamental interest is 'understanding the environment through interaction based upon the consensual interpretation of meaning' (Grundy, 1987, p. 14). Since the main goal of practical reflection is to understand the practical implication of one's action and to pass thoughtful judgement on one's beliefs and assumptions, the practitioner asks questions such as: 'What type of action should I take at this moment the problem?' 'How should I take the action?' 'What kind of support (cooperation) do I need

from others?' A practitioner engaged in this type of reflection is aware that nothing is absolute, and celebrates uncertainties, open-endedness and the window for further inquiry. The practitioner uses reflection as a means to put himself/herself at the centre of action.

Critical reflection (also called 'emanicipatory reflection') is the highest level of reflectivity. A critical-reflective practitioner is engaged in an autonomous action arising out of authentic, critical insights into the social construction of human society and by doing so develops a better understanding of forces that constrain free thoughts and action and ways of acting up on them (Grundy, 1987). According to Grundy (1987, p. 19), the practitioner has 'a fundamental interest in emancipation and empowerment to engage in autonomous action arising out of authentic, critical insights into the social construction of human society'. In this respect, the practitioner- in addition to examining his/her actions and choices, examines the complex structure that shapes these actions and choices. A critical reflective practitioner has a strong 'concern for moral and ethical dimensions underlying human action' and tries to identify 'what sort of activities and experiences will help lead people towards lives characterised by equity, caring and composition' (Rennert-Ariev, 2005, p. 3). Moreover, critical reflection involves the practitioner in decision-making about whether professional activity maintains the democratic rights of all participants and locates any analysis of personal action within wider socio-historical and politicocultural contexts. The critical-reflective approach is a valuable perspective that can lead toward a transformative teacher education curriculum and practice that in turn contributes to ensuring social justice and forming democratic society (Hatton & Smith, 1995).

Looking at the central aim of reflection and the potential role of teachers as active agents capable of transforming the social and political conditions of their society, most teacher educators agree that reflection should take account of broader historical, cultural and political values or beliefs in framing and reframing practical problems to which solutions are sought. When a practitioner tries to understand the innermost characteristic of an educational problem, he/she is engaged in what has come to be called **double-loop learning**, a process of learning that results from critical examination of the inner dynamics of the encounters, not their surface features, so that he/she will be able to grasp the multidimensional nature of the challenges encountered. Double-loop learning is unlike single-loop learning in which the practitioner emphasises the importance of techniques and struggles to ensure their efficiency. In double-loop learning, the practitioner makes more critical and multidimensional evaluations and interpretations of assumptions and principles that underlie the goals people set for themselves and the strategies they use to attain the goals.

The model (Smith, 2001) depicts that a practitioner engaged in double-loop learning questions policies, ideas and traditions as well as the basic assumptions behind them. For instance, through double-loop learning, an English teacher may come to arrive at the understanding of the impact of the social and cultural construction of masculinity and femininity in society on the participation of male and female students in mixed-sex groups or classrooms. The concept of critical reflection came to be used in the 1980s to represent practitioners' conscious deliberation on the impact of the wider social factors on educational practices. In this respect, reflection goes beyond a mechanical process of thinking back over events and actions in order to pass judgement on their merits or demerits (Martinez, 1990, p. 22) to a process in which the practitioners act as intelligent and critical agents capable of reflective thought and reconstructive action.

THE PLACE OF REFLECTION IN THE INITIAL TEACHER EDUCATION

Traditionally, prospective teachers are assumed as passive recipients of the content and pedagogical skills required to work as teachers. The traditional teacher preparation programs instead of encouraging a reflective analysis of the complex process of teaching and learning focus on the provision of the toolkits of instructional practice. Progressive teacher educators have strongly been fighting against teacher preparation programs that that do not provide student teachers with the opportunity to widen their perspectives beyond the classroom inquiry into that underpin or shape the power and social relationship between students, their teachers and the surrounding community.

Reflection in initial teacher education process is initiated to reorient it or to liberate it from dehumanising thoughts and actions. It ought to develop student teachers into reflective practitioners (Grant, 1984). For their part, Grant & Zeichner (1984) believe that reflective teaching is a key strategy in creating teachers who will take responsibility for their own and their society's growth. Similarly, Beyer (1988) contends that: 'Teacher education must be committed to the development of critically oriented, compassionate, and impassioned, reflective and socially engaged practitioners who can aid in the process of educational improvement and social change'.

Reflection in initial teacher education program is an alternative to the traditional models of training (behaviorist, craft and applied sciences) that promotes good practice as the outcome of *technical* rationality (Schön, 1983) or rationalism (Elliott, 1979) explicitly promote the view that 'knowledge gained by scientific research and represented in abstract technical formulations is the only legitimate knowledge available to inform and shape practice' (Tremmel, 1993, p. 435). Progressivists attack these models of training mainly because they are hegemonic in nature and reduce professional practice to the application of formulas following strict structural procedures (Zeichner, 1983). Reflective practice is a counter-hegemonic movement against those who view the knowledge and experience of teachers 'as trivial, atheoretical, and as inconsequential to

their work' (Zeichner, 1994, p. 1) and place prospective teachers in the secondary position throughout the preparation program. For example, both *the behaviorist* and *the craft* perspectives view prospective teachers 'as passive recipients of this knowledge [the subsidiary knowledge that constitutes good practice] and play little part in determining the substance and direction of their preparation programs' (Zeichner, 1983, p. 5). This means prospective teachers need an educational practice that values their human autonomy and perspectives: 'The fundamental task of teacher education from this point of view is to develop prospective teachers' capacities for reflective action...and to help them examine the moral, ethical and political issues, as well as the instrumental issues, that are embedded in their everyday thinking and practice' (Zeichner, 1983, p. 6).

THE ETHICAL DIMENSION OF ENGAGING STUDENT TEACHERS IN REFLECTION: NEVER EXPECT MEANINGFUL REFLECTION IN ABSTRACTION

Reflection does not occur in vacuum. From my experience with the reflection of student teachers, I observed that student teachers' skill of and experience of reflective thinking and writing is one factor that affects the quality or relevance of what they write as reflection. The knowledge and experience as well as the attitude they hold towards the topic they reflect on also matters. What is more, the intrinsic value, which the student teachers give to the reflective process, also exerts its own impact. There is no point in asking student teachers to reflect without their seeing any value in the act of reflection. As the majority of teacher educators in my institution do, sometimes we may ask student teachers to reflect and submit their reflection because doing that is emphasised in the teacher education policy or it is prerequisite for them to pass a course. In this kind of reflection, student teachers usually come with meaningless descriptions of events and circumstances. Since it is a structured way of making sense of experience, we need to provide

our student teachers with 'a variety of methods of structuring their reflections' (Wallace, 1996, p. 292). Sometimes it is useful to allow student teachers to reflect on aspects of teaching that they want to reflect on instead of obliging them to reflect on only things of our interest. If this is difficult, we can give them thinking questions (Appendix A) that focus on the broader aspect of teaching so that each student can be stimulated to reflect on his/her own understanding of the themes touched in the thinking questions.

The following two frameworks (Figures 1 and 2) can help student teachers present their reflections in a structured way. Although they seem to limit reflection to a process of dealing with immediate problems using mechanical knowledge and skills, they show that the practitioner has the willingness to seek understanding. It is up to each of us teacher educators to promote reflections that focus on the here and now to those which help the student teachers move to a deeper shift in the structure of their thoughts and perspectives. The frameworks serve teacher educators who want to engage student teachers in reflections that make their themes the issues of pedagogical content knowledge and their applicability in the classrooms.

The reflective model (Davis & Waggett, 2006) shows that the educational practitioner makes sense of his/her experience through a reflective cycle of select, describe, analyze, appraise and transform. One should know that it is insufficient to provide student teachers thinking questions and the frameworks of reflections such as shown below. For a person to be reflective, he/she must learn how to become reflexive. According to Bright (1996), reflection is based on the understanding of the practitioner. The practitioner need to be 'aware of her own processes in the development and construction of this interpretation. In this sense, 'reflective practice' is reflexive and involves much self-reflection on her own practice' (p. 177).

The other key to our student teachers' reflective window is trust. They must have

trust in us, in what they say, their feelings and the assumptions behind their perspectives. According to Taylor (2000, p. 67), 'If you try to 'sanitise' these valuable parts of yourself, you will not be able to get to the 'heart' of the matter as effectively'. In a teacher education culture in which the teacher educator by virtue of his/her privileged position, is considered as the most important person and student teachers are seen as recipients of toolkits from the knowledgeable teacher educator, the student teachers may not have the liberty to articulate their perspectives, challenge established ways of doing things and confront their teacher educators' thoughts and actions.

The central points of the positions I have advanced so far are that (1) reflection is a habit of mind as well as being actionoriented and historically embedded engagement (Kemmis, 1985); (2), it is a deliberative, context-based inquiry; (3), it requires open-mindedness, wholeheartedness and responsibility (Cornu & Peters, 2005); (4), it calls for a commitment to questioning beliefs (assumptions) and taken-for-granteds embodied in theory and practice, and (5) it is a perspective that is social rather than individual (Schwabenland, 2004, p. 64); that is, reflection is possible only in the presence of significant others (such as peers, teacher educators, cooperating teachers) and conditions that nurture deliberative reflection. Therefore, it is unreasonable to say that student teachers are unreflective without engaging them in a reasonable task of reflection, without providing them with conditions that make reflection possible and without inquiring rigorously into the nature of the alleged 'unreflectiveness'.

In addition, we have accentuated so far that reflection is a holistic process, during which student teachers can engage not only with the their behaviours in the classroom, but also with the social, environmental and psychological realities of their professional learning. I argue that as part of our attempt to prepare student teachers for the future community of practice, we have to engage them in the task of reflecting on the psychosocial and professional learning experience. What teachers do (their actions) and what they think (their perspectives) cannot be understood independently of the broader social, institutional and cultural environments. As a contextualised process of learning from one's own experience, reflection engages a practitioner in the process of developing reflective stance towards the situation of practice, the psychosocial pressures it creates and the challenges in dealing with complex nature of the whole experience.

It is unfair to ask student teachers to reflect and come up with high standard reflective texts and t pass judgements on their performance in behavioural terms without engaging them in a developmental learning process is a problem in a teacher education institution whose teacher educators view their student teachers as passive recipients of professional knowledge rather than as people with the self-determining potential for growth (Hankey, 2004). In such a situation, teacher education faculties will fail as educational institutions: not because they are not maintaining standards or expectations, but because they are failing to offer a human-oriented and culturally appropriate engagement for the learners to experience learning. Learning how to reflect, like other professional learning, is a practical, constructivist process of making meaning. The only means by which one can make student teachers reflect is unlocking their potential for reflection through developmental ways, using multiple strategies. As various scholars have confirmed, this is an emanicipatory action (Gomez & Tabachnick, 1992; Connelly & Clandinin, 1990; Wagner, 1989). The stories practitioners narrate about themselves and the situations governing their practice through journals and other methods brings forward the richness, complexity, challenges and contradictions inherent in teacher education in a much better way than do statistical figures. Connelly & Clandinin (1990, p. 3) contend that in order to understand ourselves and our students educationally, we need to understand 'people with narratives of life

experience'. Gomez & Tabachnick (1992, p. 137) suggest that 'telling teaching stories offers pre-service students and their collaborators the challenge of seeing themselves and the opportunity to reflect on their goals and practices.' In a like manner, Wagner (1989, p. 116) argues that teachers benefit greatly from 'writing strings of narratives about themselves as teachers.'

MAJOR WAYS OF UNLOCKING THE REFLECTIVE POTENTIAL OF STUDENT TEACHERS IN SELF-REFLECTIVE AND META-COGNITIVE ACTIVITY

There is on one best way of engaging student teachers in reflective process. Teacher educators have been using different ways of engaging student teachers in self-reflective and metacognitive activities. I make a brief mentioning of five important ways of fostering reflection. The first is metacognitive strategy. This strategy, also called 'debriefing' is used in the mentoring situation. It is conducted either at the end or at the beginning of an activity as a wraparound session to encourage student teachers to reflect, monitor, regulate and evaluate their own thinking and that of their peers based on the mentoring topic, skill or strategy.

The other is a *self-reflective journal*. Through self-reflective journals a teacher educator can arrive at the levels of reflections underlying student teachers' reflective writing. Self-reflective journals encourage the reflective use of metacognition and enhance student teachers' ability to monitor, assess and improve their performance and thinking and increase the depth of their understanding or learning.

The third way is *cohort*. A cohort is a group of individuals, who work and learn jointly over a period of time and stay together, receiving the required supports and guiding. In a teacher education context, cohort members are engaged in collaborative professional learning under the guidance of their teacher educators for a given period of time. The teacher educator ensures that each student teacher

gains the opportunity to belong to a caring and supportive community, as the successful cohort grouping is one build on the principle of social interaction. A teacher educator who uses this strategy needs to make self-repositioning or realignment in his/her positionality from one of an authority to a critical friend (Hussein, Tessema & Degago, 2006).

The fourth strategy is what I call contemplative-visualisation. This is an act of seeing in one's mind's eye a situation or contemplating for meaning and sense in experience. It helps the visualisers to remember things and helping them to see and plan the future. The fifth way is conferencing and peer cognitive coaching. The most characteristic feature of this strategy is that student teachers find someone, a critical friend, with whom they talk about their problems, feelings and progresses and from whom they seek critical and constructive support. As they exchange views through planned conferences and through a cognitive peer or team coaching, student teacher can provide one another a one to one feedback on situations and activities in a more personal, verbal transaction, focusing on analysis and synthesis of the situations. In order for this strategy to be effective, expectations should be clarified and goals should be established so that they can prevent misunderstandings or discordance.

We have many reasons why we engage our student teachers in reflection. But the most obvious reason is that we want to know how much they can make sense of their experience and reflect on the broader ecology of their professional learning. Reflection thus is a process of making observations, examinations, reasoning and evaluation. The quality, efficacy and usefulness of what they write or discuss is measured along levels of reflectivity. Some reflections are just descriptions of events and their circumstances while others are critical evaluations and interpretations of those events and their circumstances. For example, you may ask your student teachers to reflect on how they perceive their subject matter knowledge, pedagogical content knowledge, and general pedagogical

knowledge, the context (situational) knowledge and how they tried to combine these sets of knowledge to create a community of learning in their classroom. You do not have to expect your student teachers to talk about these issues at the same level of reflectivity. While some of the reflections contain statements and descriptions that focus on mechanical aspects of teaching and learning, other reflections may show that the student teacher evaluates educational experiences by placing them within wider historical and socio-political realities of the schools. When we assess student teachers' reflections, our aim should, among other things, be to identify the levels of reflections apparent in their writing or speech. Student teachers' reflection like other educational performance should be seen and evaluated in light of the specific purposes for which they have been required to reflect. But the most important thing is that as teacher educators we must make sure that our student teachers pass through different reflective stages. Only doing that helps us generate the type (level) of reflectivity we are expecting from them. It is not enough if we tell our student just to reflect with out involving them in the reflective processes and without attending to variables that prohibit their reflective potentials.

ADVANTAGES OF UNLOCKING THE REFLECTIVE POTENTIAL OF STUDENT TEACHERS FOR TEACHER EDUCATORS

At this place, I reflect on how I together with other two members of a community of discourse in the Department of English in Haramaya University employed different strategies to engage our student teachers in reflections (Hussein, et al. 2006). I used an action research approach to learn the hopes and challenges in using reflective journals to engage student teachers in reflective activities. One of my colleagues used cohort system to extend the idea of community of practice into partner schools where student teachers make their practice. The other one made his student teachers write reflective journals, which he read and reread together with his student teachers to

improve the structural flow and the reflective quality of the journals. Our project took over a period of three weeks and above and necessitated a closer contact of the student teachers with us (their supervisors and co-constructors of the profession).

Our experience with student teachers during field experience confirmed to us that by engaging our student teachers in the reflective process, we can provide ourselves ample data about how we have to approach teacher preparation. We learned from the experience that teacher educators can get informative data about the student teachers' views about the important knowledge and skills required to help them work as effective teachers how the student teachers see the process of learning and child development. The other outcome of our experience with the student teachers was that engaging student teachers in a reflective process would provide teacher educators the opportunity to trace theories that inform student teachers' instructional behaviours.

It would soon become evident that student teachers 'bring to their teacher education their implicit institutional biographies (the cumulative experience of school lives). which in turn, inform their knowledge of the student's world, of school structure, and of curriculum.' Their reflections reveal that the cumulative experience of school lives 'contributes to well-worn and commonsense images of the teachers' work and serves as the frame of reference for prospective teachers' self-images. Through involving them in a series of developmental reflective processes, we can gain significant information about how we should organize and exercise teacher education and professional development practice informed by educational researches; their reflections reveal that we need to integrate our teacher education programs, including student teachers' learning through placement in the partner schools, with the realistic aspects of teaching and learning; through their reflections we realized that the strive to bring about change on the actions and thoughts of student teachers should better be predicted upon the

attitudes and awareness they hold about teaching and learning and developed the insight that in a situation where we do not thread our teacher development programs through the student teachers' own premises of thoughts, a meaningful student teacher preparation is impossible. What is more, through their reflections student teachers provided us with insights about why they benefited little from their teacher education courses and provoke us to ponder over the type of teacher education that would student teachers 'not only with toolkits, but also with the desire and confidence to learn through out their lives. Last but not least, engaging student teachers in reflective activities opened for us wide window to reexamine and reconstruct our own image of ourselves as teachers, teacher educators and educational researchers. In other words, working with our student teachers pave the way for us to develop a self-critical attitude towards our own praxis. We came to conclusion that by working with student teachers, a teacher educator comes to know his/her own incompleteness and develops the commitment to inquiry, caring, freedom, well-being and social justice. As we observed, encouraging student teachers to reflect on their experiences and perspectives becomes an opportunity to learn that we cannot make a critical intervention into teacher preparation and into the on-job professional learning of teachers unless we acknowledge the valuable contributions our student teachers make toward developing a dialogical exchange of views and perspectives about teaching and learning, and unless we regard them as agents with subjectivities, positions and perspectives.

The main strength of our projects was that our attempt to unlock the reflective potential of our student teachers did not focus only on what student teachers say, why they say what they say, but also on how they say what they say. In other words, we encouraged them to reflect on the quality, efficiency and powerfulness of their own reflections. There are several ways of encouraging student teachers to reflect on the reflections they have made. In my case, I engaged the student teachers in what I called guided, whole group forum. This stage was informed by the theory that reflection is more about being attentive to the perspectives of others and develops better when one is engaged in what Michelman (1988) refers to as 'experience of self-reversionary, dialogical engagement' (p. 1531). For two days, I put the two groups together for guided discussion. This allowed the participants to exchange one or two samples of their reflections for comments from other members in the group and to discuss on the quality of reflection taking into account the words and labels in the reflections, the adequacy of the evidences available to support statements and the extent to which the writing was insightful about the feelings provoked by what they experienced. They were encouraged to evaluate the reflections also according to whether they show a deep and serious engagement with experience or a verbatim representation of observations, encounters and their circumstances. After reading his/her reflection, everyone was asked to reflect on his/her reflections on the basis of the litmus tests of the quality and levels of reflections offered them and discussed on. The alternative way of engaging student teachers in a meta-cognitive process of reflection about reflection is making them to do that following cyclic lines.

PROBLEMS OF LEVELS OF REFLECTIVITY AND THE FRAMEWORKS TO ASSESS THEM

As implicated in the foregoing discussions, we need the framework to assess the reflection of student teachers. Sparks-Langer, Simmons, Pasch, Colton & Starko (1990) distinguished among levels (types) of language and thinking (Appendix B). The first two levels contain little or no elements of reflections. As teacher educators, we can frame research questions using the words and expressions Sparks-Langer et al used to illustrate the quality of Levels 3-7. Instead of using closed-ended research questions such as: 'Does the student teacher think well?' one can look critically at a reflective statement or paragraph, and ask: 'What level of

reflection does this writing fit into?' My argument is that asking in behavioural terms reduces reflective competence to a narrowly defined range of specific skills (Hankey, 2004). As a researcher into student teachers' reflective power, teacher educator can use the following heuristic questions: (1), How do the student teachers label their experiences and thoughts with appropriate terms and concepts? ;; (2), How do they articulate their experiences using traditions or personal preferences? (3), How do the candidates explain events, actions, perspectives, assumptions and positions by providing principle or theory as the rationale?; (4), How do they relate their experiences to broader situational factors inside and outside schools?; (5), In what ways do the student teachers incorporate ethical, moral, political and social issues in their reflections?, and (6), What shortcomings (if any) are apparent in student teachers' reflections? As I argued above, reflection does not occur in a vacuum or as an abstraction and needs raw materials for as well as ways of structuring their reflections. Thus, one should give student teachers something to think with (Appendix A). These thinking questions are useful for a teacher educator who wants to know the student teachers' experience from psychosocial and professional perspectives. The questions help the student teachers locate their school-based field experience within the broader social, psychological and cultural realities of their practice.

SUGGESTIONS FOR OVERCOMING ANALYTICAL PUZZLES

When we engage our student teachers into a reflective practice, we look chiefly for two things: the theme or content of the reflection and the levels of the reflectivity of what they produce. The most difficult aspect of qualitative research is its analysis. The problem is more serious when the researcher is not clear about the purpose of his/her research.

In the preceding section I pointed out that we can use the levels of reflectivity designed by Sparks-Langer et al. (1990). It immediately becomes clear, however,

that one cannot use the frameworks used to identify and assess the levels of reflectivity of what student teachers write. The theoretical definitions of reflection and the levels of reflectivity identified by educational theorists are unsuitable to evaluate and analyze student teachers reflections. I engaged a group of my student teachers in a developmentally organized reflective process and found that some of the criteria like *events labeled with appropriate terms* in Sparks-Langer et al's (1990) reflective framework are vague and controversial. In other situations, I found out that a student teacher's single reflective text combines what Sparks-Langer et al (1990) categorise as explanations with tradition, personal preference given as rationale and explanations with principle or theory given as rationale as well as explanation with principle/theory and consideration of context factors. The following is an extract from a reflective journal of one of my student teachers:

> I observed some drawbacks of plasma-based teaching, which needs further research or renegotiation. I consider, it is helpful for teaching listening, grammar and probably speaking and its service in this respect should continue. On the other hand, teaching the rest skills using it is somewhat valueless. If we *keep on giving every priority for* this technology, at the same time, we should not forget, that we are breaking teachers' spirits of teaching and that becomes a cause for the substandard of our educational system. I believe we have slept long; it is time to be awake. Let us discharge our responsibility and save our country and the next generation.

As one can see, the reflection contains different level of reflectivity. There is a description of an event containing explanations with tradition, personal preference given as rationale. For example, the last sentence of the reflection contains explanations with tradition, personal preference given as a rationale combined with explanations that emphasize the writer is trying to throw critical lens on the ethical, moral and political dilemmas of educational policy and decisions.

Thus, one needs to derive the levels of reflectivity of texts from the texts themselves rather than allowing the prepackaged, rigid categorical frameworks to influence or determine the reflectivity. In other words, one has to use Sparks-Langer et al's (1990) reflective framework or other similar frameworks as a guideline. rather than as an ultimate standard to determine the fate of what students write as a reflection. As I did, one way of making the best use of the framework is to modify it to suit the purpose of the analysis one is making and, where required, one needs to rename/reframe some descriptive levels guided by the nature of the journal entries.

Some researchers (for example, Herndon & Fauske, 1996) use content analysis procedures and extract the underlying themes in the reflective journals. They sort out the themes as personal reflections, concerns and strategies, organisation and structure, school routines and demands and suggestions and criticisms. In my case, I propose levels of reflectivity, not themes, in reflections. This is because it is not enough to identify themes and concerns in reflections. One has to identify the themes and then categorise them along the levels of reflectivity. The theme can be about anything; the most important thing, however, is the level of language and thinking embodied in the reflection. When we give feedback to our student teachers on their reflections, we need to point out to them the level of reflectivity they are working at as well as what they are focusing on (their theme or concern). As methodological tool, one can use situated interpretive and hermeneutic orientation to discourse analysis to categorise reflections into levels. Hermeneutics, derived from the Greek for 'interpretation', has become a useful framework for building a better understanding of what people say about themselves and about others via texts (Kim, 2003). Similarly, under the situated interpretive approach, knowledge and

meaning cannot be separated from the contexts that generate them (Kim, 2003). Both the hermeneutic and situated interpretive approaches demand critical awareness of language and textuality as well as openness on the part of the interpretive inquirer (Odman & Kerdeman, 1999). Thus, by reading each student teacher's reflections, one can search for reflective themes and then assign them a place within an experiential whole (Odman & Kerdeman, 1999). The experiential whole is derived from the central theme of the research questions described above. Instead of considering the discrete life experiences (Odman & Kerdeman, 1999) of each student separately, one needs to cluster the discrete experiences within the experiential whole. For example, all statements and explanations that show that the student teachers are incorporating the ethical, moral, political and social issues in their reflections should be clustered under one theme, irrespective of the type of discrete experience the candidates have been pointing out. This method, like the constant comparative method, of data analysis enables a researcher to search for explicit as well as implicit meanings underlying views and explanations.

CONCLUSIONS AND IMPLICATIONS

Student teachers enter teacher education program with a plethora of personal beliefs about teaching, images of good teachers, images of self as teacher, and reminiscences of themselves as pupils in classrooms and that most of these beliefs and images usually remain unaffected even after they have gone through a formal training programs. A teacher education program in pursuit of transformative education must link itself epistemologically and ethically to philosophies and perspectives student teachers hold about teaching and learning.

In this paper, I argued for a position that it is better to unlock student teachers' potential for reflection instead of saying they don't reflect. I have provided readers a review of relevant literature on the subject of reflective practice and thought. My experience suggests that although it offers real challenge, reflection is an interesting task. Do not say student teachers do not reflect; put them in a situation that unlocks their reflective potential and see the constraints that both you and your student teachers have. The other important thing is grasp the different perspectives from which teacher educators and researchers look at reflection. As I have tried to point out in the literature review and in my perception and experience of reflection, reflection is not something that has one meaning and there is no one best way of experiencing it and evaluating its quality. If your purpose is to engage your student teachers in critical reflection, not mechanical (procedurallydirected) reflection, pass both your student teachers and yourself through rigorous tasks involved.

The implication of the paper for teacher education is that we can not create teachers that can play active roles in the socio-economic and political affairs of their community through compelling them to succumb to external expectations and educational standards sanctioned by people far removed from their day-to-day experience. It is difficult to build up change agents through subjecting their education to mechanical procedures and outlines such standardised evaluation checklists unless we engage them in the process of critical evaluation of teaching and learning in its broader spectrum. The effect of poor teacher induction (for example, insufficiently integrated programs, lack of an effective mentoring system and inadequate observation and feedback in the workplace) (Hankey, 2004, p. 390) is that teachers ultimately 'develop utilitarian perspective about teaching and fail to learn from their experiences' (Kilgore et al. 1990, p. 28). The paper has stressed that student teachers must finish their pre-service field training and other learning experiences with positive understanding of the profession. Unless we provide them with ample experiences about what teaching is in the broader sense and the factors that contribute to its success or failure, our student teachers either undermine the profession or develop a utilitarian perspective toward it.

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FIGURE 1

Factors that are important in	Sample questions a reflective student teacher can	The type of reflections
the professional learning	pose	
THE SITUATION	What was I trying to achieve? Why did I respond/react as I did? What were the consequences of my actions for my students, others and me? How were the students/others feeling?	A practical reflection in which the practitioner wants to understand a situation by way of withdrawing from and reflecting on it.
	How do I know how they were feeling?	
Physical	How did I feel in this situation? What internal factors were affecting me?	The same
The self in relation to actions and assumptions	Did my actions match with my own beliefs, assumptions and the theoretical knowledge I have gained? If yes - how? If no - why not? How do my own beliefs and assumptions match or mismatch with the practical situation of my practice?	The same
Knowledge	What knowledge, experience and theoretical assumptions did or should have informed me?	A technical reflection in which the practitioner ponders into the means that lead to good ends
Reflexivity	How does this connect with my previous experience and the experience of others? Could I have managed this situation better? How? What would be the consequences of alternative action for the students, others or myself? How do I feel about the experience? Can I support others and myself better as a consequence of this incident? In what way? Has this incident changed my ways of knowing?	A critical reflection in which the practitioner attempts to engage in a self-reflexive or metacognitive dialogue to build a critical insight into the broader factors that impact on his/her professional practice

Adapted from Alliex & McCarthy (2005)

APPENDIX A: THINKING QUESTIONS FOR STUDENT TEACHERS

- 1. How do you describe your experience in the field? Did you like/dislike the experience why? Elaborate.
- 2. In what way is the present field experience meaningful to your future role as a teacher? Elaborate.
- 3. How do you describe the collegial support you are getting from your co-practitioners? Elaborate.
- 4. Do you feel you have gained recognition, respect and trust from students, cooperating teachers and the community? Elaborate.
- 5. Tell us how you care for each other in the new environment of professional practice?
- 6. Do you feel that your training in the college (university) has prepared you for the practical challenge? Elaborate.
- 7. What type of emotional support/help did you receive from your co-practitioners? And in what ways have these supported your professional practice? Elaborate.
- 8. As a future teacher, what do you feel is lacking in you? Or what do you feel you need to improve in order to become a competent teacher? How? Elaborate.
- 9. Any stress or pressure felt? If any, Why? How has it affected you? Elaborate.

APPENDIX B: FRAMEWORK FOR REFLECTIVE THINKING

Description

- 1. No descriptive language
- 2. Simple, layperson description
- 3. Events labeled with appropriate terms
- 4. Explanations with tradition, personal preference given as rationale
- 5. Explanations with principle or theory given as rationale
- 6. Explanation with principle/theory and consideration of context factors
- 7. Explanations with consideration of ethical, moral, political issues

Source: G.M. Sparks-Langer et al. (1990) Journal of Teacher Education, 41 (4) 27

REFERENCES

Alliex, S. & McCarthy, A. (2005). Reflective practice: Retrospective reality and rhetoric or strategies to enhance clinical practice? In *The reflective practitioner*. Proceedings of the 14th Annual Teaching Learning Forum, 3-4 February, Murdoch University.

http://lsn.curtin.edu.au/tlf/tlf2005/refereed/allie x.html.

Beyer, L. (1987). What knowledge is of most worth in teacher education? In J. Smyth (Ed.) *Educating teachers: changing the nature of pedagogical knowledge*. London: The Falmer Press, 19-34.

Beyer, L. E. (1988). *Knowing and acting: inquiry, ideology, and educational studies*. London: Falmer Press.

Bright, B. (1996). Reflecting on 'reflective practice.' *Studies in the Education of Adults*, 28 (2), 162-184.

Carr, W. & Kemmis, S. (1986). *Becoming critical: knowledge and action research*. Philadelphia: Falmer Press

Clift, R. M.L. Veal, M. Johnson & P. Holland. (1990) Restructuring teacher education through collaborative action research. *Journal of Teacher Education*, 41(2), 52-62.

Connelly, M. F. & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19 (5), 2-14.

Cornu, R. L. & Peters, J. (2005). Towards constructivist classrooms: The role of the reflective teacher. *Journal of Educational Inquiry*, 6 (1), 50-64.

Davis, M.U., & Waggett, D. (2006). Enhancing pre-service teachers' reflective practice via technology competencies eportfolio development. Retrieved July 29, 2006, from

www.uvm.edu/pt3/site06/reflection.ppt

Dewey, J. (1933). *How we think*. Chicago: Henry Regnery.

Elliott, J. (1979). How do teachers learn? In D. Hopkins (ed). *In-service training and educational developments: an international survey*. Beckenham, Kent: Croom Helm, 138-145.

Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum. Giroux, H. (1997). *Pedagogy and the politics of hope: theory, culture and schooling*. Boulder: Westview Press.

Godonoo, P. (1998). Tribute to Paulo Freire: his influence on scholars in Africa. *Convergence*, 31 (1&2), 30-38.

Gomez, M.L. & Tabachnick, B.R. (1992). Telling teaching stories. *Teaching Education*, 4 (2), 129-138.

Grant, C. A. (Ed.) (1984). *Preparing for reflective teaching*. Boston: Allyn & Bacon

Grant, C. A. & Zeichner, K.M. (1984) On becoming a reflective teacher. In C. Grant (ed) (1984). *Preparing for reflective teaching*. Boston: Allyn & Bacon, 1-18.

Grundy, S. (1987). *Curriculum: product or praxis?* Philadelphia: Falmer Press.

Hankey, J. (2004) The good, the bad and other considerations: Reflections on mentoring trainee teachers in post-compulsory education. *Research in Post-compulsory Education*, 9 (3), 389-400.

Hatton, N. & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education*, 11(1), 33-39.

Head, K., & Taylor. P. (1997). *Readings in teacher development*. London: Heinemann.

Herndon, K.M & Fauske, J. R. (1996). Analyzing mentoring practices through teachers' journals. *Teacher Education Quarterly*, Fall, 27-44.

Hussein, J.W., Tessema, K.A., & Degagao, A.T. (2006). Hopes and challenges in engaging student teachers in reflective journal writing. Unpublished manuscript, Department of English, faculty of Education, Haramaya University, Dire Dawa, Ethiopia.

Jarvis, P. (1996). *Adult and continuing education*. New York: Rutledge.

Kemmis, S. (1985). Action research and the politics of reflection. In D. Boud, R. Keogh & D. Walker (eds). *Reflection: turning experience into learning*. London: Kogan Page, 139-163. Kilgore, K., D, Ross & J. Zbikowski (1990). Understanding the teaching perspectives. *Journal of Teacher Education*, 41(10), 28-38.

Kim, E. (2003). Student teacher subjectivity and curriculum. Paper presented in the *Proceedings of the 2003 Complexity Science and Educational Research* Conference. 16-18 October, Edmonton. Retrieved 6 October 2005, from, <u>www.complexityandeducation.ca</u>

Martinez, K. (1990). Critical reflections on critical reflections in teacher education. *The Journal of Teaching Practice*, 10 (2), 20-28.

McLaren, P. (1989). *Life in schools: an introduction to critical pedagogy in the foundation of education*. London: Longman.

Michelman, F. (1988) Law's republic. Yale Law Journal, 97, 1493-1537.

Odman, P. J. & Kerdeman, D. (1999). Hermeneutics. In J. P. Keeves & G. Lakomski (eds). *Issues in educational research*. Amsterdam: Pergamon, 184-197.

Rennert-Ariev, P. (2005). A theoretical model for the authentic assessment of teaching. *Practical Assessment and Evaluation* 10/2. Retrieved December 9, 2005, from, <u>http://pareonline.net/getvn.asp?v=10&n=2</u>.

Schön, D. (1983). *The reflective practitioner*. *How professional think in action*. New York: Basic Books.

Schön, D. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.

Schwabenland, C. (2004). Review of L. Perriton and M. Reynolds', '*Critical* management education: from pedagogy of possibility to pedagogy of Refusal'. Investigations in university teaching and learning, 2(1), 64-66.

Smith, M. K. (2001) 'Donald Schön: learning, reflection and change', *the encyclopedia of*

informal education. Retrieved June 10, 2006, from <u>www.infed.org/thinkers/et-schon.htm</u>

Sparks-Langer, G.M., Simmons, J.M., Pasch, M., Colton, A & Starko. A. (1990). Reflective pedagogical thinking: How can we promote it and measure it?' *Journal of Teacher Education*, 41 (4), 23-32.

Stones, E. (1994). *Quality teaching*. London: Rutledge.

Swanwick, K. Paynter, J. (1993). Teacher education and music education: an editorial view. *British Journal of Music Education*, 10 (1), 3-8.

Taylor, B. (2000). *Reflective practice: A guide for nurses and midwives*. St Leonards: Allen & Unwin.

Tremmel, R. (1993). Zen and the art of reflective practice in teacher education. *Harvard Educational Review*, 63(4), 434-458.

Wagner, J. (1989). The well-told teaching story: A resource for teachers of English. *English Education*, 21(2), 110-125.

Wallace, M. (1996). Structured reflection: the role of the professional project in training ESL teachers. In D. Freeman & J.C. Richards (eds.) *Teacher learning in language teaching*. Cambridge: Cambridge University Press, 281-294.

Zeichner, K. (1983). Alternative paradigms of teacher education. *Journal of Teacher Education*, 34 (3), 3-9.

Zeichner, K. (1994). Beyond the divide of teacher research and academic research. Paper presented at The Annual Meeting of the Australian Association of Research in Education. University of Newcastle, New South Wales, 30 November.