

Reflection and Teaching: weighing pros and cons.

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Abstract: Higher education seems to have become the latest 'economic battleground' with numerous institutions hoping to attract as many students as possible expands. In the process, it is suggested that there needs to be balance between concerns for financial returns and yet being true to the standards of academia. The onus for such a sense of responsibility lies with the teaching institutions. One way in which these institutions can safeguard this commitment to academic standards is to ground the teaching approach on a sound philosophy and research on teaching and teachers.

One approach that provides such a philosophical base, as well as opportunities for practical application of the approach in teaching, is Reflection. It is argued that Reflection is relevant to teachers, students and managers of education. Based on a research project, this paper attempts to examine a number of approaches to Reflection, the merits and possible problems associated with the concept, and the relevance of the approach in higher education, especially in the context of teacher education.

Based on discussions with student teachers at USM, the paper argues that higher education must seek strong philosophical grounds in order that graduates leave the institutions of learning, not only empowered, but also with a sense of moral responsibility to accompany such empowerment. Reflection offers one such viable approach.

Keywords: reflection, teaching, higher education

Introduction

Two strands of thought will lead this introduction to the major points of this paper. First, it can be noticed that many nations, especially Asian nations, are caught in what seems to be an increasing paradoxical dilemma. The dilemma lies in fact that the need to preserve valued traditions of the past has to be balanced against the pressures to innovate and adapt relatively new practices and traditions, especially in the face of swift technological developments, and globalisation (whatever it means in its numerous interpretations). Developments in Information and Communication Technology (ICT) mean that protection of young minds, shaping the growth of these minds in preferred directions and censoring of undesirable ideas are increasingly at risk. The new technology empowers individuals to source information with relative ease. However, such empowerment comes with the risk that instead of the individual owning the new idea, the idea takes over the young mind, especially in self-access contexts without adult guidance. One issue which has to be faced and addressed is the fact that the identities of individuals and communities at large are at risk from intruding 'foreign' values and ways of living which move across distances and boundaries into the collective national consciousness. Is this what nations, especially

those in Asia, want? More important, are they in a position to screen these influences and accept what they wish to accept and reject undesirable influences?

It is the contention of this paper that the best way of developing such screening capacities lie in developing an enlightened citizenry. Such enlightened citizens should be capable of making appropriate decisions based on a capacity for critical awareness, discrimination and reflective abilities. Enlightening the citizens is, however, not going to happen in an instant. Instead, it is a result to be hoped for in the future, provided that careful planning and curricular innovations underpin programmes specifically aimed at developing critical thinkers. Thus, there is a need to focus on children today so that they will be better prepared to face the daunting challenges that the new world order of the future will confront them with. In order to develop children to be critically aware and enlightened, we need, however, to ensure that not only our teachers, but parents as well are equipped to think critically themselves and, furthermore, possess the necessary methodological skills in developing such thinking among children. Developing both these attributes calls for careful planning, and structured curricular activities for teacher and higher education.

Second, higher education is an expanding industry across the world. Universities are growing not only in physical forms with new campuses, but also through distance education formats and the increasing tendency these days to form strategic partnerships with educational institutions in specific regional contexts. The last mentioned type of educational partnerships (seen in the form of 2+1, 3+0 and similar formats) is an increasing phenomenon that has resulted in links between private colleges of tertiary education and established universities. Such a phenomenon in countries such as Malaysia is a natural response to needs, such as the need for more opportunities for higher education, variety in choice, reducing economic costs, attending reputed universities and perhaps most importantly, saving time. Whatever the reason, it is this phenomenon of rapid expansion and the various associated implications of the accommodating the demand for 'compressed' education as quickly as possible that have led to my suggestion of an 'industry'. The term is chosen deliberately, to draw parallels with the economic and manufacturing similarities that suggest themselves in this context. It should be relatively obvious that marketing the institutions depends on selling reputations, facilities, attractive rates, time saved and successful pass rates. Many of these institutions work flat out in order to ensure that their candidates are prepared in time to take pre-university matriculation and higher school certificate education programmes in less than a year. The danger lies in the sacrifices that institutions have to make to fulfill the demands of such compressed education, especially given the possible intake of students with marginal abilities. What should these institutions focus on, do with and leave out? Is it not likely that routine and rote-learning cultures get established because of economic necessities? It is in these contexts that teaching and learning should rise above the demands for instant 'fixes' of solutions, and take the perhaps more painful but valuable longer route of reflection and critical thinking. This does not imply that we include special courses entitled 'reflection' or 'critical thinking'! Instead, it is suggested that reflection and critical thinking should underpin all courses, thereby making such thinking second nature to graduates eventually. In order to do so, institutions have to make informed choices based on awareness of available options and possible shortcomings.

The rest of this paper details reflective approaches to teacher education as well as specific strategies which have been attempted in efforts to develop thinking, reflective and critically aware teachers. The approaches were examined in the context of a research project at Universiti Sains Malaysia using video-based materials in education as well as in-service teachers. In presenting these, the paper attempts to provide viable options for curricular innovation in teacher education in Asia, based in part on an awareness that syllabuses and curriculums will need to be adapted to suit local contexts, cultures, traditions and needs. Nunan (1998) suggests that, "Curriculum" is concerned with the planning, implementation, evaluation, management, and administration of education programmes. 'Syllabus', on the other hand, focuses more narrowly on the selection and grading of content." (p. 8).

Numerous approaches, especially to teacher education claim to be reflective in orientation. However, as the following discussion will reveal, such approaches do not all interpret the terms 'reflection', and 'reflective teaching' in the same way. In understanding the terms to mean different things, the various approaches emphasise different aspects, have different goals, and adopt different strategies to achieve their goals. Often, the approaches may be seen to be taking different paths, each of which is not necessarily compatible with others.

Interpretations of Reflection

Since Dewey (1933), there have been numerous approaches to teacher education aiming to produce reflective teachers who will be inclined to make intelligent and informed decisions about what to teach, when to do so, and why they undertake particular courses of action (Richert, 1990; Ross and Hannay, 1986). While this may be so, there does not seem to be much agreement as to what exactly is reflection. One reason for this is the broad range of established meanings associated with the word 'reflection' (Russell, 1989), and as far as the field of education is concerned, terms

“...such as “reflective practice,” “inquiry-oriented teacher education,” “reflection-in-action,” “teacher as researcher,” “teacher as decision maker,” “teacher as professional,” “teacher as problem-solver,” all encompass some notion of reflection in the process of professional development, but at the same time disguise a vast number of conceptual variations, with a range of alternative implications for the organisation and design of teacher education courses” (Calderhead, 1989, p.43).

Liston and Zeichner (1987) point out that reflection has become something of an “...educational slogan...that lacks sufficient conceptual elaboration and programmatic strength” (p.2).

Griffiths and Tann (1992) suggest that reflection is one of the recent approaches that provide a radical answer to the theory-practice division (i.e. that they are separate/mutually interdependent) by suggesting that “all action is an expression of theory (albeit, highly personal and implicit theory)” (p. 70). They propose, however, that such a division is false, because “what we still tend to label as ‘theory’ and ‘practice’ are more accurately seen as ‘public’ and ‘personal’ theories...to be viewed as lining, intertwining tendrils of knowledge which grow from and feed into practice” (1992, p. 71).

The influence of knowledge on reflection

Approaches to reflection have varied depending on what the function of knowledge obtained either from research or practice is. If such knowledge is seen to be externally derived, then research findings are used in the belief that knowledge obtained from external sources can be useful not only in directing, but also controlling practice. Teachers thus model their practices in the belief that replicating the findings of empirical research findings is valid and effective in solving the problems of practice. On the other hand, such knowledge from research can be viewed as constituting merely one other source of knowing. Research findings can then be accepted as another acceptable source of knowledge for informing practice. Based upon careful consideration of existing options, teachers choose the best option in the light of possible consequences. Such an approach would essentially be eclectic, and aim for what would be best for students. Knowledge can also be viewed as being found in the domain of practice. Attempts to reconstruct experience arising from practice leads to new revelations. Such revelations may be about either the contexts of action, the teacher's self (in the cultural environment of teaching) or on certain assumptions about teaching that are taken for granted (such as the social, political and cultural assumptions embedded in the context of teaching). In these cases, knowledge is obtained from the context as well as personal experience, and acts to transform practice (Grimmett, 1988).

One definition of the reflective approach has been to suggest that

“when teachers adopt a reflective attitude toward their teaching, actually questioning their own practices, then they engage in a process of rendering problematic or questionable those aspects of teaching generally taken for granted” (Smyth, 1984, p.60).

However, there is some confusion as to what it is that can be described as problematic, because

“the objects of our doubts might be accepted principles of good pedagogy, typical ways teachers respond to classroom management issues, customary beliefs about the relationship of schooling to society, or ordinary definitions of teacher authority - both in the classroom and the broader school context” (Tom, 1985, p.37).

In other words, approaches that seek to problematise educational matters are trying to raise questions about issues that might otherwise be accepted as sound. What seems to be important then is how to conceptualise teaching. If teaching is viewed as being value-free and technical in nature, the reflective approach might focus on the teaching and learning process and knowledge of subject matter. If education is seen as something broader, reflection will be macro in nature, and concern itself with the ethical, moral and political dimensions of education (Smyth, 1989).

In the sections that follow, an attempt will be made to highlight and categorise the orientations and major characteristics of a number of recent approaches to reflection

in teacher education. The attempt will not aim to be comprehensive, but rather aim at providing a representative selection.

Approaches influenced by Dewey

Dewey (1933) suggests that reflection is an act of intelligence, and emphasises the sense of wonder or perplexity that leads a person to reason and purposefully seek out solutions based on ideas of what the goal of the enquiry should be. Certain characteristics such as open-mindedness, wholeheartedness and responsibility, and certain ways of thinking such as reasoning and proper ordering of one's thoughts are all necessary for reflection. One could therefore classify approaches within this paradigm as belonging to modes of reasoning.

For Dewey, Reflective thinking is essentially problem-solving in nature. Data is examined based on prior knowledge and present observation. This in turn provides ideas (or suggested solutions) for testing and experimentation until a well considered and satisfactory solution is arrived at. Such a decision is equivalent to belief and commits the person to either a point of view or a course of action.

A number of approaches have emphasised the problem solving nature of reflection, as suggested by Dewey (1933). An example of such approaches would be the ALACT model proposed by Vedder and Bannink (1988) in the Netherlands. They suggest that the model develops a proposal that there are two kinds of reflection: an after-the-event reflection and a reflection that is similar to error analysis in that it is called for when things go wrong. One notes the similarity of the stages involved in this kind of reflection and the one proposed by Dewey, as illustrated by Action, Looking back on action, Awareness of essential aspects, Creating alternative models for action, and Trial.

Reflection is an important aspect of what has been called an experiential learning approach. Two features of the model include the experience itself, and the reflective activity that is based on the experience. Experience in this context is described as "the total response of a person to a situation or event: what he or she thinks, feels, does and concludes at the time and immediately thereafter" (Boud, Keogh, and Walker, 1985b, p.18). Such an event or situation could be either formal (for example through lectures, field trips, and workshops) or informal, and may come about through an external or internal cause. It is during a phase of processing following experience that reflection occurs. Reflection in this case is "a form of response of the learner to experience" (Boud, Keogh and Walker, 1985b, p.18), and represents people trying to recapture their experience, thinking about it, mulling over it and evaluating it. In this approach, there is a constant interplay between behaviour, ideas and feelings, experience and reflection leading to new perspectives, understandings and action. While acknowledging their debt to John Dewey, Boud, Keogh and Walker (1985b) point out that their approach is different because it places greater emphasis on the affective aspects of learning. These affective aspects are important not only because they provide opportunities for enhancing reflection, but also because they provide barriers to reflection.

Approaches influenced by Schon.

Schon (1983,1987,1988) has emphasised knowledge that is found in the artistic performance of skilled practitioners. Many skilled practitioners are able to reflect while in the midst of action (reflection-in-action) and try out new solutions, instinctively as it were, based on their previous knowledge and experience. It can also involve reflection-on-action, after the event as it were. This involves a consideration of alternative modes of framing and reframing (Calderhead, 1987). For Schon (1983, 1987, 1988), the act of reflection calls for a kind of interactive and interpretive skill for the analysis of complex and unclear problems (Calderhead, 1989).

On the other hand, Hayes and Ross (1989) define reflection as a

“way of thinking about educational matters that involves the ability to make rational choices and to assume responsibility for those choices” (p.315).

They point out that the elements of reflection include the recognition of educational dilemmas, responding to these dilemmas by recognising similarities and dissimilarities, framing and reframing the dilemma, mentally experimenting with the situation to discover consequences and implications of possible solutions, examining intended and unintended consequences and evaluating the solution by determining whether or not the consequences are desirable. The similarities to Dewey's and Schon's stages of reflection are apparent in this approach.

Wallace (1991) acknowledges being influenced by Dewey and Schon when proposing his model of teacher education. In his reflective model, pre-service teachers come to professional education with existing conceptual schemata or mental constructs. Then, in the course of teacher education, they receive inputs of “received” knowledge and experiential knowledge. The interaction of these three elements in the context of practice leads to reflection and understanding. Practice and reflection form a reflective cycle, and lead to professional competence.

Wallace's (1991) approach recognises an individual's previous knowledge and experience of the profession. Students bring at least twelve years of vocational observation and participation to professional education, and these include craft knowledge as well as conventional wisdom which amount to explicit behavioral tenets of the dominant prevailing ideology (Armstrong and Hoover, 1989). Wallace (1991) points out that once enrolled on courses, students have inputs of received knowledge (the vocabulary of subjects, matching concepts, research findings and theories and skills) as well as experiential knowledge (knowledge-in-action, knowledge from observation and doing) which together provide for a cycle of practice and reflection leading to professional competence. The term ‘received knowledge’ is proposed as an alternative to Schon's reference to research-based theories and techniques (1983, p.58) not only because the student receives it rather than experiences it, but also because it is a deliberate echo of received wisdom or that which is commonly believed without proof or question. Furthermore, much of what students learn (like intonation patterns, and concepts such as a grammatical hierarchy and educational validity) are not necessarily all based on research. Experiential knowledge refers to professional experience acquired in the context of practice, and is closest to Schon's notion of knowing-in-action. However, for Wallace (1991),

experiential knowledge could include knowledge-by-observation (p.15) of someone else's practice (in person or through video). Wallace (1991) refers to feelings, intentions and doubts that can arise in the course of doing things and suggests that

"It is possible to leave these feelings or intentions either unexplored or unconsciously stored, or it is possible to reflect on them, leading to conscious development of insights into knowing-in-action. It is (or should be) normal for professionals to reflect on their own professional performance, particularly when it goes especially well or particularly badly. They will probably ask themselves what went wrong, or why it went so well...what to avoid in future, what to repeat and so on" (p.13).

Wallace's (1991) approach is important in being specifically designed for the general training of foreign language teachers. It has been designed for those engaged in teacher education (especially in developing countries), as well as programmes for in-service, supervisory or inspection, advisory, managerial and personal development. In attempting to put ideas and suggestions within the broader context of a coherent framework for the approach to language teacher education, no attempt is made to prescribe the content of any specific approach to teacher education. The approach represents a collection of practical activities (based on the views and content presented in each section) with no prescription of correctness. This recognises that there is no single correct answer or solution to educational problems. Most activities remain open-ended, and chapters are characterised by sections entitled "personal review" which invite the readers to think about ideas and issues raised in each of these chapters. Reflection in this approach then represents deliberating over ideas that have been raised. In the process, received and experiential knowledge combine to inform on the idea or problem, thus leading to new understanding, and a reflective cycle.

Wubbels and Korthagen (1990) acknowledge the influence of reframing as the key to their interpretation of reflection as being the result of constant attempts to expand, refine and alter mental perceptions of reality. They follow a definition that "a person is reflecting when he or she is engaged in structuring his or her perception of a situation, of his or her actions or learning, or when...engaged in altering or adjusting these structures" (p. 32) as being the basis of a four year teacher education programme in the Netherlands. In reporting this, Wubbels and Korthagen (1990) go on to suggest that one "has a reflective attitude if one displays a tendency to develop or alter mental structures, thus indicating an orientation towards one's professional growth" (p.32).

Schon's concept of reflection-in-action is also very much in evidence in Richert's (1990) definition of reflection (with regard to a study of factors involved in reflection) as

"the time in the teaching process when teachers stop for a moment (or longer) to think about what has occurred to make sense of it in order to learn from their experiences in the classroom" (p.526).

The following section will attempt to analyse reflective approaches from different perspectives such as technical, interpretive, critical or moral.

Reflection in a Technical orientation.

In a technical orientation, the most important consideration is the solution of problems, and specifically the ways in which the problem can be solved. The emphasis as such is on means, while the goals and embedded assumptions about teaching are taken for granted. A technical approach would be dependent upon the findings of research to inform and speedily provide solutions to problems. In teaching, the approach emphasises teachers' abilities to perfect and employ teaching techniques (Bullough and Gitlin, 1989).

'Reflective Teaching' (distinguished as a specific procedure by capital letters) as advocated by Cruickshank and Applegate (1981), and Cruickshank (1985b, 1987), seems to amount to a variation of micro-teaching (Zeichner, 1990) in which each student is given identical lessons to prepare and teach, with the subject matter, materials, and allotted time (15 minutes) all being specified and controlled. This form of reflective teaching is advocated as allowing for an emphasis and focus on how to teach, followed by reflective discussions, first in groups, and then the class as a whole, focusing on factors that affect teaching and learning. The approach is considered to be reflective in that there is a looking back on events that have occurred. The focus is on skills alone, thereby reducing reflective enquiry into a matter of technique and ignoring the educational and social contexts in which teaching is embedded (Ross and Hannay, 1986).

Some presentations of reflective enquiry and pedagogy have made Dewey's phases of reflective thought into a highly structured problem-solving procedure (Beyer, 1984a; 1984b). This technical, problem-solving procedure is presented to students in a "detailed step-by-step manner, and students are encouraged to approach problem-solving tasks in this linear procedure" (Ross and Hannay, 1986, p.10). Such an approach runs the risk of reducing all problems into technical ones, and ignores the need quite often for dialogical (rather than technical) reasoning when there are alternative systems or competing viewpoints to be considered. Furthermore, in transforming issues into procedures, the approach does not take into account the fact that reflective enquiry is a dialectical process which is guided by principles, and therefore open to debate (Ross and Hannay, 1986).

Another approach that depends on retrospection (looking back and examining after the event) is Schulman's (1987) description of a programme of research into teachers' knowledge at Stanford University, where reflection is seen as

"reviewing, reconstructing, reenacting and critically analysing one's own and the class performance and grounding explanations in evidence" (p.15).

Such an approach, argue Munby and Russell (1989), remains in the technical rational tradition, and appears to be a model of knowledge production and use, and the processes comprising reflection are meta-cognitive (cognitive processes that depend on introspection) similar to Schon's (1983, 1987) reflection-on-action only, rather than reflection-in-action. That the approach emphasises reflection-on-action is evident particularly in view of Shulman's (1987) further explanation of reflection as

“what a teacher does when he or she looks back at teaching and learning that has occurred, and reconstructs, reenacts, and / or recaptures the events, emotions and the accomplishments. It is that set of processes through which a profession learns from experience” (p.19).

Reflection in an Interpretive orientation.

In an interpretive orientation, the important factor becomes the individual teacher's experience. Action only makes sense in terms of the subjective meanings ascribed by the performers of actions, and interpretations of these actions with reference to those meanings. In other words, to describe something involves interpretation of the individuals' conscious intentions as well as the social contexts within which such intentions make sense, because the

“...social character of actions implies that actions arise from the network of meanings that are given to individuals by their past history and present social order and which structure their interpretation of ‘reality’ in a certain way. To this extent, the meanings in terms of which individuals act are predetermined by the ‘forms of life’ into which they are initiated” (Carr and Kemmis, 1986, p.89).

The interpretive approach attempts to bring about practical change by making transparent to individuals the meanings of their actions. This is achieved by facilitating dialogue between interested parties. Furthermore, by suggesting alternative ways of interpreting their actions through reconsideration of the beliefs and attitudes inherent in their present way of thinking, an opportunity is provided for practitioners to comprehend themselves and their situation.

Interpretive approaches have led to the use of “self-reflection” in teacher education, for example in Israel (Elbaz, 1988), where one reflects on ones' own actions and understandings. Self-reflection in such approaches allows for the examination of habitual ways in which individuals perceive their world. Such an examination could then lead in teacher education programmes to helping students become aware of the ways in which they look upon their world, and teaching and learning in particular, so that this understanding can lead to professional development.

The interpretive approach to reflection can thus focus on individuals' stories, making it possible to “...reconstruct, to rebuild a narrative that ‘remakes’ the taken for granted, habitual ways we all have of responding to our own curriculum situations” (Clandinin and Connelly, 1988, p.81).

Among the objections to such an approach is the danger that it ends up serving the status quo, by being merely a cathartic or a therapeutic ‘indwelling’, and not going beyond individualism to confront the alienating and hierarchical structures inherent in the situation (Bullough and Gitlin, 1989).

Reflection in a Moral orientation (deliberative, relational and critical orientations).

Deliberative

The deliberative approach looks upon teaching as consisting of practical problems requiring deliberation, as well as action for their solution. Such reflection or deliberation "is a moral as well as rational process of deciding what ought to be done in a practical situation" (Calderhead, 1989, p.44). It is also both moral and rational because it brings to bear upon a situation the "greatest number of genuinely pertinent concerns and genuinely relevant considerations commensurate with the importance of the deliberative context" (Gauthier, 1963, cited by Calderhead, 1989, p.44).

Schwab's (1969) work on 'the practical' and 'practical deliberation' is suggested as being of this kind, whereby it is "informed not only by ideas but also by the practical exigencies of situations; it always requires critical appraisal and mediation by the judgment of the actor" (Carr and Kemmis, 1986 p.93). Kemmis (1985) suggests that in practical deliberation, we do not focus on means, but begin to address questions of what is right and appropriate.

The deliberative approach, implying thoughtful consideration of issues, is best described as a moral craft approach (Tom, 1984), with a concern for pursuing desirable ends, right conduct and values. Deliberative reflective teachers would consistently examine the rightness of their conduct with regard to their students, and would attempt to develop curricula with a view to what is best and worthwhile (Valli, 1990). Pedagogical questions rather than pedagogical knowledge (Tom, 1987) may provide the thrust of the approach, as found in the Teachers for Rural Alaska programme (Valli, 1990). Liston and Zeichner (1987a) however suggest that the moral craft deliberative approach poses problems because it is not based on any ethical theory. They warn against a tendency in some programmes toward a political activist stance that is mainly confrontational, and does not sufficiently provide for consideration of other views.

Relational

Another moral approach to reflection is the relational approach, and this has led to ethic-of-caring programmes based on Noddings' (1984) work, and is

"rooted in the natural relation of mothering, subjective experience, and the uniqueness of human encounters. While the approach does involve moral deliberation, its rootedness in receptivity, relatedness, and responsiveness rather than in moral reasoning precludes its being subsumed under the category of moral deliberation" (Valli, 1990, p.43).

The goal of such an approach is to develop caring teachers, or caretakers, who care more for the affirmative growth of their students than, say, performance in achievement tests. Such affective growth may come about through a mutually constructed (by teacher and pupil) ethical ideal of caring.

Reflection in such an approach may provide opportunities for the student teachers to model and demonstrate the kind of ethical communities that they as teachers are expected to create. The content of such programmes may be guided by the teachers' responsibility to individual students, as well as relational questions, and could include

any issue or topic. The effectiveness of moral decisions made in such an approach will be guided by the sole question of how it would benefit the students being cared for, especially their individual talents, aspirations and personal desires rather than broad societal needs (Noddings, 1984).

Critical

The critical approach to reflection has its origins in the critical approach to social science, where self-reflection is expected to lead to understandings, explanations, and action for removal of conditions that frustrate. The critical approach is the only strategy among the three moral approaches to explicitly treat schools and school knowledge as political (rather than neutral) constructions that impede social justice and equality. Reflection in this case is "action-oriented, social and political" and its "product is praxis (informed, committed action)" (Kemmis, 1985, p.141). The basis of the approach is critique, in order to provide a form of

"therapeutic self-knowledge that will liberate individuals from the irrational compulsions of their individual history through a process of self-reflection" (Carr and Kemmis, 1986, p.138).

In other words, the approach attempts to discover how the form and content of thought has been given by history, and how "history itself will be shaped by our praxis..." (Kemmis, 1985, p.142).

Critical social science goes beyond critique to critical praxis, requiring an integration of theory and practice, described

"as reflective and practical moments in a dialectical process of reflection, enlightenment and political struggle carried out by groups for the purpose of their own emancipation" (Carr and Kemmis, 1986, p.144).

The goal of a critical approach as compared to the goal of the deliberative approach (moral decision maker) and the relational approach (caretaker) is the preparation of "critical pedagogues" or "transformative intellectuals" (Giroux and McLaren, 1986). For critical theorists, the main goal of teacher education should be the preparation of teachers who understand the ways in which schools might be contributing to an unjust society so that these teachers could then engage in emancipatory action.

In each of the deliberative, relational and critical approaches, moral criteria are found within the approach itself (Valli, 1990). Thus, they would all be both an "approach" and an "ethic", each embodying its own principle of good conduct. Caring, moral deliberation and social criticism would be the ethically correct practices of reflective teachers in the respective approaches. While teachers could conceivably integrate the three ethics into their practice, Valli (1990) warns that this could be problematic. She points out that reflective practice

"...is not singular. Different approaches do not lead to the same reflective practice, even when those approaches are all grounded in moral considerations. Only by unreflectively incorporating conflicting perspectives into daily practice could one teacher be caring, critical, and

deliberative. This is an unlikely (and surely undesirable) option for those who prepare reflective teachers" (Valli, 1990, p.54).

It will be fair to say in concluding this section that the term reflection has led to numerous approaches, all having varying interpretations and emphases. Feiman-Nemser (1990), in reviewing literature on reflection, suggests that the present consensus is that "reflective teacher education is not a distinct programmatic emphasis but rather a generic professional disposition" (p.221). Calderhead (1989) observes that there is "great difficulty in gaining any precise conceptual grasp of what reflection is or might be in teachers' professional development. The only uniting theme in discussions of reflective teaching is the general emphasis on the cognitive, and to some extent moral or affective, aspects of learning to teach" (p.45). More pertinent however is Zeichner's (1981/1982) observation that it will not be possible to equip prospective teachers with all the necessary knowledge and skills for their entire careers, and "that no teacher education program, no matter what the orientation and no matter how good, can produce a fully developed teacher at the pre-service level" (p.5). The best that can be done is to provide experiences that enrich rather than impede student teacher growth.

Where non-teacher education courses are concerned, the critical component should involve students seeking underlying significance and implications, receiving new ideas with openness, accepting good arguments, evaluating ideas in a balanced fashion, noticing errors in argument, taking a critical stance and be able to make connections between what they know and what they learn in the various courses that the students attend. In short, the tertiary institutions should create enlightened citizens.

Conclusion

The main difficulty with most reflective approaches remains that of motivating people to reflect. Where there does not exist a culture of reflection, the danger is that it becomes meaningless thinking without purpose. In the context of teacher education, there is also the problem of personal experience. How are student teachers expected to reflect on experience that they have not had? In a sense, it could be argued that reflection is only possible if there is rich vein of experience to reflect upon, and thus it is only the experienced practitioner that is capable of meaningful reflection. It may be possible to take a reflective approach in non-teacher education subject disciplines, but it still raises the question of whether it would be possible to reflect without a full stock of received and experiential knowledge. One major issue will be whether tertiary institutions can find time for the 'luxury' of reflection, given their tight academic schedules. On the other hand, can they afford to ignore the legitimate claims for the importance of critical and reflective orientations in their graduates?

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