

The Impact of a Course in Reflective Teaching on Student Teachers at a Local University College

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Abstract

This paper reports on a qualitative action research study which utilises a written interview schedule. The aim of the study was twofold: One, to examine the impact of a course in Reflective teaching on two cohorts of Bachelor of Education student teachers at a local university college and two, to continue the process of giving credence to reflective teaching as integral to effective teaching and learning. Specifically, the discussion of findings reveals that the course aided in the development of student teachers' reflective teaching and thinking. Findings show that it had positive effects on most students' general knowledge of reflective teaching, helped to develop their self-knowledge and awareness, a questioning disposition, and the application of reflection to their out-of-classroom life. The findings also pointed out that student teachers were interested in applying what was learned about reflective teaching and thinking in the regular school classroom. They also identified the need to develop certain affective and professional skills such as: the control and development of certain emotions, being consistent, prioritizing and the development of English-speaking skills.

Keywords: Reflective Teaching, Critical Thinking, Reflective Thinking, Student Teachers, Teacher Knowledge, Self-Knowledge, Emotions, Affective Skills, Professional Skills

Resumé

Cet article rend compte d'une étude de recherche-action qualitative s'appuyant sur un guide d'entretien écrit. L'objectif de l'étude était double : premièrement, examiner l'impact d'un cours sur l'enseignement réflexif sur deux cohortes d'enseignants stagiaires inscrits dans un baccalauréat en éducation dans une université locale et deuxièmement, continuer à donner du crédit à l'enseignement réflexif en tant que partie intégrante d'un enseignement et d'un apprentissage efficaces. Plus précisément, l'analyse des résultats révèle que le cours a contribué au développement de l'enseignement réflexif et de la pensée réflexive des enseignants stagiaires. Les résultats montrent aussi que le cours a eu des effets positifs sur les connaissances générales, en matière d'enseignement réflexif, de la plupart des étudiants, et a aidé à développer leur connaissance et conscience de soi, une disposition au questionnement, et l'application de leur réflexion dans leur vie hors-classe. Les résultats ont également souligné que les enseignants stagiaires étaient intéressés par l'application de ce qu'ils avaient appris sur l'enseignement réflexif et la pensée réflexive dans la salle de classe.

De plus, ils ont identifié la nécessité de développer certaines habiletés affectives et professionnelles telles que le contrôle et le développement de certaines émotions, être cohérent, la mise en place de priorités et le développement de compétences en langue anglaise.

Mots-clés : enseignement réflexif, pensée critique, pensée réflexive, enseignants stagiaires, savoir-pratique des enseignants, connaissance de soi, émotions, habiletés affectives, compétences professionnelles

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Literature Review

Zeichner and Liston (1996) assert:

If a teacher never questions the goals and the values that guide his or her work, the context in which he or she teaches, or never examines his or her assumptions, then it is our belief that this individual is not engaged in reflective teaching (p.1).

Based on this statement, I define reflective teaching as involving a questioning disposition and critically thinking or “reflectively thinking” (Norris & Ennis, 1989), about one’s teaching techniques, personal goals, values, beliefs, assumptions about teaching, and the teaching context. This means that the desire and willingness to question and to think critically or think reflectively must come naturally or be cultivated through practice. The ability to cultivate this disposition through practice is supported by Posner (1989) who pointed out that all human beings have the capacity to question and to think critically because these are human characteristics and can be developed.

Zeichner and Liston (1996) put this in practical terms when they state that reflective teaching involves teachers in examining, framing, attempting to solve dilemmas of classroom and schools, and asking questions about assumptions and values they bring to teaching. It also involves attending to the institutional and cultural context in which they teach, taking part in curriculum development, being involved in school change and taking responsibility for their professional development. Essentially, this means reflective teaching involves critically thinking about all that one does in the classroom which should result in changes to classroom practice generally, and on an ongoing basis. The classroom is also filled with challenges therefore framing is critical. Framing is the ability to recognize problematic issues and determine what actions need to be taken to change the situation. Reflective teaching is also concerned with making changes to schools’ culture; that is, the schools’ environment, mission, socialization, leadership, and strategy or decision-making processes (Minott, 2009a).

However, central to the reflective teaching process is the questioning of personal beliefs/ values, and assumptions. This is important for a number of reasons which I will now discuss.

Questioning Beliefs/Values, and Assumptions

Borg (2001) defines belief as a proposition which is held either unconsciously or consciously. The individual accepts it as true and it serves as a guide to thought and behaviour. Aguirre and Speer (2000), Virta (2002), and Kupari (2003) support the idea that beliefs shape practice and orient practical knowledge. Borg (2001) also points out that a belief is held to be true by the individual involved, though this may not be absolutely so.

While the study carried out by Barry (1982) reports a number of factors that influenced teachers’ lesson planning, teachers’ beliefs ranked high among those considered very potent. Richards (1996), in a study of pre-service music teachers’ pedagogical knowledge and beliefs, concludes that well-established beliefs about teaching of music are formed from the participants’ experiences as high school music students, as private music

tutors, and as university students. Virta (2002) makes similar observations among student history teachers. Richards (1996) concludes that for some student teachers, their beliefs about teaching formed orientations that guide the way they thought about and planned for instruction. I can infer from Richards' conclusion that essentially, teachers' beliefs cause them to lean to a particular way of acting and thinking about their teaching. Borg (2001) also supports this observation, for she states that teachers with contemporary beliefs are significantly more likely to have their students analysing mathematical relationships and working in groups, and those with traditional beliefs emphasize models of teaching where the teacher transmits information and rules to the students.

A number of writers argue that questioning in general, and specifically questioning personal belief as it relates to teaching, is an absolute necessity if improved practice is desired (Cunningham, 2001; Farrell, 2001; Markham, 1999). Calderhead (1992) states that one characteristic of becoming a reflective teacher involves critically examining/questioning one's own and others' personal beliefs, for this aids in developing a coherent, articulated view of teaching and learning. Minott (2009b) expands on this idea by stating that it is via the critical examination of beliefs (reflecting on belief) that the transformation of what teachers believe about teaching will occur. The act of examining one's beliefs about teaching and testing these beliefs in the rigour of classroom realities should result, not only in the development of new knowledge, but could also reinforce beliefs held about teaching. In other words, reflecting on one's beliefs results in the development of new practical knowledge. In addition, reflecting on practical knowledge could result in the development of new beliefs. However, reflection is not an independent variable, which only exerts influence, but beliefs and practical knowledge and changes in these also influence the reflective process (Fisher, 2005). If this is the case, then what emerges is a cyclical, complex, and ongoing process involving reflection, belief, and practical knowledge. The idea that I am promoting is similar to that which Joram and Gabriele (1998) posit. I believe that teachers must consider their beliefs and reflect on them, in order to be aware of how their beliefs affect their teaching. Teachers must be willing to change their beliefs to enable them to be more effective teachers. For example, Borg (2001) states that teachers with contemporary beliefs are significantly more likely to have their students analysing mathematical relationships and working in groups, and those with traditional beliefs emphasize models of teaching where the teacher transmits information and rules to the students. It is through the process of reflecting on their beliefs about mathematics, that teachers would be inclined to utilise appropriate methods to enable students' learning and by so doing, contributes to their effectiveness as teachers.

Some Advantages to Teaching Reflectively Generally

In addition to questioning beliefs/values and assumptions, the advantages of teaching reflectively are many, for individual teachers, the teaching profession, and schools that are willing to employ and encourage its use. For example, I can infer from Farrell (2001) that reflective teaching demands that teachers employ and develop their cognitive skills as a means of improving their practice. They would recall, consider, and evaluate their teaching experiences as a means of improving future ones. Calderhead (1992) points out that reflective teachers develop and use self-directed critical thinking and ongoing critical inquiry in their practice. This is initiated by them and not administratively decreed. These activities will also result in the development of contextualised knowledge (i.e.,

understanding the unique aspects of teaching in a particular school or classroom). Elder and Paul (1994), and Halpern (1996) also state that reflective teachers think critically, which involves the willingness to question, take risks in learning, try out new strategies and ideas, seek alternatives, take control of learning, use higher order thinking skills and reflect upon their own learning processes. Cunningham (2001) found that reflective teachers discuss and analyse with others, the problems they encounter in their classroom, to aid their analysis of situations. This results in improved future classroom encounters. Zeichner and Liston (1996) also put forth that reflective teachers are conscious of their subject and their standards of teaching that subject. Teaching reflectively makes the teacher responsible for identifying subject content deficiencies and, through the act of reflection and being autonomous, the teacher addresses his or her own deficiencies.

Reflective teaching also demands that teachers use and develop their affective skills as a means of improving their practice. According to Markham (1999), they use their intuition, initiative, values, and experience during teaching, and exercise judgment about the use of various teaching and research skills. Reiman (1999) suggests that they identify personal meaning and or significance of a classroom or school situation and this would include the disclosure and examination of personal feelings. Markham (1999) further suggests that teachers also take personal risks, for reflective teaching demands the sharing of perceptions and beliefs with others. They engage in the disclosure of feeling and ideas, receiving and giving feedback as a part of a collaborative experience (Day, 1999) and, as Cunningham (2001) states, they confront the uncertainty about their teaching philosophies and indeed their competence.

If teachers hone their cognitive and affective skills (i.e., develop their critical thinking skills and utilise intuition and initiative via reflective teaching), this could improve their ability to react and respond—as they are teaching—to assess, revise, and implement approaches and activities on the spot. According to Cunningham (2001), teachers honing their cognitive and affective skills could help them to develop further self-awareness and knowledge through personal experience. More importantly, the honing of cognitive and affective skills could also aid in encouraging teachers in their role as autonomous professionals, by inspiring them to take greater responsibility for their own professional growth by deepening an awareness of their practice, set within their unique particular socio-political contexts.

Reflective Teaching and the Teaching Profession

Over the past 20 years, the teaching profession has embraced these and other concepts of reflective teaching and the notion of the teacher as reflective practitioner. Embracing the notion of teacher as reflective practitioner has led to an increased emphasis on classroom practices which encourage teachers to reflect-in-action and reflect-on-action so as to improve their teaching and to engage in action research. Teacher education programs have embraced the notion of the teacher as reflective practitioner by offering learning experiences that model and foster student teachers' reflective capabilities, thus empowering future teachers as reflective professionals (Grushka, McLeod, & Reynolds, 2005; Parkinson, 2009).

Encouraging student teachers' reflective capabilities requires a focus on the development of their cognitive and affective skills. This is a process which involves encouraging them to take initiative, develop their intuition, and provides opportunities for them to examine and possibly utilize personal values and assumptions they hold about

teaching. It is also generally agreed that teachers with the ability to take the initiative and use their intuition can be advantageous to any school or school system. For example, there is evidence that teachers exercising reflective capabilities leads to creative and innovative approaches to classroom situations and problems. It also leads to self-understanding and self-improvement and could result in their being better teachers, thus facilitating necessary changes in 'self', others, and the working environment (Cunningham, 2001; Zeichner, 1992).

Providing learning experiences that encourage student teachers to utilize their reflective capabilities (i.e., to engage in critical thinking, framing problematic situations and collaborating with colleagues) should be the main focus for any reflective teacher education program. Student teachers utilizing their reflective capabilities are important for three reasons. One, the provision of a variety of opportunities for them to utilize their reflective capabilities is one way of encouraging their continued use of reflection on entering the teaching profession. This is necessary because they will encounter many barriers to teaching reflectively in schools (Cole, 1997). Two, there is the need to develop future mentors for the idea of reflection and reflective teaching, thus enabling future student teachers to experience the benefits of teaching reflectively. Three, developing teachers who are autonomous, self-directed professionals is an aim of teacher education programs world-wide. Providing opportunities for student teachers to utilize their reflective capabilities is a way of achieving this aim.

The Study

As a reflective practitioner and a proponent of the practice, with a deep interest in ensuring that teacher education programs offer learning experiences that encourage the development of students' reflective capabilities, I designed and taught a course in reflective teaching at a local university college. In the spirit of encouraging student teachers' reflective capabilities, I carried out a study to ascertain what impact the course had on two cohorts of students at the local university. The results of the study reinforce the need for units in teaching degrees which focus on reflective teaching and thinking. The data collected for this study allows for general conclusions similar to other studies, but also provides a more in-depth analysis of students' responses from a part of the world not yet explored by other researchers, i.e., the Cayman Islands.

This paper reports on the study. It proceeds with an outline of the course and an overview of the method used for the collection of data, and discusses the findings which are based on the views and opinions of the student teachers as they appear on their responses to the written interview questions.

Course Background

The University College of the Cayman Islands is the state institution which provides a range of undergraduate and postgraduate programmes. Currently, there are approximately 1300 students enrolled in the University College (this number includes students on the main campus and the remote site, Cayman Brac or the "Brac"). The teacher education department started in 2007. The development of this department is a response to the university's mission statement which is to be responsive to the needs of the local community. The department hosts a number of programmes: a postgraduate diploma in Education, Bachelor's in Education, and teachers' aide certificate. One goal of the

department is to offer courses that are responsive to local needs and internationally relevant. This is important because a large number of students are expatriates and will not be remaining on the island. They are in need of a degree that meets international standards. The department and all its programmes are fully accredited and students who have completed programmes are employed in other parts of the world.

This focus on being internationally relevant as led to the recognition by programme developers in the department that reflective teaching is perennial and is an established part of teacher education programmes world-wide. This recognition also led to the development of a 15-week course called *Reflective teaching*. This course is placed in the second semester of the third year in a four year Bachelor of Education degree programme. The aim is to help teachers-in-training to develop an understanding of the facets of reflective teaching and to be able to apply elements of the practice to their own teaching. The course is broken into several parts covering areas such as the purpose and process of reflective teaching, keeping a reflective journal, teacher knowledge, contextual and professional learning, kinds of reflections, emotions and effective reflective teaching, contextual challenges to reflective teaching and teachers' professional development.

The delivery of the course includes lectures, lecture-discussions, and group discussions of assigned readings and textbook. The course is normally evaluated using a standard student course evaluation form issued during week 14. Students are assessed via course work assignment and a midterm and final semester examination.

Methodology

The aim of this qualitative action research study was twofold: One, to examine the impact of a course in reflective teaching on student teachers in the third year of a Bachelor of Education degree programme at a local university college and two, to continue the process of giving credence to reflective teaching as integral to effective teaching and learning. I utilised qualitative data derived from a written interview schedule. The written interview schedule was used because it provided an in-depth understanding of the impact of the course on students' reflective capabilities. The main research question which guided this study was, how has the course in reflective teaching influenced student teachers' reflective capabilities?

Data Collection

Two B.Ed undergraduate cohorts (i.e., 2009 & 2010) were given a set of written questions at the end of a course in reflective teaching and learning. The questions were:

- What is your assessment of your reflective teaching and thinking at this time?
- What do you need to work on, and develop in order to become a more reflective teacher and thinker?

Seven students were interviewed in the 2009 data collection process and seven in the 2010 data collection process. This accounts for a 100% participation rate in both years.

Data analysis

Powell and Renner (2003) propose allowing the categories or themes to emerge from the data. They refer to this as "Emergent categories." I employed this method in the

data analysis process. Specifically, I read through students' answers to the questions to find words and phrases that recurred. These became the categories or themes which were defined after I had worked with the data or as a result of working with the data. For example, the category *knowledge development* was used because the data was replete with the use of the word "knowledge" and the idea of gaining an understanding, and an awareness of various aspects of teaching. The category, *out-of-classroom use of reflection*, was based on the fact that the data was also replete with comments on the use of reflection in students' out-of-school-life.

Results and Discussion

Five major categories or themes emerged from the examination of the responses to the two research questions. The following categories emerged from responses to the question; what is your assessment of your reflective teaching and thinking at this time?

- Knowledge development: refers to the general understanding and awareness of reflective teaching which came as a result of embarking on the course
- Self-knowledge: includes deepening an understanding of "self" or developing self-awareness, particularly being able to identify personal strengths and weaknesses
- Out-of-classroom use of reflection: refers to how student teachers actually utilize reflection in their out-of-school life

The following categories or themes emerged from responses to the question; what do you need to work on, and develop in order to become a more reflective teacher and thinker?

- Practice makes perfect: refers to the need to not only develop knowledge about reflective teaching, but to be able to practice what was learned in order to become more reflective teachers and thinkers
- Affective and professional skill development: refers to the need to control or develop certain emotions, being consistent, prioritizing, and the development of English speaking skills.

I use these categories or themes to guide the discussion in this section.

Knowledge Development

The Eastern Mennonite University website states that a critical goal of reflective teaching is to support teachers' professional knowledge bases and that these knowledge bases focus on knowledge of self, knowledge of content, knowledge of teaching and learning, knowledge of pupils, and knowledge of context within schools and society.

The respondents or student teachers in this study highlighted the fact that they built knowledge or understanding as a result of embarking on the course and through the various opportunities provided in the course to use elements of reflective teaching; for example, critical thinking or reflective thinking. Specifically, they were encouraged to give careful consideration or thought to various issues and aspects of the course, recall and evaluate information, and were involved in a process of disciplined intellectual criticism, which utilizes balanced judgment (Farrell, 2001).

A number of student teachers spoke of developing knowledge about various aspects of teaching. One spoke about understanding classroom happenings: "Doing the course Reflective Teaching has helped me to better understand the happenings of a

classroom and has made me more equipped to deal with situations that may arise” (Tony, 2005). Another student teacher spoke of understanding via reflection, how to ‘do things’ differently or to facilitate change in the classroom:

In this course you learn so many new methods and strategies; it gives you a sense of understanding and a way of thinking in a more positive manner. You are able to think in a more reflective way that will allow you to do things better and to make changes and to take a look back on how you used to do things before and you are able to correct them in a reflective way (Yolo, 2009).

Student teachers also spoke of the degree to which the course has caused them to devote more time to writing in their reflective journals and the knowledge gained from carrying out the journaling process. They spoke also of the willingness to now reflect and to use any given time to reflect. This was challenging to do before embarking on the course.

In the foregoing discussion, I defined reflective teaching as involving a questioning disposition and critically thinking or “reflectively thinking” (Norris & Ennis, 1989). This definition suggests that the desire and willingness to question and to think critically or think reflectively must come naturally or be cultivated through practice (Posner, 1989). One student teacher states that she had developed a questioning disposition as a result of doing the course, with the expressed aim of improving her knowledge. She wrote:

I now realise that I ask more questions and desire to find the answer to them whether it’s by doing personal research or asking family or workmates. As a reflective thinker, I seek for new ways to better myself educationally, and I try to implement what I have learnt, in the classroom, and share with workmates (Tine 2010).

One student teacher spoke of growing in various types of knowledge:

I have gathered immense information on reflective teaching and have really grown in this area. I am now a far more reflective person than I was a few months ago, prior to my engagement in this course. I have grown in knowledge as a reflective person. I have gained knowledge of self, passion, emotion, technical knowledge and practical knowledge (Owen, 2009).

Owen’s reference to the development of practical knowledge and the fact that the course helped him to gain an understanding in this area is significant because this occurrence is in line with the established literature which points out that there is a correlation between teaching reflectively and teachers’ practical knowledge.

Shulman (1987) defines teachers’ practical knowledge primarily as cognitive, individual constructs. The difficulty with this definition of teachers’ practical knowledge rests in the fact that it highlights teacher-knowledge as solely cognitive and excludes the moral and sociological dimensions. In the words of Connelly, Clandinin, and He (1997), it does not acknowledge nor seem to recognize the complexity and enormity of teachers’ knowledge landscape (i.e., the personal and the in-classroom and out-classroom life of the teacher,) and the impact that these have on their knowledge.

While a number of writers have debated this definition (see for example Connelly, Clandinin, & He, 1997; Leach and Moon, 2000; McEwan & Bull, 1991), Shulman's idea was timely, for it highlighted the fact that teachers' practical knowledge—how they know and how they expressed their knowledge—affected every aspect of teaching and learning.

In a previous paper in (2009b), I pointed out the correlation between reflective teaching and practical knowledge in showing that reflection builds practical knowledge. This occurs when beliefs about teaching are reflected on and tested in the rigors of the classroom. This results not only in the development of new knowledge, but could also reinforce beliefs held about teaching.

Self-Knowledge

Individuals develop self-knowledge from personal experiences. Self-knowledge occurs when they mentally process or, I would add, critically think about these experiences. Critically thinking about experiences involves cognitive processes such as categorizing, describing, questioning, and hypothesizing (Weinstein & Alschuler, 1985).

Student teachers in the study developed self-knowledge by critically thinking about their experiences in the course. Four student teachers spoke of being more self-aware: “[The course] has deepened my understanding of why I react and solve problems in the way I do in the classroom. It also provided alternative ways of dealing with issues in the classroom” (Owen, 2009).

I think at this point in time I tend to pay more attention to incidents and I try to find ways that things could be improved. I now tend to learn from situations that normally seem trivial, as I look at them in a more reflective manner (Tony, 2010).

At this time I am more aware of how my past experiences influence my judgment. My increased knowledge within the course area has also influenced my thinking. Prior to taking this course, I used to think ‘look before you leap’ and ‘hindsight is 20/20’. Now at this point in time, before I leap, I think about how I am going to leap, where I will land, and when I have landed, I look back to see where I came from and how well I executed the jump (Nelly, 2009).

I have learnt to view things from a critical standpoint, having a level of openness, self-awareness, knowledge of self, and a willingness to see things from another's perspective. I am more aware of the social context in which I teach, the students, and, basically, all the various tangents that extend from the nucleus of education (Michael, 2009).

As hinted in the foregoing discussion, critical to any discussion of self-knowledge is the questioning of “self.” A common feature of the reflective process is the questioning of “self,” that is, one's beliefs, values, assumptions, contexts, and goals, in relation to actions, events, or decisions in teaching as outlined by Zeichner and Liston (1996). According to Cunningham (2001), reflecting on the self could also develop further self-awareness and knowledge. More importantly, it could aid in encouraging teachers in their role as autonomous professionals. It encourages them to take greater responsibility for their own

professional growth by deepening an awareness of their practice, within their unique socio-political contexts.

Out-of-Classroom Use of Reflection

One important feature of the responses was the many references to how reflective thinking and teaching connects with life outside the classroom:

At this time I have a better understanding of what it is to be a reflective thinker and teacher, and that this knowledge will benefit me not just within a classroom environment but in other situations as well, for example, at home and in caring for my own children (Nelly, 2009).

Out of school, I find myself using reflection as my way of making better decisions for myself. Whenever I am faced with a reoccurring issue, I reflect on how I dealt with it before, which assists in the way in which I will deal with it now. Now-a-days I find myself making excellent moral choices and how I deal with moral issues. I am a much nicer individual now (Tammy, 2010).

Doing the course in reflective teaching has helped me to identify the different aspects of a teacher's everyday life and has taught me how I can connect them all to have a sense of satisfaction with my work and to help students be the best they can be. I have learnt that reflective teaching has to do with my entire self, not just the cognitive, but the moral and social part as well (Tony, 2010).

While these responses highlight the usefulness and connection between reflective teaching and thinking and teachers' out-of-school life, Gelter (2003) suggests caution. The researcher states that applying reflective thinking to everyday life has to be learned and encouraged. This is so because reflection is not a spontaneous everyday activity and it is difficult to keep one's focus on one thing for any length of time.

Practice makes Perfect

The importance of connecting theory and practice in various disciplines such as nursing (McKenna & Roberts 1999), teaching (Nuthall, 2004), and pre-service teacher education (Serebrin, 2004) is quite evident in the literature. The respondents in the study, in answering Research Question 2 i.e., what do you need to work on, and develop in order to become a more reflective teacher and thinker? Also spoke of connecting theory to practice. For example:

I need to be in the classroom practicing what I have learned in order to be a more reflective teacher. I have learned so much from this course, but I haven't had the opportunity to implement any of it because I am not in the classroom (Tony, 2010).

I just need to do it more often, more in-depth, and more consciously, and encourage those around me to grasp the concept. I have learned that reflection on your thoughts and actions can greatly influence and change the outcome of any situation (Christen, 2010).

The integration or connecting of theory to practice is very important in the development of teachers in training, especially as they learn how to teach. This connection can be facilitated in a number of ways, such as a collaborative exercise between university and schools where student teachers will have the opportunity to build consistent theory and practices from intentionally connected inquiry-based experiences. The connection can also be facilitated when teacher education programmes make theory explicit, and when a student teacher has opportunities to reflect, experiment, and actively converse about theory in action (Serebrin, 2004).

Affective and Professional Skill Development

Reflective teaching also demands that teachers use and develop their affective skills as a means of improving their practice. According to Markham (1999), they use their intuition, initiative, values, and experience during teaching, and exercise judgment about the use of various teaching and research skills. Reiman (1999) suggests that they identify personal meaning and/or significance of a classroom or school situation, and the process of identifying personal meaning and/or significance of a classroom or school situation includes the disclosure and examination of personal feelings. Enabling and encouraging student teachers' reflective capabilities also involves encouraging them to take initiatives, nurturing the use of intuition and providing opportunities for them to examine and utilize personal values and assumptions they hold about teaching. In other words, it involves reflection on the affective.

It is generally agreed that teachers, with the ability to take initiatives and use their intuition, can be advantageous to any school or school system. For example, there is evidence that the exercising of initiative and intuition lead to creative and innovative approaches to classroom situations and problems. It also leads to self-understanding and self-improvement, changes in "self" and the working environment (Cunningham, 2001; Zeichner 1992).

The actual research exercise reported in this paper was a catalyst which encouraged the respondents to examine their personal feelings or emotions (i.e., the affective). One student teacher said, "I also think I need to work on my patience as I tend to get quite impatient easily" (Tony, 2010). Another said, "I also need to work on my emotions; even though my emotions are involved—which they should be—I shouldn't let them get the best of me and cloud my judgement and thinking" (Tine, 2010). Still another student teacher said,

As I reflect on matters of importance it dawns on me that I have a number of issues. Sometimes the issue of emotion comes into play and it is difficult to separate emotion from profession. Another issue is consistency; I try to be consistent but it is not easy when I feel overwhelmed with different situations and then I am bombarded with issues on a daily or weekly basis (Rita, 2009).

Markham's (1999) comments are relevant to the student teachers in this study. By sharing their personal feelings with me via this study, they are engaging in the disclosure of feelings and ideas and taking personal risks.

However, if teachers hone their cognitive and affective skills via reflective teaching, they can improve their ability to react and respond—as they are teaching—to assess, revise, and implement approaches and activities on the spot. This supports the view of Cunningham (2001) that honing cognitive and affective skills via reflective teaching could also develop further self-awareness and knowledge through personal experience.

Another facet of the reflective process is that it allows teachers to identify areas in their professional practice needing improvement (Cunningham, 2001). Student teachers were also able to identify these areas. For example, one student teacher said:

There is, however, other little things that I need to work on as an individual such as managing my time in order for me to become a more reflective thinker. I need to also develop the skill of prioritizing (Tammy, 2010).

Another said:

I think that the most important thing for me is to overcome my language barrier; if I do so, I know that I will be a good reflective thinker and teacher. I know that I am an ESL student and have difficulty in reading English, etc. But I know that I will overcome it someday soon (Yoto, 2009)

The overall aim of teaching reflectively is to improve practice, and by so doing, improve students' learning. Improvement of practice may include adjusting some aspect of "self," as well as the development of certain skills that might be lacking. Tammy and Yoto were able to identify some areas of their practice that needed improvement. This includes being able to prioritize, learning how to manage time, and overcoming linguistic barriers. Their ability to do this displays their reflective capabilities. Zeichner and Liston (1996) states that part of being a reflective practitioner includes the ability to identify deficiencies in ones' practice and, through the act of reflection and being autonomous, address such deficiencies.

Summary and Conclusion

So, how exactly did a course in reflective teaching have an influence on student teachers at the local university college? And hence, why is reflective teaching important? The presentation and discussion of the findings point out that the course aided in the development of student teachers' reflective teaching and thinking. Findings show that it had positive effects on most students' general knowledge of reflective teaching, helped to develop their self-knowledge and awareness, encouraged a questioning disposition, and the application of reflection to their out-of-classroom life. The findings also showed that students were interested in applying what was learned about reflective teaching and thinking in the classroom. They also identified the need to develop certain affective and professional skills, such as the control and development of certain emotions, being consistent, prioritizing, and the development of English-speaking skills.

The teaching of a course in reflective teaching and thinking clearly had some positive effects on the majority of the student teachers who participated. There were clearly more statements made about the kinds of knowledge and understanding that were developed. The student teachers' comments at least show that they are aware of the need to

make time for reflection and reflective thinking. However, making time to reflection and reflective thinking is not without challenges. Cole (1997) points out that professional contexts do not encourage or support reflective practice or reflective practitioners. Teachers who engage in systematic inquiry in their practice, do so secretly, behind closed doors, or away from their places of work.

The surprising acknowledgement of the impact of the course on students was the fact that they utilised reflection and reflective thinking in their out-of-classroom life. This, however, is more challenging to consistently achieve. Gelter (2003) explains that applying reflective thinking to everyday life has to be learned and encouraged. This is so because reflection is not a spontaneous everyday activity and it is difficult to keep one's focus on one thing for any length of time.

The following student teacher's comment epitomizes the potential benefits of a course in reflective teaching.

I have learnt to question the effectiveness of any teaching method I employ and to take into consideration the different barriers that would cause me to be less reflective, such as traditional barriers and the cultural and social barriers in my school. I have adopted an evaluative mind whereby I can question, use the knowledge I have gained, professionally as well as personally, and apply new concepts to the teaching and learning process (Michael, 2009).

References

- Aguirre, J., & Speer, N.A. (2000). Examining the relationship between beliefs and goals in teacher practice. *Journal of Mathematical Behavior*, 18(3), 327-356.
- Barry C.J. (1982). A study of the lesson planning of secondary mathematics teachers (Unpublished M.Ed Thesis). Flinders University of South Australia, Adelaide.
- Borg, M. (2001). Key concepts in ELT Teachers' beliefs. *ELT Journal* 55(2), 186-188.
- Calderhead, J. (1992). The role of reflection in Learning to Teach. In V. Linda (Ed.), *Reflective teacher education: Cases and critiques* (pp.139-146). Albany: New York.
- Cole, A. L. (1997). Impediments to reflective practice towards a new agenda for research on teaching. *Teachers and Teaching: Theory and Practice*, 3(1), 1-27.
- Connelly, F. M, Clandinin, D. J., & He. M. F. (1997). Teachers' personal practical knowledge on the professional knowledge landscape. *Teaching and Teacher Education*, 13(7), 665-674.
- Cunningham, F.M.A. (2001). Reflective teaching practice in adult ESL Settings. Retrieved from [http://www.marshalladulthoodeducation.org/pdf/briefs2/Reflective Teaching Practice in Adult ESL Settings.pdf](http://www.marshalladulthoodeducation.org/pdf/briefs2/Reflective_Teaching_Practice_in_Adult_ESL_Settings.pdf)
- Day, C.W. (1999). Researching teaching through reflective practice. In Loughran J. (Ed.), *Researching teaching; Methodologies and practices for understanding pedagogy* (pp. 215-232.) London, UK: Falmer Press.
- Eastern Mennonite University (2005). The reflective teaching model. Retrieved from <http://www.emu.edu/education/model>
- Elder, L., & Paul, R. (1994). Critical Thinking: Why we must transform our teaching. *Journal of Developmental Education*, 18(1), 34-35.
- Farrell, T. S.C. (2001). Tailoring Reflection to Individual Needs: a TESOL case study. *Journal of Education for Teaching*, 27(1), 23-28.
- Fisher, T.(2005). Personal communication by email Sunday July 24th 2005.
- Fowler, F.G, & Fowler, H.W (1964). *The pocket Oxford dictionary*. Oxford University Press.
- Gelter, H. (2003). Why is reflective thinking uncommon? *Reflective Practice*, 4(3), 337-344.
- Grushka, K., McLeod, J.H., & Reynolds, R. (2005). Reflecting upon reflection: theory and practice in one Australian university teacher education program. *Reflective Practice*, 6(2), 239-246
- Halpern, D.F. (1996). Thought and knowledge: An introduction to critical thinking. Retrieved from <http://www.kcmetro.cc.mo.us/longview/ctac/definitions.htm>
- Hyrkas, K, Tarkka, M.T., & Ilmonen, P.M. (2001). Teacher candidates' reflective teaching and learning in a hospital setting: Changing the pattern of practical training; a challenge of growing into teacher-hood. *Journal of Advanced Nursing*, 33(4), 503-511.
- Joram, E., & Gabriele, A.J. (1998). Pre-service teachers' prior beliefs: Transforming obstacles into opportunities. *Teaching and Teacher Education*, 11(2), 175-191.
- Kupari, P. (2003). Instructional practices and teacher's beliefs in Finnish mathematics Education. *Studies in Educational Evaluation*, 29, 243-257.

- Leach, J, and Moon, B. (2000). Pedagogy, information and communications technology and teachers' professional knowledge. *The Curriculum Journal*, 11(3), 385-404.
- Markham, M. (1999). Through the looking glass: Reflective teaching through a Lacanian Lens. *Curriculum Inquiry*, 29(1), 55-76.
- McEwan, H., & Bull, B. (1991). The Pedagogic nature of subject matter knowledge. *American Educational Research Journal* 28(2). 316-334.
- McKenna, B., & Roberts, R. (1999). Bridging the theory-practice gap. *Nursing New Zealand* 5(2), 14-16.
- Minott, M.A. (2009a). Supporting reflective teaching via schools' culture: A framework utilizing Tierney's understands of schools' culture. Retrieved from <http://www.leeds.ac.uk/educol/documents/142150.pdf>
- Minott, M.A. (2009b). *Reflection and reflective teaching: A case study of four seasoned teachers in the Cayman Islands*. Germany: VDM publishers.
- Norris S. P., & Ennis R. H. (1989). *Evaluating critical thinking*. Pacific Grove, CA: Midwest Publications.
- Nuthall, G. (2004). Relating classroom teaching to student learning: A critical analysis of why research has failed to bridge the theory-practice gap. *Harvard Educational Review*, 74(3), 273-306.
- Parkinson, P. T. (2009). Field-based pre-service teacher research: Facilitating reflective professional practice. *Teaching & Teacher Education*, 25(6), 798-804.
- Posner, G.J. (1989). *Field experience methods of reflective teaching*. New York: Longman.
- Powell, E.T., & Renner, M. (2003). Analyzing qualitative data. Retrieved from http://cecommerce.uwex.edu/pdfs/G3658_12.PDF
- Reiman, A.J. (1999). Guided reflective practice: An overview of writings about teaching. Retrieved from <http://www.ncsu.edu/mctp/reflection/overview.html>
- Richards C.A. (1996). Pedagogical beliefs, skills, knowledge: influences on pre-service music teachers' lesson planning (Unpublished doctoral dissertation). University of Newcastle, Newcastle, Australia.
- Serebrin, W. (2004). Melissa's story: bridging the theory/practice gap in teacher education. *Canadian Journal of Educational Administration and Policy*, 32, 1-19.
- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Virta, A. (2002). Becoming a history teacher: Observation on the beliefs and growth of the student teacher. *Teacher and Teacher Education* 18, 687-698.
- Weinstein, G, and Alschuler, A. (1985). Educating and counseling for self-knowledge development. *Journal of Counseling and Development*, 64, 19-25.
- Zeichner, K. (1992). Conceptions of reflective teaching in contemporary U.S teacher education program reforms. In V. Linda (Ed.), *Reflective teacher education: Cases and critiques*. Albany: New York.

Zeichner, K. M., & Liston, D. P. (Eds). (1996). *Reflective teaching- An introduction*. Mahwah: New Jersey.