Reflection-in-Action: A Stimulus Reflective Practice for Professional Development of Student Teachers

Muhammad Zafar Iqbal*

Abstract

Reflection to maintain classroom momentum, to overcome unwanted practices e.g. 'shyness', 'shivering' and 'repetition of words' during the process of teaching, led student teachers to shift their attention towards acquisition of professional skills during practicum. This paper examines the role of Reflection-in-Action to acquire professional skills during practicum. Quantitative data was collected from 800 student teachers through a questionnaire. Likewise, 10% of the total sample was observed to collect qualitative evidences. Descriptive analysis of the data was made to see the tendencies of the data and then variables were computed to test the hypotheses. Reflection of student teachers over students' discourteous attitudes, 'student teachers' own unwanted practices (shyness, shivering and repetition of words), class room momentum, class room discipline and reflection over hesitation to respond to students' questions nearly increased 49% chances for student teachers to smoothly complete their lesson plans. A significant relationship exists between Reflection-in-Action and smooth progression of the lesson plan. Reflection-in-action significantly contributes to wards professional development of student teachers.

Keywords: Reflection-in-action, reflective practices, professional development, student teachers, lesson plan.

^{*} Assistant Professor, Department of Education, International Islamic University Islamabad. Email m.zafar@iiu.edu.pk

Introduction

Reflection-in-action refers to active evaluation of thoughts, actions and practices during action. It also refers to 'thinking on feet' during the process of teaching (Schon, 1987).Reflection-in-action also means the exploration of professional beliefs, practices and experiences during teaching. Briefly, how a person is thinking and acting as a professional (Greenwood, 1998; Bulman, &Schutz, 2004; Pedro, 2005). Reflective practices empower teachers to become successful decision makers who take responsibility for their actions. Reflective practices led teachers to meet the learning needs of students in a better way (Zeichner, 2013; Ghaye, 2008; Roadman, 2010; Anita, 2011; Osterman & Kottkamp, 2004; McGregor & Cartwright, 2011; Rodgers, 2002; Larrivee & Cooper, 2006, Zengaro & Nejad, 2007). The practicum course offers opportunities to student teachers to reflect upon their professional actions through videotaping, micro-teaching assignments, reflective learning journals, peer's feedback and student's feedback (Erginel, 2006).

The Higher Education Commission revised the curriculum of B. Ed programme and included four units on reflective practices (HEC, 2006), but regretfully culture of reflective practices is not very common in Pakistan. During last 31 years many researchers have attempted to study the notion of reflective practices e.g., Greenwood, 1998: Muchinsky, 2003; Bulman, & Schutz 2004; Hativaand Goodyear, 2002; Pedro, 2005 and Myers, 2009. Few studies have also been conducted in Pakistan e.g., the study conducted by Ehsan, 2011; Hussain, Mehmood and Sultana, 2011; Hajira and Shamsa 2012. This paper explores the effects of reflection-in-action on the professional development of student teachers during practicum.

Donald Schon an American philosopher presented the idea of reflective practices during 1983 and he had used various unique terms to clarify the concept of reflective practices e.g. 'reflection-in- action', 'reflection on action', 'single loop learning' and 'double loop learning'. Schon claims that professionals reflect over their practices to reshape their professional actions and to search out feasible solutions or professional problems (Finger &Asun 2000). Reflection-in-action is a conscious attempt to make professional actions more reasoned and purposeful (Schon, 1987). Habit of reflective practices helped out teachers to construct professional knowledge (Greenwood, 1998: Bulman & Schutz, 2004; Pedro, 2005; Roadman, 2010; Anita, 2011; Osterman & Kottkamp, 2004; McGregor & Cartwright, 2011). Reflective teachers put serious efforts to investigate the effectiveness of their teaching and to meet the learning needs of their students in a better way (Myers,

2009; Rodgers, 2002; Larrivee and Cooper, 2006, Zengaro and Nejad, 2007; NCATE, 2008). Involvement of teachers in reflective practices encouraged them to adopt student centered learning approaches. Reflective teachers usually break down teaching material into more understandable sections (Roadman, 2010). Involvement in reflective practices encouraged teachers to become responsive to their students and fulfill students learning needs in a better way (Moon, 2003; Titus & Gremler, 2010).

Types of Reflective Practices

Schon, 1987 and Zeichner and Liston, (2004) have argued that refection is essentially an individual process, while Heather and Amy(2012) Osterman and Kotkamp, (2004) and Ghaye, (2011) have taken reflection as a social process and divided reflective practice into two major types; individual and group reflective practices. Individual reflective practices include; reflection-in-action, reflection on action, reflection through professional portfolios and logbooks while group reflective practices include reflection through peer observation, colleague feedback, student feedback, group discussions, seminars, mentoring and reflective dialogues. According to Valverde, 1982 'reflection-in-action' aims to question one's own professional actions, behaviour, practices, and accomplishments to acquire professional excellence. Kottkamp (1990) reflective teachers always put serious efforts to search out better teaching strategies.

According to Jasper (2006), reflective practice is purposeful and thoughtful activity to enhance professional understanding and to gain new ideas and insights. Ghaye (2000) opinions that reflective practice is a way to find out the course of action to cope with professional uncertainties. Reflection encouraged teachers to work competently and ethically at the edge of order and chaos. Process of reflection required willingness and commitment to gain new ideas and insights (Boud *et al.*, 1998; Mezirow, 1981; Larrivee, 2010). Ability to involve in reflective practices is arched among student teachers during training (Schon, 1983, 1987; Loughran, 2002; Brookfield, 1995; Osterman & Kottamp, 2004). Reflection facilitates teachers to confront and challenge their current conceptions about teaching learning process and helps out teachers to assess their current practices, identify areas for improvement, become better decision-makers and deal with ambiguity, stress and ever-changing circumstances.

Background of the Study

Since, 1947 many efforts have been made in Pakistan to produce professionally competent teachers who have excellent pedagogical skills and insight to reflect on their practices. During 2006, The Higher Education Commission revised B.Ed. curriculum and included four units on critical thinking and reflective practices. Researcher developed interest in the connotation of reflection-in-action and intended to question the reflective practices of Student Teachers during practicum course.

Objectives of the Study

This study was conducted to achieve the following objectives:

- 1. To study the practices of student teachers to involve reflection-in-action during teaching practicum.
- 2. To study the role of reflection-in-action to identify and rectify professional mistakes during teaching practicum.
- 3. To study the perceptions of student teachers about reflection-in-action and what they practically do during practicum.

Research Questions

This study was guided by the following research questions:

- 1. Do student teachers reflect upon their actions during teaching?
- 2. Does reflection-in-action contributes to identify and rectify professional mistakes during practicum?
- 3. Does any difference exist between what student teachers say about reflection-in-action and what they actually do during practicum?

Hypothesis

 H_0 : There is no significant relationship between the involvement of student teachers in Reflection-in-Action (RIA) and smooth progression of lesson plan during practicum.

Methodology

The following methods were used for this study:

Study was a descriptive in nature and based on a mixed method approach.
 All male and female student teachers enrolled in the B.Ed. programme at Teacher Training Colleges and universities department of education in twin cities during 2012 formed the population of the study. All 910 student teachers were selected as the sample of the study.

- 2. Data was collected through a questionnaire in person. The aim of the questionnaire was to study the practices of student teachers and to see their involvement in reflection-in-action during teaching practicum. Observation of the practices of 20 Student Teachers was made during the practicum to see that what Student teachers say and what they actually do during practicum.
- 3. It was hoped that a combination of qualitative and quantitative approaches would offer an accurate picture of the current situation. The quantitative data were analyzed though SPSS version 16, while the qualitative data were analyzed though content analysis approach. Themes and sub-themes were identified to see the trends and frequencies of the data.

Results

In this study 18.8% student teachers were male and 82.2% were female. Majority (78%) of respondents were 20 to 25 years old and 5.1% respondents provided no answer about their age, Almost 77% respondents were graduates, when they were enrolled in B.Ed. programme and 29.9% were master degree holders.

Table 1Descriptive Analysis of the Questionnaire

Descriptive Analysis of the Questionnaire							
Sr. No.	Statements ($N = 800$)	SA (%)	A (%)	N (%)	D (%)	SD (%)	
1	I reflect over students discourteous attitudes during teaching process	27	42	5	19	7	
2	I plan strategies to overcome students discourteous attitudes during my lesson	28	36	7	23	6	
3	I attempt to overcome my unwanted practices (shyness, shivering, repetition of word and underconfidence) during teaching process	30	41	7	17	5	
4	When I teach to the students, I reflect over class room discipline to maintain class-room momentum	27	42	9	16	6	
5	I think about smooth progression of lesson plan during lesson	32	33	7	24	5	
6	Whenever, I teach controversial contents in class I reflect over the contents before teaching	20	39	11	21	9	
7	During teaching process I plan strategies to maintain classroom discipline	30	39	6	17	8	
8	When I ask questions from my students I reflect over my hesitation to overcome	23	37	6	23	10	
9	I reflect over my practices to improve my pedagogical skills	24	33	7	13	24	
10	I reflect on my professional mistakes and I attempt to rectify my mistakes on the spot	26	39	7	21	8	
11	I attempt to identify slow learners and assign them easy assignments	28	41	6	19	6	
	easy assignments						

Majority of student teachers (69%) were agreed that whenever students demonstrated discourteous attitudes during lesson, they reflected over discourteous attitudes of students. Similarly, (64%) were agreed that they reflected over their practices during lesson and immediately planned strategies to deal with student's discourteous attitudes.

Almost 71% of student teachers replied that they were involved in reflection-in-action and attempted to overcome their own unwanted practices e.g., 'shyness', 'shivering', 'under confidence' and 'repetition of words' during the process of teaching. They reflected over their practices on the spot to ensure classroom momentum or to maintain classroom discipline.

Almost 65% replied that they used to involve themselves in reflection to uphold smooth progression of the lesson plan during the process of teaching, 59% responded that whenever they were going to teach controversial contents in the classroom, they reflected over such contents beforehand. Anyhow 69% Student teachers were agreed that they planned strategies to maintain classroom discipline.

Almost 60% of student teachers were agreed that in the beginning of teaching practice they initially felt hesitation to respond to students' questions and they attempted to overcome their hesitation during class. Fifty-seven percent student teachers replied that they reflected over their pedagogical skills and attempted to improve their pedagogical skills during practicum. In other words the majority of student teachers attempted to improve their pedagogical skills during practicum.

Likewise, 65% of student teachers were agreed that they reflect upon their professional mistakes and attempted to improve rectify professional mistakes. Majority of student teachers attempted to recognize and improve upon their professional mistakes on the spot during practicum. Almost 69% of student teachers replied that they reflected over the abilities of their students and assigned easy assignments to slow learners. Interestingly a majority of Student teachers attempted to identify slow learners during practicum. Table 2 below presents regression model summary.

 Table 2

 Model summary Reflection-in-Action and Smooth Progression of Lesson Plan

Model	R	R^2	Adjusted R^2	SEE	Durbin-Watson
1	.698a	.487	.487	.65727	1.514

- a. Predictors: (Constant), Reflection-in-Action
- b. Dependent Variable: Smooth progression of lesson plan

The value of R^2 =.487 indicates that nearly 49% of the total variability in the response variable (smooth progression of lesson plan) is accounted by the predictor variable (Reflection-in-Action) which indicates that a moderate linear relationship existed between involvement of student teachers in reflection-in-action and smooth progression of lesson plan. In simple words, reflection of student teachers over students' discourteous attitudes, reflection over unwanted practices (shyness, shivering and repetition of words), classroom momentum, classroom discipline and reflection over hesitation to respond students' questions nearly increased 49% chances for student teachers to smoothly modify their already planned lesson. The Durbin Watson statistic has a value of 1.514 (normal range 1.5to 2.5) indicated that the residuals were independent and no auto correlation existed in the data.

 Table 3

 ANOVA Summary Reflection-in-Action and Smooth Progression of Lesson Plan

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	327.792	1	327.792	758.765	.000a
Residual	344.741	798	.432		
Total	672.533	799			

- a. Predictors: (Constant), Reflection- in-Action
- b. Dependent Variable: Smooth progression of lesson plan

The value of F statistics (table 3) is = 758.76 > table value 3.85 which was highly significant and shows that Reflection-in-Action affects the smooth progression of lesson plan. Therefore, H_0 was rejected that there is no significant relationship between involvement of student teachers in Reflection- in-Action (RIA) and smooth progression of lesson plan. The coefficients of β =.730 has a t value of 27.54 (> 1.64) was significant at the 0.05 level as also shown by the p-value of 0.000.

Table 5Observable Indicators of Involvement of STs in Reflection-in-Action

Sub-Themes	Indicators observed	Percentages Total number of respondents=80
Reflection over Students Discourteous attitudes	16% frequently paid attention to students' discourteous attitudes: whenever students chat during lesson, not listening to teacher's voice; students were not looking at teacher's face or students ignored teacher's presence. Student teachers (STs) stopped the lesson, paid attention to students, forbade them or assigned any activity to the students.	Yes 16% (<i>N</i> =13)
Reflection over unwanted practices	9% STs were aware about their unwanted practices and attempted to overcome, shyness, shivering, repetition of words, excessive use of supporting words, low voice, under-confidence and attempted to overcome such practices during class.	9% (<i>N</i> =7)
Reflection over Classroom momentum	10% ensured that all students are involved in lesson and looking at teacher's face; assigned class-work and homework; completed the topic, revised major themes gave proper time to the take student's questions at the end of class. Assigned homework and provided guidelines to complete homework. Teacher properly ended the class.	10% (<i>N</i> =8)

-		
Smooth progression of lesson plan	36 STs out of 80 were following the lesson plan; they announced the topic, objectives and importance of the lesson. Similarly, they reviewed the previous knowledge of their students. They attempted to relate the current topic with previous knowledge of their students and provided hints about previous lessons. Only 36 STs illustrated difficult concepts at the end of lesson.	45% (N=36)
Classroom discipline	They attempted to maintain classroom discipline: Attempted to keep students busy; every time noted note passing, chatting, whispering. Teacher's eye contact with students was normal. STs noticed when students were feeling tired and asked the students about delivery of lesson.	24% (<i>N</i> =19)
Overcoming hesitation	24% STs initially felt hesitation to respond to students' questions: voice of the teacher was very low; encouraged students to ask questions. Discouraged or ignored student's questions.	24% (<i>N</i> =19)

Findings

Following findings were drawn on the basis of statistical results:

- 1. Quantitative data showed that 69% Student teachers (STs) were agreed that they reflect over their classroom actions, whereas, results of observation revealed that almost 16% to 45% STs provided emergent evidences that they were reflecting over their actions during lesson. Only 13 out of 80 STs frequently paid attention to student's attitudes during lesson and ensured that all students were looking at teacher's face and listing to teacher's voice.
- 2. Similarly, almost 71% STs tick the option agree or strongly agree that they reflect over their unwanted practices e.g 'shyness', 'shivering', 'under confidence' and 'repetition of words' and attempted to overcome such practices during the process of teaching. Interestingly 7 out of 80 (9%) STs were aware about their unwanted practices and attempted to overcome.
- 3. Majority of STs (69%) were agreed that whenever students demonstrated discourteous attitudes during lesson, they reflected over discourteous attitudes of students and immediately planned strategies to deal with student's discourteous attitudes.

- 4. Almost 65% were agreed that they reflect over their classroom actions to uphold smooth progression of the lesson plan and reflect over the controversial contents beforehand. Almost 60% Student teachers were agreed that in the beginning of teaching practice they initially felt hesitation to respond to students' questions and they attempted to overcome their hesitation during class.
- 5. Almost 57% of STs were agreed that they reflected over their pedagogical skills and attempted to improve their pedagogical skills during practicum. In other words a majority of student teachers attempted to improve their pedagogical skills during practicum. Likewise, 65% of STs were agreed that they reflect upon their professional mistakes and attempted to rectify mistakes on the spot. Majority of STs attempted to recognize and rectify their professional mistakes during practicum.
- 6. Interestingly a majority of Student teachers attempted to identify slow learners during practicum. Almost 69% of STs replied that they reflected over the abilities of their students and assign easy assignments to slow learners.
- 7. Majority of STs (68.9%) were agreed that they reflected over class room discipline to maintain class room momentum during the teaching process. It was observed that only 10% STs ensured that all students are involved in lesson, assigned homework to students; completed the topic, revised major themes and gave proper time to the take student's questions at the end of class.
- 8. Almost 36 out of 80 (45%) STs were following the lesson plan. They announced the title, objectives and importance of the lesson, asked questions from students to test previous knowledge, attempted to relate the topic with previous knowledge through hints and illustrated difficult concepts STs at the end of class. Majority of STs were not feeling hesitation to respond students' questions during practicum. Only 24% STs initially felt hesitation to respond to students' questions or ignored student's questions. Majority of STs (64.4% mean 3.62) was involved in reflection-in-action to uphold smooth progression of lesson plan and thought that reflection-in-action contributes to uphold smooth progression of lesson plan during lesson.

9. Majority (69%) of STs planned strategies to maintain classroom discipline during teaching process, which indicated their involvement in reflection-in-action. Majority of STs (60.8%) replied that when they asked questions from their students they reflected over their hesitation and attempted to overcome their hesitation. In other words, student teachers initially felt hesitation to ask questions from students during practicum.

- 10. Many of STs (56.1%) reflected over their teaching actions during practicum and attempted to improve their pedagogical skills, while 36.7% do not put self-efforts to improve their pedagogical skills during practicum.
- 11. The value of (R²=.487) indicated that nearly 49% of the total variability in the response variable (smooth progression of lesson plan) can be accounted by the predictor variable (RIA) which indicates that a moderate linear relationship existed between involvement of student teachers in RIA and smooth progression of lesson plan. The value of F statistics (table 2) is = 758.76 > table value 3.85 which was highly significant and shows that RIA affects the smooth progression of lesson plan. Therefore H₁ was accepted that there was significant relationship between involvement of STs in Reflection-in-Action (RIA) and smooth progression of lesson plan.
- 12. The coefficients of β =.730 has a t value of 27.54 (> 1.64) was significant at the 0.05 level (as also shown by the p-value of 0.000). Regression coefficients showed that reflection over students' discourteous attitudes, unwanted practices (shyness, shivering and repetition of words), class-room momentum and class room discipline significantly contributed to ensure smooth progression of lesson plan.

Conclusions

Following conclusion were made on the basis of quantitative data and qualitative evidences:

1. Student teachers reflected over the students who demonstrated discourteous attitudes during the teaching learning process and plan strategies to overcome the discourteous attitudes of their students. A majority of student teachers reflect over their own unwanted practices e.g., 'shyness', 'shivering', 'repetition of words' and 'under-confidence' and attempted to overcome these unwanted practices during the lesson, to maintain class room momentum, discipline and to uphold smooth progression of lesson plan during lesson.

- 2. Majority of student teachers (71%) were involved in reflective practices during practicum course, they reflected over the controversy of contents before teaching of contents to the class. In other words a majority of student teachers were sensitive about controversial contents.
- 3. Student teachers reflected over their actions during practicum and put self-efforts to overcome their hesitation. STs reflected over their teaching practices to improve their pedagogical skills, while almost 40% of STs do not put self-efforts to improve their pedagogical skills during practicum.
- 4. The habit of reflection over teaching practices during practicum guides STs to identify and rectify professional mistakes on the spot. A majority of STs remained aware of their professional mistakes.
- 5. Reflection over students' discourteous attitudes, reflection over unwanted practices (shyness, shivering and repetition of words), class room momentum, class room discipline and reflection over hesitation to respond students' questions increased by nearly 49% chances for student teachers to smoothly complete lesson plan. A moderate linear relationship exists between involvement of student teachers in RIA and smooth progression of lesson plan.

Discussion

Student teachers regarded reflection-in-action as a fundamental quality to get self-awareness, which was developed through the reflective practicum course. The habit of reflection-in-action developed awareness among teachers to understand their own professional actions through videotaping of lessons, microteaching assignments, reflective learning journals, students feedback and through peer feedback (Erginel, 2006). Involvement in reflection-in-action leads student teachers to identify and rectify their own professional mistakes during teaching. Reflective teachers continuously examined their professional beliefs. The process of self-evaluation facilitate teachers to understand their motives behind classroom policies. Self-reflection is particularly valuable for teachers to defuse disruptive situations (Spiller, 2011). Reflection led teachers to adopt patterned responses in any given classroom situations (Peters, 1991).

The habit of reflective practices is the panacea for effective teaching. Reflective teachers always imagine what they are doing and how it might be made even better (Eisner, 2002). Reflective teachers found the rationale of their teaching practices by developing a deeper understanding about their teaching style. Habit of reflection enhanced their ability to question and understand the results of their own actions (Ferraro, 2000: Amoh, 2011). Similarly, the results of this study revealed that reflection-in-action provided student teachers an awareness to search out better solution to cope with problematic situations occurred during the teaching process. A significant relationship exists between involvement of teachers in reflection-in-action and smooth progression of lesson plan. The first feature of the notion of reflection-in-action emphasized upon 'reflection', while second feature emphasized upon 'in action' refers monitoring of actions through attentive feedback (Russell, 1999).

Reflective practices raised the student's self-confidence in learning that takes place outside the university (Pouget and Osborne, 2004). Reflection-in-action empowered student teachers to assess their own learning and gain academic recognition in reward. But reflection requires refined pedagogy and leads professionals towards development of professional practice (Anita, ND). Similar results of study in hand showed that reflection-in-action caused student teachers to identify and rectify their professional mistakes, which lead them towards professional development. Reflective teachers can find out the rationale of their teaching practices by developing a deeper understanding about their own teaching style. Ability to question and understand of one's own actions results in professional growth of teachers (Ferraro, 2000: Amoh, 2011). Similarly the results of this study revealed that there is a significant relationship between involvement of teachers in reflection-in-action and better management within the class.

References

- Alverde, L. (1982). The self-evolving supervisor. In T. Sergiovanni (Ed) Supervision of teaching (p. 81-89). Alexandria: Association for Supervision and Curriculum Development.
- Amoh, S. A. (2011). The Reflective and Collaborative Practices of Teachers in Ghanaian Basic Schools: A Case Study. (Doctoral dissertation). Retrieved from: http://ethese.nottingham.ac.uk/2012/1/1.thesis-final.pdf.

- Anita, W. (ND) Using Reflection in Workplace Learning: Is it possible to use both individual and collective reflection to reconcile the 'three party knowledge interests' in the workplace? Retrieved from: http://www.oecd.org/edu/imhe/43977669.pdf
- Boud, D., Keogh, R. & Walker, D. (1998). Reflection turning experience in to learning. New York: Nichols.
- Breidensjo, M. & Huzzard, T. (2006). Reflecting on Workplace change' in Boud, Cressey, and Docherty (Eds) op cit.
- Brookfield, S. D. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass. Retrieved from. http://vccslitonline.cc.va.us/mrcte/Brookfield-review.htm.29.01.20122.00pm
- Bulman, C., & Schutz, S. (2004). Reflective practices in nursing (3rd Ed). U.K: Blackwell Publishing.
- Bulman, C., & Schutz, S. (2004). Reflective practices in nursing (3rd Ed). U.K: Blackwell Publishing.
- Ehsan, T. (2011). Effects of Reflective Practices of Teachers on Students' Performance in the Subject of General Science. (Unpublished Thesis). Allama Iqbal Open University, Islamabad.
- Eisner, E. W. (2002). The Arts and the Creation of Mind. New Haven, CT: Yale University Press.
- Elmholdt, C. & Brinkmann, S. (2006). Discursive practices at work: constituting the reflective learner in Boud, Cressey and Docherty (Eds) op cit
- Erginel, S. S. (2006). Developing reflective teachers: A study on perception and improvement of reflection in pre-service teacher education (Doctoral dissertation), The graduate school of social sciences of Middle East Technical University).
- Ferraro, J. M. (2000). Reflective practice and professional development. Washington DC: ERIC Clearing house on Teaching and Teacher.
- Finger, M. and Asún, M. (2000) Adult Education at the Crossroads. Learning our way out, London: Zed Books.

Ghaye, T. A. (2008). Learning to Teach, Teaching to Learn: A hand book for NUS Teachers.

- Cresswell, Educational Research 4th Ed. 2013, (page 571).
- Ghaye, T., and Lillyman, S. (2002). Reflection principles and practice for healthcare professionals. UK: Wiltshire Quay books.
- Greenwood, J. (1998). The role of reflection in single and double loop learning. Journal of advanced nursing practice, 27(5), 1048-1053. Doi: http://www.communityhealthcarebolton.co.uk/SHA/LLL/resources/reflective/Greenwood.pdf.
- Hajira, B, and Shamsa, A. (2012). Reflective practices and teacher educators: An exploratory study. International Journal of Social Science and Education, Vol (3) (1) 2223-4934 retrieved.
- Hativa, N., & Goodyear, P. (2002). Teacher's thinking beliefs and knowledge in higher education. (Eds.) Netherland: Kluwer Academic Publisher.
- Heather & Amy, (2012). Condensing our stories six word memories. Hammy: 10wordpress. Retrieved from ttp://hamy10.wordpress.com/2012/06/01/condensing-our-stories-six-word-memoirs-amy/
- HEC, (2006). Curriculum of Education B.Ed/BS (Hons) &M.Ed. Higher Education Islamabad. Retrieved from: http://pdf.usaid.gov/pdf_docs/Pnadu796.pdf
- Hussain, A. M., Mehmood, A. and Sultana, M. (2011). An Inquiry into Benefits of Reflective Practice in Open and Distance Learning. Turkish Online Journal of Distance Education-TOJDE April 2011 Volume: 12 No. 2. (51-59). Retrieved from: http://files.eric.ed.gov/fulltext/EJ964960.pdf.
- Jasper, M. (2006). Reflection decision making and professional development. UK: Black well. Retrieved from http://books.google.com.pk/books?id =gwUxA8
- Larrivee, B. (2010) 'Transforming Teaching Practice: becoming the critically reflective teacher. Reflective Practice, Vol. 1, 3, pp. 293–307.
- Larrivee, B., and Cooper, M. J. (2006). An educator's guide to teacher reflection. USA: Cengage Learning.

- Loughran, J. J. (2002). Effective reflective practice in search of meaning in learning about teaching. *Journal of Teacher Education*, (2002) Vol. 53, (1) 33-43. DOI: http://jte.sagepub.com/content/53/1/33.
- Lyons, N. (2006). Reflective engagement as professional development in the lives of university teachers. Teachers and Teaching Theory and practice, Vol. 12, No. 2, April 2006, pp. 151-168.
- McGregor D., Cartwright, L., (2011). Developing reflective practice: A guide for beginning teachers. England: Open University Press. Retrieved from http://books.google.com.pk/books?id=yT6nWpvPwCcCandpg=PA180andlpg f=true.
- Mezirow, J. (1981) A critical theory of adult learning and education. Adult Education, 32(1), 3-24
- Moon, J. (2003). Learning journals logs and reflective diaries. UK: University of Exeter.
- Muchinsky, P. M. (2003). Psychology applied to work (7th Ed). Australia: Thomson.
- Myers, P. Z. (2009). An analysis of the concept reflective practice and an investigation into the development of student teachers' reflective practice within the context of action research. (Doctoral dissertation). Brunel University, UK.
- NACTE. (2008). Professional Standards for the Accreditation of Teacher Preparation Institutions. Retrieved from: http://nacate.org/institutions/publicationsbooks.asp?ch=49book=standards.
- Osterman, K. E, and Kottkamp, R. B. (2004) Reflective practice for educators: Professional Development to improve student learning (2nd ed.). Newbury Park, CA: Corwin Press.
- Osterman, K.F., and Kottkamp, R. B. (1993). Reflective practice for educators improving schooling through professional development. London: SAGE Publications.
- Pedro, J. Y. (2005). Reflecting in teacher education: Exploring pre-service teachers' meaning of reflective practice. Reflective Practice, Vol. 6 (1), 49-66.

Peters, J.(1991). Strategies for reflective practice professional development for educators of adults SanFrancisco: Jossey-Basspp.

- Plymouth University (2010). Reflection becoming reflective. Learning Development, Retrieved from: http://www1.plymouth.ac.uk/learningdevelopment/Documents/Reflection.pdf dated 16th September 2014.
- Pouget, M. and Osborne, M. (2004) 'Accreditation or validation of prior experiential learning: knowledge and savouring France –a different perspective?' Studies in Continuing Education, Volume 26(1), pp 45-65
- QIA (2007). Quality Improvement Agency. Key Skills Support Programme.

 University of Warwick. http://archive.excellencegateway.org.uk/media/
 KSSP/ kssp%20cpd% 20reflection %20guide.pdf dated 07.09.2014.
- Roadman, G.J. (2010). Facilitating the teaching learning process through the reflective Engagement of pre-service teachers. Australian journal of teacher education. Volume 35, (2) March 2010. Pp.20-34. DOI: http://ro.ecu.edu.au/ajte/vol35/iss2/2/
- Rodgers, C. (2002). Defining reflection another look at John Dewey. Teachers College Record, (104). 842-866. DOI: http://www.tcrecord.org/content.asp?contentid=10890
- Russell, T. (1999). Faculty of education. Kingston Ontario: Queens University. Retrieved from: reflective practice http://educ.queensu.ca/~ar.
- Schon, D. (1987). Educating the reflective practitioner. San Francisco, CA: Jossy Bass.
- Spiller, D. (2011). Peer Observation: Teaching Development. New Zealand: Private Bag. Retrieved from: http://www.waikato.ac.nz/tdu/pdf/booklets/20_Peerob servation. pdf, ldated24.02.20138.35pm.
- Titus A. P. & Gremler, D. D. (2010). Guiding reflective practice: an auditing framework to assess teaching philosophy and style. Journal of Marketing Education 32(2) 182-196. DOI: http://www.gremler.net/ personal/ research/2010_TS_Audit_JME.pdf 07.02.2011 4.30pm.

- Valverde, L (1982). The self-evolving supervisor. In T. Sergiovanni (Ed) Supervision of teaching(81–89). Alexandria: Association for Supervision and Curriculum Development.
- Zeichner, K. M. and Liston, D.P. (2013). Reflective Teaching An Introduction. New York. Routledge.
- Zengaro, F., and Nejad, I, A. (2007). Exploring reflective engagement that promotes understanding in college classrooms. International Journal for the scholarship of teaching and learning. 1(2) 1-18. DOI: http://dspacepord.georgiasouthern.edu:8080/jspui/handle/10518/4173