

Reflective Pedagogy for Teaching Excellence: An Analytical study

Dr. Asha O. S.

Associate Professor, S.N.M. Training College , Moothakunnam
North Parur , Ernakulam, Kerala. Email: ashaoliyath@gmail.com

Abstract: *Teaching has to be viewed as a knowledge rich profession with teachers as learning specialists and professionals in their field. Teachers can be expected to process and evaluate new knowledge relevant for their core professional practice and to regularly update their knowledge base to improve their practice and to meet new teaching demands. The findings of this point towards the fact that portfolio writing as a strategy for reflective pedagogy is effective in attaining a reflective mindset that culminates in better performance in teacher competence and heightened level of self esteem among secondary and higher secondary level prospective teachers.*

Key Words: *Teaching, knowledge, Reflective pedagogy, self esteem, self assessment.*

1. INTRODUCTION:

The ushering in of the 21st century witnessed the emergence of social web and the hug embrace of technology like cloud computing which brings the information platforms to the clouds. One of our major goals of education in this increasingly globalized society is to help learners become i –kids and truly global citizens whose entire life has been immersed in 21st century media culture. This expansive vision of hybrid teaching demands multilevel roles of educators as a visionary, emphatic mentor, media creative expert, model collaborator, risk taker, life-long learner and above all as a reflective teacher. High quality teachers who embrace innovative instructional mechanism, enriched with dynamic, analytical and reflective prospective is the most significant aspect for fulfilling the present day demands of our educational system. As life-long learners, they need to be active participants in their own learning and incorporate the traits and trends needed to compete in the present globalized world. Hence it is imperative to delineate the teaching function as an endeavour of reflectively in the new social realm.

As the most powerful resources in schools, teachers are critical to raise education standards. Improving the competency and efficiency of school system, largely depend on ensuring that teachers are highly proficient, mostly skilled, well resourced and intrinsically motivated to perform at their best. Effective monitoring and improving of teacher competence is central to the continuous development of schooling. The policy imperative for the teaching and learning of 21st century skills, such as problem solving, collaboration, communication and creativity, might entail a re-skilling of the current teacher workforce and upgrading of the knowledge base of the teaching profession.

Teaching has to be viewed as a knowledge rich profession with teachers as learning specialists and professionals in their field. Teachers can be expected to process and evaluate new knowledge relevant for their core professional practice and to regularly update their knowledge base to improve their practice and to meet new teaching demands. Here comes the relevance of teacher as a reflective practitioner. Literature highlights many features that characterise expert teacher, which include extensive pedagogical content knowledge, better problem solving strategy, better adaptation for diverse learners, better decision making, better perception of classroom events and greater sensitivity to context and greater respect for students.

Several studies stress the importance of the knowledge teachers hold, highlighting that in addition to assimilating academic knowledge, student teacher also need to incorporate knowledge derived from experiential and practical experiences in the class room.

There is one quality above all that makes a good teacher-the ability to reflect in what, why and how we do things and to adapt and develop our practice within lifelong learning. Reflection is the key to successful learning for teachers and for learners. Reflection is an underpinning value and is a key to becoming a professional teacher.

In a professional setting reflection is

- deliberate
- purposeful
- structured
- about linking theory and practices
- to do with learning
- about change and development

Robin's et.al (2003) describe reflection practice as a tool that allows teachers , student teachers and teaching assistants to understand themselves their personal philosophies and the dynamics of their classroom more deeply.

Authentic engagement in reflection supports a teacher to become contemplative, to improve professional competencies and to identify personal strengths and relative limitations. It is because of its potential to impact possibility on individual practice that reflection is arguably the most important of the many professional attitudes that characterise successful teachers at every stage of their careers,

Reflection is very broadly able to be defined as the deliberate; purposeful, met cognitive thinking and/or actions in which educators engage in order to improve their professional practices. (Sellars, M. 2014) Eyer, et.al (1996) indentified that for reflection to be meaningful it must be continuous, connected, challenging and contextualised. To ensure such relevancy it is critical that curriculum impose structures that enable a scaffolding of students' insights, interpretations and analyses. As meaning making results from both individual and collective process, reflective pedagogy most appropriately seeks to balance instructional direction with learning autonomy. Reflection enables student teachers to examine their teaching plans and actions to arrive at new ways of understanding oneself, students and classroom events and building more effective models of practice for enhancing learning. Reflection is a three field process composing direct experience analysis of our ethics, values or knowledge about that experience, and consideration of the options which should lead to action as a result of the analysis. Reflective practice can be seen as reconsidering and questioning experiences within a context of learning theories (Whilton, 2014), Pennington (1992) describes reflective teaching as “ a movement in teachers' education in which teachers analyse their own practice and their underlying beliefs and then consider alternative means of achieving their ends”. Al Hazmi (2006) adds that reflection incorporates a critical component. Indicating that a reflective approach to teaching embodies that student teachers collect data about teaching, examine their attitude, beliefs, assumptions and teaching practices, and use the information obtained as a basis for critical reflection about teaching in order to improve their practice. Kahn and Walsh, (2006) view reflection as a means for self evaluation of one's practice and place it at the core of the teaching learning cycle. Reflective teaching methodology involve questioning one's own self to bring perfection asking the following questions

- ★ Which teaching model am I using?
- ★ How does it apply in specific teaching situation?
- ★ How well is it working?

Reflective teaching means looking at what you do in the classroom, thinking about why you do it and thinking about if it works – a process of self observation and self evaluation. By collecting information about what goes in our classroom, and by analysing and evaluating this information we identify and explore own practices and underlying beliefs. This may lead to changes and improvement in our teaching.

Macros and Tillema (2006) and Fendler (2003) emphasised the importance of reflection to improve the teaching practice. According to Russel, (1999) “teacher should think about what they have learned from their teaching experiences, and re evaluate these experiences to see them in new ways that might suggest new practices”.

Reflective teaching involves recognizing, examining, ruminating of the way an individual teaches. As individuals possess their own background and experience, bring certain beliefs, assumptions, knowledge, attitudes, and values to teaching.

Research on effective teaching over the past two decades has shown that effective practice is linked to inquiry, critical thinking, and reflection that is beneficial for professional development by gaining a better understanding of their own individual teaching styles through reflective practice. By adopting reflective teaching pedagogy teacher educator imparts inspiration among teacher trainees, so as to enable them to practice the same in their teaching practice sessions, sustain interest among teacher trainees.

2. DEFINITION OF KEY TERMS:

2.1 Reflective pedagogy entails exploring the pedagogical practices by self observation, self evaluation and self monitoring of the teacher functions and underlying beliefs pursuing changes and modification in the teaching endeavours leading to teacher professionalism.

2.2 Teaching Excellence: In the present study ‘Teaching excellence’ is meant as the optimum functional efficacy of a teacher in respect of instructional functions as well as management functions embedded with commitment, accountability and professionalism.

3. Hypotheses of Study

- The select reflective practices are effective in enhancing teaching competence of prospective teachers at secondary and higher secondary level.
- The select reflective practices are effective in augmenting the level of self esteem of prospective teachers at secondary and higher secondary level.

4. METHODOLOGY:

The investigator intended to adopt experiment method for conducting the study. The quasi-experimental design with pre test post test non equivalent group segment was adopted for the present study.

Sample selected

The sample of the study primarily consisted of 70 prospective teachers at secondary level coming under Ernakulum district.

Analytical supports and techniques of the study

The analytical support and technique for the present study were.

- (a) Self esteem scale
- (b) Analytic rubric for teaching competency.
- (c) Reflective journaling frame
- (d) Portfolio design

Analysis and Interpretation of Data

To find out the effectiveness of the select reflective practices, the investigator treated reflective journaling frame and portfolio writing design in experimental group. The main emphasis was to identify the effectiveness of the select reflective practices among prospective teachers at secondary level. It was found out through the following modes

- ★ Analyzing teacher competence of select sample of perspective teachers
- ★ Analyzing the level of self esteem of prospective teachers

Effectiveness of Reflective practices in teacher competence.

The effectiveness of reflective practices in nurturing teacher competence was assessed and analyzed by assuring the level of teaching competence. A self assessment analytic rubric of teacher competence was administered to the control group before and after the experimentations and the number of student teachers fall under each of the select levels of performance for each criteria were estimated. The corresponding percentage of students in this respect and their averages were computed and is described in table 1

Table 1

Percentage of Students under novice, basic, proficient, and advanced levels of performance of control group

Levels of Performance	Novice		Basic		Proficient		Advanced	
	Pre Test %	Post Test %	Pre Test %	Post Test %	Pre Test %	Post Test %	Pre Test %	Post Test %
Lesson Template	68	65	26	28	6	7	NIL	NIL
Set Induction	72	70	24	25	4	5	NIL	NIL
Development of Lesson	75	73	20	21	4	5	1	1
Learning Activities	74	71	20	23	5	6	1	NIL
Learner Involvement	76	73	18	20	6	7	NIL	NIL
Use of A. V. Cards	72	70	21	22	4	5	NIL	NIL
Master of the Subject Matter	73	74	24	25	5	5	1	1
Class Management	71	68	23	24	3	5	NIL	NIL
Closure of the Lesson	70	65	24	28	4	5	1	1
Assessment and Evaluation	71	70	23	25	5	4	1	1
Average	72.3	71.8	23.4	24.1	4.7	4.4	0.5	0.4

Table 1 shows that the average percentage of pupils coming under novice, basic, proficient and advanced levels of performance in teacher competence before the experiment are 72.3,23.4,4.7 and 0.5 respectively and those after the experiment are 71.8,24.1,4.4 and 0.4 respectively. It is also clear from Table 4.1 that the proportion of students coming under novice, basic, proficient and advanced levels in each aspects of teacher competence has no considerable change after they are exposed to the prevailing practices in teacher education. This reveals that there is no noticeable change in the teacher competence of perspective teachers after they are exposed to the prevailing practices of teacher preparation.

The rubric was administered to the experimental group which was treated with reflective practices before and after experimentation and the number of students fall under each of the set levels of performance for each criteria were estimated. The corresponding percentage of students in this regard and their averages were computed. It is described in Table 1

Table 1 percentage of students under Novice, Basic, proficient and advanced levels of performance of experimental group.

Table 2

Levels of Performance	Novice		Basic		Proficient		Advanced	
	Pre Test %	Post Test %	Pre Test %	Post Test %	Pre Test %	Post Test %	Pre Test %	Post Test %
Lesson Template	75	25	20	58	4	15	1	2
Set Induction	71	28	22	50	5	12	2	10
Development of Lesson	70	29	23	49	4	8	3	4
Learning Activities	65	22	25	50	6	18	4	10
Learner Involvement	69	23	22	52	7	15	2	10
Use of A. V. Cards	73	25	23	48	6	18	2	9
Master of the Subject Matter	73	23	20	51	5	18	2	8
Class Management	70	21	22	55	4	15	4	9
Closure of the Lesson	74	19	19	56	5	15	2	10
Assessment and Evaluation	72	20	20	54	3	18	5	8
Average	72.1	23.9	22.1	53.7	5.2	14.9	3.1	7.6

Table 2 shows that the average percentage of students coming under novice, basic, proficient and advanced levels of performance in teacher competence before the experiment are 72.1,22.1,5.2 and 3.1 respectively. It is also clear from Table that the proportion of students coming under novice, basic, proficient and advanced levels in each criteria of teacher competence changed noticeably after the treatment of the select reflective practices. The percentage of pupils coming under Novice level in every criteria of teacher competence decreased considerably where as percentage of students coming under Basic proficient and advanced levels increased after the experiment. This indicate that there is a decrease in percentage of students under Novice level of performance after the experimental treatment. Table 1 indicate that the percentage of students coming under Novice, basic proficient and advanced levels of teacher competence with respect to the score of each component of teacher competence and average score of teacher competence has no remarkable change in control group. It can be informed from the results that reflective pedagogy is effective in enhancing the level of performance of pupils from novice level to advanced level in teacher competence.

On administration of the analytic rubric for of teacher competence, it is revealed that the intervention of the reflective practices augment the set levels of teacher competence from novice to advanced levels. Before the intervention of the strategy nearly all learners were found to be at novice level of proficiency as they exhibited minimal ability to analyze non – routine tasks with flexibility and perseverance. They were not in a position to explore different strategic routes to solve pedagogic issues and to justify their solution pathways logically. However by the intervention of the select strategy the student teachers could develop the capacity to think reflectively about the learners and the pedagogical situations. The select reflective journaling strategy invited the students to make analytical revision of their creative expressions during the pedagogical endeavors. After the intervention of the select strategy the concludent has seen that the reflective practices obtained through the process of journaling and portfolio writing add momentum to embark on to frame and reframe multiple pathways and decision making in pedagogic interventions and hence the prospective teachers could rise to the advanced levels of teacher competence.

5. Effectiveness of reflective practices with respect to self esteem

In order to find out the effectiveness of reflective practices with respect to self esteem of prospective teachers the investigator analyzed the pre test and post test scores of the central group and experimental group who were exposed to reflective practices.

The mean and standard deviation of the pre test scores of self esteem of central group and experimental group were estimated for the total sample and subject wise sub samples to find out whether any significant difference exists between these groups. The critical ratios were found based on the data presented in Table 4.4

Table 3

Data and Results of test of significance of the mean pre test scores of achievement between experimental 1 and control group

Sl No.	Sample	Central Group			Experimental Group			Critical Ratio	Level of Significance %
		Mean	SD	No. of Students	Mean	SD	No. of Students		
	Total	13.5	2.01	35	14	1.97	35	1.18	23.7
2	Science Stream	14	1.98	20	15	1.71	20	1.21	23.2
3	Arts Stream	12	1.76	15	13	1.09	15	0.13	89.5

Table 3 shows that the critical ratio obtained for the total sample is not significant as the level of significance is 23.7%, so no significant difference exists between the mean pre test scores of achievement of experimental group I and control group. From Table 4.4 it can be seen that the critical ratios obtained for the subject wise sub samples are not significant as their levels of significance are 23.2% and 89.5% respectively. This shows that no significant difference is found in the mean pre test scores of self esteem of experimental and control group.

It can be inferred from the result that the test of significance of pre self esteem scores that the performance of the experimental group who were exposed to reflective journaling and control group for the total sample and subject wise subsample is similar in their pre experimental status of self esteem measured in terms of pre test.

6. Comparisons of post test self esteem scores of experimental and control group

To find out whether any significant difference exists between the experimental and control group, the mean and standard deviation of the post test scores of self esteem were estimated. The critical ratios were found out based on the data presented in Table 4.5

Table 4

Data and Results of test of significance of the mean post test scores of achievement between experimental and control group

Sl No.	Sample	Control Group			Experimental Group			Critical Ratio	Level of Significance
		Mean	SD	No. of Students	Mean	SD	No. of Students		
	Total	13	1.71	35	27	2.001	35	7.05	0.01
2	Science Stream	12.5	1.83	20	26	1.99	20	4.82	0.01
3	Arts Stream	14.5	2.02	15	28	1.793	15	5.21	0.01

The obtained critical ratios for the total sample and subject wise sub sample are significant as their level of significance is 0.01%. This shows that significant difference exists between the mean score of the post self esteem test of experimental and control group.

This result indicates that the performance of the experimental group and control group in the post self esteem test are not similar. The table value shows that the higher mean scores are associated with the experimental group. This means that experimental group shows better performance than the control group in their level of self esteem for the total sample and subject wise sub sample.

7. DISCUSSION OF RESULTS:

The effectiveness of reflective pedagogy was tested through a mixed method research design in which both experimental approach and certain self assessment mode of data gathering were blended harmoniously. The findings derived in this context resonates the range of potentiates of the select reflective practices in transforming the prospective teachers at secondary and higher secondary level into a culture of reflectivity

Reflective journals and portfolio writing provide a space to conduct a retrospective analysis of the observations and responses to situations to improve future practice envisaging new scenarios enables the student teachers to have awareness and control of one’s own cognitive process and regulatory mechanism. Before the commencement of the experimentation a set of pre-tests including self assessment rubric for the assessment of teacher competence was administered. This rubric has lead the learners to the avenues of demonstrative verbs exhibited by a competent teacher. These perceptions of performances of a competent teacher might have gravitated the processing of the pedagogical situation to the fullest extent to yield better product.

During the experimental interceptors the student teachers are funneled into the sequential flow of the select mechanism which provides plenty of experiences entailing the development of discourse between the teacher and the teaching events involving deeper reflections.

These trends are in accordance with the following observations:

Moon (2004) reported that a reflective journal is essentially a vehicle for reflection and is an accumulation of material that is mainly based on the writers’ process of reflection. Connell (2006) reported that reflective journal has become an increasingly popular tool used by numerous faculties across many disciplines in higher education.

As a concluding remark the investigator advocated that the empathetic accrual in the Performance of the experimental group in terms of teacher competence and self esteem is due to the upshot of the active engagement and facilitation of a cluster of intelligent behaviours centred around. Creative thinking and of the enhanced satisfaction delivered though the opportunity of self analysis and self expression as a liberating and self authenticated experience provided to the student teachers.

8. MAJOR FINDINGS AND CONCLUSION:

These results show that reflective journaling frame is effectual in uplifting the set levels of teacher competence.

This shows that reflective journaling is effective to a great extent for improving self esteem of prospective teachers at secondary level. Thus the findings mentioned above conclusively point towards the fact that the select reflective journaling frame has tremendous effect in shaping a culture of reflective practices pursuing better performance in teacher competence and enriched level of self esteem among prospective teachers at secondary and higher secondary level.

5.2.2 The effectiveness of the select practice of reflective pedagogy namely portfolio writing among prospective teachers at secondary level was established by analysing the test scores of self assessment rubric of teacher competence and scale of self esteem.

These results show that portfolio writing is effectual in uplifting the set levels of teacher competence.

This shows that portfolio writing is effective to a great extent for improving self esteem of prospective teachers at secondary level. Thus the findings mentioned above conclusively point towards the fact that the select portfolio writing has tremendous effect in shaping a culture of reflective practices pursuing better performance in teacher competence and enriched level of self esteem among prospective teachers at secondary and higher secondary level.

Thus the findings mentioned above conclusively point towards the fact that portfolio writing as a strategy for reflective pedagogy is effective in attaining a reflective mindset that culminates in better performance in teacher competence and heightened level of self esteem among secondary and higher secondary level prospective teachers.

9. IMPLICATIONS OF THE STUDY:

The present study is intended to find out the effectiveness of reflective pedagogy for up scaling teaching excellence among prospective teachers at secondary and higher secondary level. The major implications of the study are described below.

The present study underscores the use of reflective journals and portfolio writing as a method of engaging student teachers in the exercise of reflective actions and their transcripts and in relating classroom theory to situations of practice outside the classroom. Not only the enthusiastic benefits namely, untapped potential of both journaling and portfolio were highlighted in the study but also it points towards the numerous constraints embedded within the dominant culture of educational system that limit the full potential of the select practices of reflective pedagogy. The study participants indicated that they got a rare opportunity to reflect upon their own experiences and were able to share their journal entries regarding what has worked and has not worked and were able to learn innovative ideas for using journals and portfolio in their own teaching. This implies the need of transaction an ambience of journal writing and portfolio among the student teachers as well as all levels of learners so that effective learning takes place.

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