

REFLECTIVE THINKING AMONG PRE-SERVICE TEACHERS**Dr. (Mrs.) Meenakshi Lath***Associate Professor,**Bombay Teachers' Training College, Mumbai***ABSTRACT**

Reflective thinking is central to the identity and life of a teacher. One of the foremost tasks of teacher education is to initiate pre-service teachers into the teaching profession as reflective practitioners. This study investigates the levels of reflective thinking pre-service teachers in Mumbai pursuing undergraduate programmes in Education. The study uses a descriptive survey approach. Data was collected from 94 pre-service teachers. The tool used was Questionnaire for Reflective Thinking developed by Kember et al (2000) which is a four-scale instrument measuring levels of reflective thinking in terms of four constructs; habitual action, understanding, reflection and critical reflection. The data revealed that the pre-service teachers have higher levels of understanding and reflection as opposed to habitual action and critical reflection.

Introduction

French philosopher, René Descartes (1637) famously quoted "I think, therefore I am." These words have reverberated across the centuries and maintain relevance till today - echoing in man's existential crisis and search for meaning in the world today. Reflective thinking is the hallmark of evolving and enlightened citizenry and most certainly it is central to the identity and life of a teacher. One of the foremost tasks of teacher education is to initiate pre-service teachers into the teaching profession as reflective practitioners. Teachers with a capacity for reflective thinking encourage reflective learners. The hallmark of ideal teacher education is learning to find one's own voice in a reflective learning space where the learner is encouraged to think critically and has the freedom to develop his own viewpoint, even if it is a divergent one.

The discourse related to reflective thinking traces back many centuries to the ancient Greeks. Legend has it that Socrates, the great philosopher, spent much of his time engaged in dialogue and questioning with the youth of Athens. As civilization evolved, reflective thinking gave birth to a diversity of worldviews, epistemological perspectives and schools of thought. The Socratic method, which embraces the spirit of questioning and dialogue and is widely used in educational contexts today.

While there are many scholars who have written about reflective thinking, John Dewey is one of the thinkers who has written extensively about the elements of reflective thinking such as the importance of uncertainty or perplexity, a systematic and prolonged inquiry into the topic and an attitude of suspended judgement till the process of reflection is complete.

Reflective thinking has increasingly found mention in education policy documents in India over the years. The National Policy of Education, 1986, has made a reference to collective reflection and developing the ability to think critically as one of the important objectives of education (NPE,1986). Recommendations for the new educational policy from many stakeholders have emphasized on critical thinking skills.

Background of the study

The researcher decided to study reflective thinking among pre-service teachers keeping in mind the increasing emphasis on reflective thinking in the literature. Teacher education paradigms have been changing over the last decade. It is not enough to only look at reflective thinking alone in the context of teacher education. This study aims to investigate the levels of reflective thinking of pre-service teachers in terms of habitual understanding, understanding, reflection and critical thinking. The study will help us to understand to what extent the pre-service engage in reflective thinking.

We live in a society which is undergoing digital transformation. The learners of today need to learn the skills of retrieving, sifting through and processing the information. Thinking critically about information has become more important than ever before. Teacher education needs to transition from traditional mode of skills-based learning and lay greater emphasis on the pre-service teachers' ability of reflection and critical thinking. The researcher has been teaching courses in 'Foundations of Educational Philosophy', 'Knowledge and Curriculum' and 'Reading and Reflecting on Text.'. These courses relate with ideas about reflection, epistemology, what is knowledge and how we gain knowledge. Having taught these courses for a few years also contributed to the interest in reflective thinking. Reflection and critical thinking are an inherent part of knowledge construction by an individual.

THEORETICAL FRAMEWORK OF THE STUDY

In the literature there are several models and theories developed around the concept of reflective thinking. In this section, the researcher would like to outline a few of the models which may be relevant in the context of teacher education.

Model of Reflective Learning by Boud, Keogh, and Walker (1985)

Boud et al proposes a model of reflective thinking and learning which considers reflection as an activity. It is the experience and response of a person to a situation or event which becomes the

trigger for the reflection. This is followed by the processing phase where the learner engages in conscious reflection which may take place individually or in association with others. This leads to a new understanding and appreciation of a phenomena or thing. It may also lead to new learning, change in behaviour or readiness for commitment to action. Boud et al also stress on the learner's intent in this entire process, an element which is often overlooked in learning situations. A desire to learn for a particular purpose has a remarkable way of overcoming obstacles in learning. In the case of a group, the group's intent becomes paramount, factoring in divergent intents of the individuals involved.

Mezirow's Critical Reflection Model (1991)

According to Mezirow (1991) reflection refers to the process of assessment of the content, process, or basis of meaning given to an experience whereas critical reflection questions and challenges these premises. Mezirow speaks of "content reflection" or examining the content of a problem, "process reflection" or examining the problem-solving approach used and "premise reflection" which leads to transformative learning. Mezirow's three types of reflection may hinge on learners' internal experiences or an external situation they may encounter. Asking questions like what, how and why enables the learners to reflect.

Kember et al. (2000) derive four major levels of reflective thinking from Mezirow's theory, habitual actions, understanding, reflection, and critical reflection, and have developed a Questionnaire for Reflective Thinking (QRT) based on it.

Reflective Thinking: Reflective thinking refers to higher-order thinking skills which attempt to relate new knowledge to prior understanding and the ability to think in both abstract and conceptual terms. It involves the processes of analysing and making judgments about what has happened.

Levels of Reflective Thinking:

- a. **Habitual Action:** Any activity of the individual that is learnt through frequent use. Later, it is performed automatically or with little or no conscious thought. (Kember, 2000)
- b. **Understanding:** Thoughtful activity of individuals in which they use their existing knowledge and comprehend different phenomena or things. Kember et al. (2000) elaborate that the construct 'understanding' comprises an understanding of a concept without reflecting upon its significance in personal or practical situations.
- c. **Reflection:** This refers to active and sustained consideration of the grounds that support any belief or form of knowledge. (Dewey, 1933) It involves the critique and appraisal of assumptions about the content or process of problem solving (Mezirow, 1999). Reflection leads to a new understanding of a phenomena.

d. **Critical reflection:** This is a profound and deeper level of reflection. Kember et al. (2000) elaborate that it involves the testing of a premise. It usually results in a transformation of perspective. This is the highest level of reflective thinking and is not observed as frequently.

Aim of the study:

The study was conducted with the following broad aim:

To study reflective thinking among pre-service teachers.

Objective of the study:

To study the levels of reflective thinking among pre-service teachers with respect to:

- a. Habitual Action
- b. Understanding
- c. Reflection
- d. Critical Reflection

Review of the Literature

There are a number of studies conducted on reflective thinking at pre-service teacher education level.

Suvarna (2008) did a case study on developing critical thinking skills through a strategy training task-based approach using a treatment programme. The study revealed that training learners in learning strategies to develop critical thinking skills improved their language proficiency.

Chekuri (2014) conducted an investigation of ten trainee teachers' reflective thinking and its contributions to professional growth in a practicum setting. The tools of the study included questionnaires, teachers' journals entries, focus group interviews and interviews. The findings reveal that participants considered self-reflection on their teaching central to their work.

Choy et al (2017) conducted a study on reflective thinking among pre-service teachers and demonstrated that reflective thinking leads to self-efficacy, self-assessment and teaching awareness among teachers. Self-reflection is crucial for enhancing confidence and competence among teachers.

Kember et al (2000) researched the development and testing of an instrument to measure the level of reflective thinking. The constructs measured were derived from the literature, primarily the work on reflective thinking by Mezirow. The development of the instrument was based on literature review and initial testing. The tool measures four constructs; habitual action, understanding, reflection and critical reflection. The final version was validated and reliability of the scales was established by acceptable Cronbach alpha values.

Buzdar and Ali (2013) conducted a study on the development of reflective thinking through distance mode teacher education programmes in Pakistan. Data was gathered in the

Questionnaire of Reflective Thinking developed by Kember et al. (2000). The study examined thinking and learning practices of 450 students. Findings confirmed that the distance education programme in teacher education promotes understanding and reflective thinking among learners in this case.

The review of literature helped to clarify the theoretical underpinnings, crystallize the researcher's ideas and gave an insight into various data-gathering tools.

Research Paradigm

Creswell (2003) suggests that research design or a plan to conduct research involves the intersection of the researcher's worldview, strategies used for inquiry and research methods. The research design process should begin with clarifying the philosophical assumptions of the inquiry (Creswell, 2007). He suggests four schools of thought about knowledge claims that have shaped the practice of research – postpositivism, constructivism, advocacy/participatory and pragmatism.

The present research study is grounded in the postpositivist framework which recognizes the centrality of empirical data collection and the use of theory. The study aligns with the traditional view of knowledge as objective reality as opposed to knowledge as a subjective reality.

The tool was administered to 91 pre-service teachers undergoing undergraduate degree programmes in education in Mumbai city and suburban areas. The researcher made use of the Questionnaire for Reflective Thinking (QRT) developed by Kember et al (2000) for the present study.

The QRT is a simple instrument that examines the extent to which students engage in reflective thinking. The questionnaire contains four scales which relate to various levels of reflective thinking, each of the four scales is measured by four items. They are: Habitual action (Ha), Understanding (Un), Reflection (Re), Critical reflection (Cr). The questionnaire is designed for use in academic programmes. The wording of items is simple and excludes any terminology specific to any particular discipline or profession. The version of the questionnaire completed by the students did not include the scale headings. The questionnaire was completed by 150 pre-service teachers.

In order to prepare the grounds for the statistical analysis, the data were then tabulated systematically with the help of Microsoft Excel. The data was organized and examined using tables, charts and figures and graphs. Statistical methods were applied on the basis of aims and objectives of the study. Descriptive analysis was used by the researcher in order to analyse the data.

The variables studied for the present research are the reflective thinking of pre-service teachers for 4 components: Habitual Action, Understanding, Reflection and Critical Reflection.

Table 4.1 Descriptive Analysis of Reflective Thinking of Pre-service Teachers

	Habitual Action	Understanding	Reflection	Critical Reflection
Mean Scores	13.50	16.59	16.86	15.75

From Table 4.1 It was observed that the mean scores of Understanding and Reflection of the pre-service teachers are higher as compared to their Habitual Action and Critical Reflection Scores, indicating that while the pre-service teachers do engage in reflection, the level of critical reflection is marginally lower.

Comparison of the pre-service teachers' responses in the four subscales demonstrates that the majority of them avoid making decisions through habitual action. Data reveal that the levels of understanding and reflective thinking are high indicating the curricular design and transaction of pre-service teacher programmes are stronger. Habitual action is promoted to a lesser degree and critical reflection is marginally lower than reflection and understanding indicating that pre-service teachers avoid making decisions on the basis of habitual action whereas, to some extent, they engage in critical reflection.

Recommendations for teacher educators and school authorities

It is crucial to promote reflective thinking among pre-service teachers who are responsible for the transitioning of young adults. The teacher education programme is a period of change for the beginning teacher. Below are outlined some of the strategies commonly used for encouraging reflective learning.

- Teacher educators should build a reflective culture in the classroom and model reflective thinking.
- Higher order questions which focus on analysis and application of knowledge should be used to guide self- reflection.
- The maintenance of a teaching portfolio and use of appropriate study materials and reflective exercises should encourage reflection.
- Self-reflection in the form of journaling, blogs and freewriting should form a regular part of the pre-service teachers' routine.

- Individual and group reflections should be planned which spark learning triggered by multiple perspectives.
- Real-world problems, case studies, and contexts should form the springboard of discussion and learning
- The multiple intelligence profile of the students should be factored in so the learning is not unidimensional.
- The classroom climate should have an emphasis on suspended judgement so that the student's reflective exploration is not hindered in any way.
- Learning to learn and learning to think should form an essential part of the teacher education curriculum.
- Providing opportunities for pre-service teachers to conduct action research and collaborative inquiry can also promote critical thinking and reflection.

An enabling environment must be created for student teachers to adopt reflective practices. Training, regular discussions, collaboration and conscious engagement with such practices will certainly filter down to the classrooms.

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