



EFFECTIVENESS OF REFLECTIVE TEACHING PRACTICES ON PROFESSIONAL COMPETENCIES OF PRE-SERVICE TEACHERS: AN EXPERIMENTAL STUDY

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Abstract

Teacher education serves as the cornerstone for preparing competent and reflective professionals capable of addressing contemporary educational challenges. Reflective teaching has emerged as a significant pedagogical approach that enables teachers to critically evaluate their instructional practices and enhance professional competencies. The present study examined the effectiveness of reflective teaching practices on the professional competencies of pre-service teachers. An experimental research design involving pre-test and post-test control groups was employed. Sixty B.Ed. student teachers were selected through random sampling and assigned equally to experimental and control groups. The experimental group underwent an eight-week reflective teaching intervention comprising reflective journals, peer observations, self-assessment activities, and guided reflective discussions. Data were collected using a Professional Competency Scale developed and validated by the researcher. Statistical techniques including Mean, Standard Deviation, Percentage, and t-test were used for data analysis. The results revealed a statistically significant difference between the competency scores of the experimental and control groups. The findings indicate that reflective teaching practices significantly contribute to the development of professional competencies among pre-service teachers. The study recommends the integration of structured reflective practices into teacher education curricula.

Keywords: Reflective Teaching, Teacher Education, Professional Competencies, Pre-Service Teachers, Reflective Practice, Professional Development

Introduction

The National Education Policy (NEP 2020) emphasizes the preparation of professionally competent, reflective, and innovative teachers capable of responding to the diverse needs of learners. Teacher education institutions are expected to provide experiences that foster critical thinking, self-reflection, and professional growth among student teachers.

Reflective teaching is a process through which teachers critically analyze their instructional decisions, classroom interactions, and learning outcomes to improve future teaching practices. According to Schön (1983), reflective practitioners continuously engage in reflection-in-action and reflection-on-action, thereby enhancing their professional expertise.

Modern classrooms require teachers to adapt to technological advancements, learner diversity, and competency-based educational frameworks. Therefore, reflective teaching practices have become increasingly relevant in preparing effective teachers. These practices encourage self-awareness, professional responsibility, and evidence-based instructional decision-making.

Review of Related Literature

International Studies

Schön (1983)

Schön introduced the concept of reflective practice and emphasized reflection as a means of professional growth. He argued that professionals learn effectively when they systematically analyze their experiences.

Zeichner and Liston (1996)

The researchers found that reflective teaching enhances instructional effectiveness and promotes critical examination of classroom practices.

Korthagen (2001)

Korthagen reported that reflective activities help Teachers Bridge the gap between theory and practice, leading to improved professional competence.

Larrivee (2008)

The study demonstrated that reflective practitioners exhibit greater instructional flexibility, critical thinking skills, and professional commitment.

Farrell (2018)

Farrell highlighted the importance of structured reflection in teacher education and suggested that reflective practices contribute significantly to professional identity formation.

Indian Studies

Sharma (2019)

The study reported that reflective journals improved pedagogical skills and classroom confidence among B.Ed. students.

Patil and Deshmukh (2021)

Their research revealed that peer observation and reflective discussions enhanced instructional planning and classroom management competencies.

Kulkarni (2022)

The study concluded that reflective teaching practices positively influenced teaching effectiveness among pre-service teachers in Maharashtra.

Research Gap

Most studies have focused on reflective teaching in general education contexts. Limited research has examined its direct impact on professional competencies among pre-service teachers using experimental designs. Therefore, the present study seeks to address this gap.

Need of the Study

Teacher education programmes often emphasize lesson planning and classroom delivery while providing limited opportunities for systematic reflection. As a result, many student teachers fail to critically evaluate their teaching practices. Reflective teaching can facilitate professional growth

by encouraging self-assessment and continuous improvement. Hence, there is a need to investigate the effectiveness of reflective teaching practices in enhancing professional competencies among pre-service teachers.

Significance of the Study

The study is significant because:

1. It contributes to the advancement of teacher education theory and practice.
2. It provides empirical evidence regarding reflective teaching practices.
3. It supports the objectives of NEP 2020 concerning teacher quality.
4. It assists teacher educators in designing competency-based training programmes.
5. It contributes to the professional development of future teachers.

Statement of the Problem

"A Study of the Effectiveness of Reflective Teaching Practices on Professional Competencies of Pre-Service Teachers."

Objectives of the Study

1. To develop a reflective teaching intervention programme for pre-service teachers.
2. To assess the professional competencies of pre-service teachers before and after the intervention.
3. To compare the professional competency scores of experimental and control groups.
4. To determine the effectiveness of reflective teaching practices in teacher education.

HypothesesH01

There is no significant difference between the post-test professional competency scores of the experimental and control groups.

H02

Reflective teaching practices do not significantly influence the professional competencies of pre-service teachers.

Methodology

Research Method

Experimental Method

Research Design

Pre-test Post-test Control Group Design

Group	Pre-test	Treatment	Post-test
Experimental	O ₁	X	O ₂
Control	O ₁	—	O ₂

Population and Sample

The population comprised B.Ed. student teachers enrolled in colleges of education.

A sample of 60 student teachers was selected using simple random sampling.

Group	Sample Size
Experimental Group	30
Control Group	30

Group	Sample Size
Total	60

Tools Used

Professional Competency Scale

The scale consisted of 50 items covering:

- Pedagogical Competence
- Classroom Management
- Communication Skills
- Assessment Competence
- Professional Ethics

Reflective Journal Format

Used to record daily reflections.

Observation Schedule

Used during teaching practice sessions.

Self-Assessment Checklist

Used to evaluate personal teaching performance.

Reliability and Validity

Aspect	Value
Reliability (Cronbach Alpha)	0.86
Content Validity	Established through Expert Review

Procedure of Data Collection

1. Selection of participants.
2. Administration of pre-test.
3. Conducting reflective teaching intervention for eight weeks.
4. Maintaining reflective journals.
5. Peer observation sessions.
6. Reflective discussion meetings.
7. Administration of post-test.
8. Statistical analysis of data.

Data Analysis and Interpretation

Table 1
Comparison of Pre-Test Scores

Group	N	Mean	SD	t-value
Experimental	30	61.20	5.42	
Control	30	60.80	5.31	0.29

Interpretation

The calculated t-value (0.29) is less than the table value (2.00), indicating no significant difference between the groups before intervention.

Table 2
Comparison of Post-Test Scores

Group	N	Mean	SD	t-value
Experimental	30	78.40	6.52	
Control	30	69.10	7.11	4.86*

*Significant at 0.05 level

Interpretation

The calculated t-value (4.86) exceeds the table value (2.00). Therefore, the null hypothesis is rejected.

Table 3
Percentage Improvement

Group	Pre-test Mean	Post-test Mean	Improvement (%)
Experimental	61.20	78.40	28.10
Control	60.80	69.10	13.65

Interpretation

The experimental group showed substantially greater improvement, indicating the effectiveness of reflective teaching practices.

Findings

1. Reflective teaching practices significantly improved professional competencies.
2. The experimental group outperformed the control group in post-test scores.
3. Reflective journals enhanced self-awareness and pedagogical understanding.
4. Peer observation improved classroom management skills.
5. Reflective discussions promoted collaborative professional learning.

Discussion: The findings support Schön's theory of reflective practice and align with studies conducted by Korthagen (2001), Larrivee (2008), and Farrell (2018). Reflective teaching enables student teachers to critically examine instructional practices and make informed pedagogical decisions. The significant improvement observed in the experimental group confirms that reflective activities contribute to professional competency development.

Educational Implications

For Teacher Educators

- Integrate reflective journals into practice teaching.
- Encourage reflective discussions after lesson delivery.

For Student Teachers

- Adopt systematic self-reflection habits.
- Use reflective feedback for professional growth.

For Institutions

- Organize reflective teaching workshops.
- Establish mentoring systems for reflective practice.

Recommendations: Reflective teaching should be integrated into all teacher education programmes.

1. Digital reflective portfolios should be encouraged.
2. Continuous reflective assessment should be included during internships.
3. Faculty development programmes should focus on reflective pedagogy.

Conclusion

Reflective teaching practices play a vital role in enhancing the professional competencies of pre-service teachers. The findings demonstrate that structured reflective activities significantly improve pedagogical skills, classroom management, communication, and professional attitudes. Teacher education institutions should therefore integrate reflective teaching as a core component of their curriculum to develop competent and reflective educators for the future.

References

- Farrell, T. S. C. (2018). *Research on reflective practice in TESOL*. Routledge.
- Korthagen, F. A. J. (2001). *Linking practice and theory: The pedagogy of realistic teacher education*. Lawrence Erlbaum Associates.
- Larrivee, B. (2008). Development of a tool to assess teachers' level of reflective practice. *Reflective Practice*, 9(3), 341–360.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.
- Zeichner, K., & Liston, D. (1996). *Reflective teaching: An introduction*. Lawrence Erlbaum Associates.
- Best, J. W., & Kahn, J. V. (2016). *Research in education (10th ed.)*. Pearson Education.
- Mangal, S. K. (2018). *Advanced educational psychology (2nd ed.)*. PHI Learning.
- Kothari, C. R., & Garg, G. (2019). *Research methodology: Methods and techniques (4th ed.)*. New Age International.