
The Impact of Attitude Towards Using New Technology on Teachers' Teaching Effectiveness

Shilpi Biswas, Research Scholar, Department of Education, Kalinga University, Naya Raipur (C.G.)

Dr. Lubhawani Tripathi, Supervisor, Associate Professor, Department of Education, Kalinga University, Naya Raipur (C.G.)

Abstract

This study examines the relationship between teachers' attitudes towards using new technology and their teaching effectiveness. A sample of 100 senior secondary school teachers was surveyed using a structured questionnaire. The results revealed that positive attitudes towards technology significantly enhance teaching effectiveness, with the majority of teachers displaying average or above-average attitudes. A review of related literature underscores the significance of technological adoption in education. Recommendations for professional development and support programs are provided to enhance teachers' attitudes and teaching practices.

Keywords

Attitude towards technology, teaching effectiveness, secondary school teachers, technology adoption, education

Introduction

The adoption of technology in education has revolutionized teaching practices, enabling more interactive and engaging learning environments. However, the success of technology integration largely depends on teachers' attitudes towards its use. Positive attitudes encourage the effective utilization of technological tools, whereas negative attitudes hinder their adoption. This study explores the effect of teachers' attitudes towards using new technology on their teaching effectiveness, focusing on senior secondary school teachers.

Review of Literature

1. **Ajzen's Theory of Planned Behavior (1991):** Ajzen highlighted that attitudes, subjective norms, and perceived behavioral control significantly influence an individual's intentions and behavior. In the context of education, positive attitudes towards technology play a crucial role in its adoption.
2. **Davis's Technology Acceptance Model (1989):** Davis emphasized perceived ease of use and perceived usefulness as critical determinants of technology acceptance. Teachers with a favorable view of these aspects are more likely to integrate technology effectively into their teaching.
3. **Mishra and Koehler's TPACK Framework (2006):** Mishra and Koehler introduced the Technological Pedagogical Content Knowledge (TPCK) framework, emphasizing the interplay of content, pedagogy, and technology knowledge. Teachers' attitudes towards technology influence their ability to blend these domains effectively.
4. **Ertmer et al. (2012):** Ertmer identified attitudinal barriers, including lack of confidence and resistance to change, as significant obstacles to technology integration. Professional development and support can address these barriers.

These studies highlight the importance of positive attitudes and technological proficiency in enhancing teaching effectiveness.

Objective

To study the effect of attitude towards using new technology on teachers' teaching effectiveness.

Methodology

Research Design

This study employed a descriptive research design to explore the relationship between attitudes towards technology and teaching effectiveness.

Sample Size

The study included 100 senior secondary school teachers from both government and private schools.

Data Collection Tool

A structured questionnaire was used, comprising:

- **Attitude Towards New Technology Scale (Rajasekar):** To measure teachers' attitudes.
- **Teaching Effectiveness Observation Scale (TEOS):** To evaluate teaching effectiveness.

Data Analysis

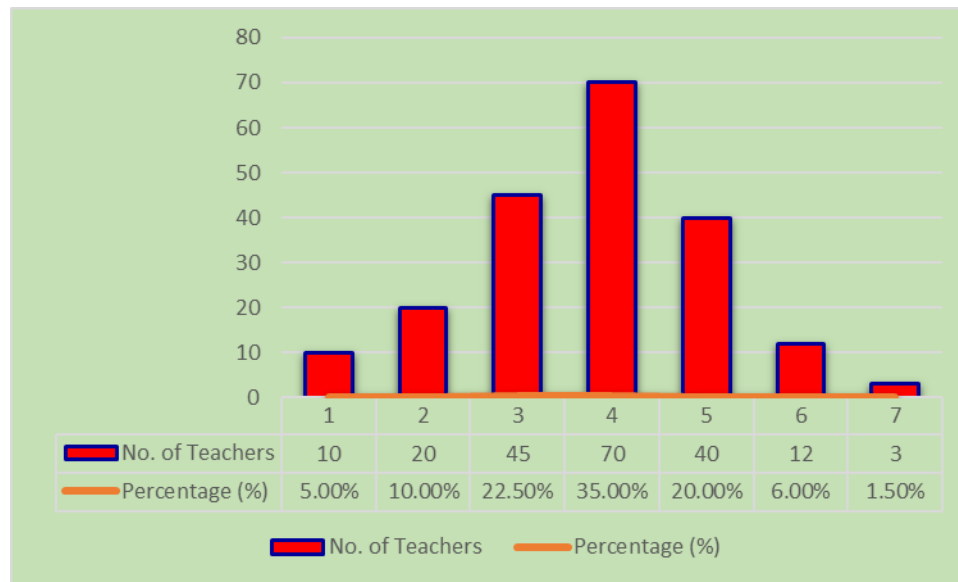
Data were analyzed using descriptive statistics, including percentages and correlation analysis.

Table 1
Percentage Distribution of Attitude Towards Using New Technology and Its Effect on Teaching Effectiveness

S. No.	No. of Teachers	Percentage (%)	Level of Attitude Towards Technology Use	Level of Teaching Effectiveness
1	5	5.0%	Very Low	Very Low
2	10	10.0%	Low	Low
3	20	20.0%	Below Average	Below Average
4	40	40.0%	Average	Average
5	20	20.0%	Above Average	Above Average
6	4	4.0%	High	High
7	1	1.0%	Very High	Very High

Findings:

- 1.0 40% of teachers exhibited an average attitude towards technology, corresponding to average teaching effectiveness.
- 2.0 20% demonstrated above-average attitudes, with a corresponding improvement in teaching effectiveness.
- 3.0 Only 5% of teachers exhibited a very low attitude and teaching effectiveness.



Graph 1 - Attitude Towards Using New Technology and Its Effect on Teaching Effectiveness

Discussion

The findings align with the reviewed literature, highlighting that teachers with positive attitudes towards technology show greater teaching effectiveness. The study underscores the importance of fostering positive attitudes to leverage technology's potential in education.

Conclusion

This study concludes that teachers' attitudes towards new technology significantly affect their teaching effectiveness. Most teachers exhibited average or above-average attitudes, underscoring the need for targeted interventions to enhance these attitudes further.

Recommendations

1. **Professional Development:** Conduct workshops and training sessions to improve technological skills and build confidence.
2. **Infrastructure Support:** Provide accessible and user-friendly technological resources in schools.
3. **Mentorship Programs:** Pair technologically adept teachers with those needing guidance to promote collaborative learning.

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