

A CORRELATIONAL STUDY ON ATTITUDE TOWARDS USING NEW TECHNOLOGIES AND TEACHING EFFECTIVENESS OF SECONDARY SCHOOL TEACHERS

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Abstract

The aim of the researcher is to explore the relationship between attitude toward using new technologies and the teaching effectiveness of secondary school teachers. For the present study survey method was adopted. Attitude Towards Using New Technologies Scale and Teacher Effectiveness Scale was administered to gather data from teachers of secondary schools. A sample of 60 secondary school teachers from Durg district of Chhattisgarh was randomly chosen for this research. To analyze the results, the Coefficient of Correlation was computed. A positive relationship was observed between attitude towards using new technology and teaching effectiveness in female teachers in comparison to male teachers. The study also depicted a positive relationship between attitude towards using new technology and the teaching effectiveness of teachers of both state and central boards. Thus, attitude toward using new technology increases the teaching effectiveness of teachers and allows them to put up every learning style and can leverage technology to accomplish new levels of productivity, implement useful digital tools to advance learning opportunities for students and increase student support and engagement.

Keywords: Attitude towards using new technology, Teacher Effectiveness and Secondary School Students.

Introduction

Technology has impacted almost every aspect of life today, and education is no exception. Traditionally, classrooms have been comparatively isolated, and collaboration has been partial to other students in the same classroom. Former times expertise, concepts, and techniques may not be relevant or appropriate for the current context. The model of the teacher as the "sage on the stage" has been in education for a long time, and it is still very much in indication today. However, for the reason of the access to new technology and educational opportunity that technology has enabled, in many classrooms today we see the teacher's role everchanging to the "guide on the side". Teachers' attitudes towards new technology can help sustain an advanced relationship between educators and students, reinvent approaches to learning and collaboration, open gaps, and adapt learning experiences to meet the needs of all learners. In this context, Reid (2002) remarked that after the integration of new technologies in the classroom teachers' functions were renovated as facilitators and co-learner. Technologies in classroom teaching increase the opportunities for individualized instructions, self-learning, quality teaching improvement, and adequate transfer of learning. According to Chauhan (2016), successful teachers use diverse tools to schedule and coordinate learning experiences, formatively measure and document student success, implement and evolve new teaching approaches as appropriate, and analyze learning using multiple sources for classroom and school development. National Policy on Information and Communication Technology in School Education (2012) gives emphasis on the use of new technology in the classroom. Last two to three decades lots of studies are completed to examine the utility of technologies in classroom teaching. Imrana (2017) discovered that secondary school teachers research attitudes towards new technologies in relation to their gender and school styles. The results indicate that gender differences occur in the attitudes of secondary school teachers towards technology.

Teacher effectiveness requires a teacher's attributes, appearance, behavior and processes such as pupil contact and variables of production such as the result of the teaching-learning process, including the accomplishments of pupils. Teaching effectiveness was described by Afe (2019) as the style of teaching

characterized by the display of academic, social and emotional stability, passion for children and a positive disposition to the teaching career and the willingness of students to encourage good qualities and attitude towards technology. Effective teaching includes an engaging classroom presence, value in real-world learning, exchange of best practices and a lifelong love of learning which can be possible by adopting new technology in the teaching-learning process.

Significance of the study

The topic, a study on attitude towards using new technologies and teaching effectiveness of secondary school teachers is determined by the researcher as per need in today's scenario, where there is severe competition in all domains of life and the effectiveness of the teachers becomes imperious to empower the students to face global challenges. Actual teaching is a par excellence attribute of eminent education. Technology offers students with easy-to-access information, enhanced learning, and fun prospects to practice what they learn. It enables students to explore novel subjects and expand their understanding of difficult concepts. Nowadays students already rely on technology in their everyday lives, so why not integrate it into the classroom? It is a known reality that the qualities, attitude and personality of the instructor enable the students to become decent human beings, thereby leading to the creation of an informed and coherent community. In order to face the evolving problems of globalization and liberalization on the one hand, and the mushrooming of educational institutions on the other, the effectiveness of the teacher is important and quality education becomes mandatory, but the quality of education depends on the teachers' ability and effectiveness. It is a must for the teacher to become acquainted with the implementation of recent technical concepts and gadgets to achieve the necessary instructional objectives.

Statement of the problem:

The present study has been entitled a correlational study on attitude toward using new technologies and teaching effectiveness of secondary school teachers.

Objectives of the study

- To find out the relationship between attitude towards using new technology and teaching effectiveness of secondary school teachers.
- To find out the relationship between attitude towards using new technology and teaching effectiveness of secondary school teachers on the basis of gender.
- To find out the relationship between attitude towards using new technology and teaching effectiveness of secondary school teachers on the basis of affiliation of school.

Hypotheses

H₀₁ There will be a significant positive relationship between attitude towards the use of new technology and the teaching effectiveness of female teachers.

H₀₂ There will be a significant positive relationship between attitude towards the use of new technology and the teaching effectiveness of male teachers.

H₀₃ There will be a significant positive relationship between attitude towards uses of new technology and the teaching effectiveness of state board teachers.

H₀₄ There will be a significant positive relationship between attitude towards uses of new technology and the teaching effectiveness of central board teachers.

Delimitation of the study.

1. The study is delimited to 60 secondary school teachers only.
2. The study considered state board and central board teachers only.

3. Only the Durg district is considered for the present investigation.

Methodology



In the present study, the investigator employed descriptive survey method.



All the secondary school teachers working in State and Central board affiliated schools of Durg district of Chhattisgarh for data collection.



In the targeted population, only 60 teachers were selected by a simple random sampling technique.



Description of the tool

For the present study the tools used by the researcher are mentioned below:

S.No.	Tool	Proponent	Nature of the scale
1	Attitude Towards Using New Technology Scale (ATUNIS)	Dr. S. Rajasekar	The scale is five-point rating scale and contains 30 items. It contains 13 positive items and 17 negative items
2	Teacher effectiveness scale (TES)	Dr. Pramod Kumar and Prof. D.N. Mutha	This scale consists of 69 items with a five opinion point scale

Table No.1

Statistical Treatment of the data

Statistical methods are extensively used in educational research. For the analysis of data coefficient of Correlation was computed. All the calculations have been done manually.

Table No.2

Table depicting the relationship between Attitude towards using new technology and teaching effectiveness of female teachers

Variable	N	Mean	r	Level of significance
Attitude Towards Using New Technology	49	106.41	0.337	Significant at 0.01 level
Teaching Effectiveness	49	294.57		

As shown in the above table it is observed that there exists a positive relationship between the usage of new technology and the teaching effectiveness of female teachers. Hence the proposed hypothesis: There will be a significant positive relationship between attitude towards uses of new technology and the teaching effectiveness of female teachers has been accepted.

Table No.3

Table depicting the relationship between attitude towards uses of new technology and teaching effectiveness of male teachers.

Variable	N	Mean	r	Level of significance
Attitude Towards Using New Technology	11	103.53	-0.262	Significant at 0.01 level
Teaching Effectiveness	11	289.00		

It is clear from the above table that there is a significant negative relationship between the usage of new technology and teaching effectiveness in the case of male teachers. So the hypothesis: There will be a significant positive relationship between attitude towards uses of new technology and the teaching effectiveness of male teachers, stands rejected.

Table No.4

Depicting the relationship between Attitude towards uses of new technology and Teaching effectiveness of State board teachers

Variable	N	Mean	R	Level of significance
Attitude Towards Using New Technology	30	103.50	0.413	Significant at 0.01 level
Teaching Effectiveness	30	290.40		

From the above table, it is revealed that the mean value of attitude towards using new technology is 103.50 and teaching effectiveness's mean value is 290.40 Calculated r value is positively significant at 0,01level of significance. Hence the hypothesis: There will be a significant positive relationship between attitude towards uses of new technology and the teaching effectiveness of state board teachers stands accepted.

Table No.5

Depicting the relationship between Attitude towards uses of new technology and Teaching effectiveness of Central board teachers

Variable	N	Mean	R	Level of significance
Attitude Towards Using New Technology	30	109.50	0.178	Significant
Teaching Effectiveness	30	297.31		

The above table exhibits that the mean value scores of Attitude Towards Using New Technology and Teaching Effectiveness of Central board teachers are 109.50 and 297.31 respectively. The calculated r-value is 0.178 which is positive and significant at both levels of significance. Hence the hypothesis there will be a significant positive relationship between attitude towards the use of new technology and the teaching effectiveness of Central board teachers has been accepted.

Findings and Conclusions

In the present study, a positive relationship was observed between attitude towards using new technology and teaching effectiveness in female teachers in comparison to male teachers. The study also depicted a positive relationship between attitude toward using new technology and the teaching effectiveness of teachers of both state and central boards. Female teachers working at secondary levels have a better attitude towards using new technologies than their male counterparts. This result is similar to the finding of Solachi (1991) who established that female teachers use more technologies in the classroom than their counterparts. But the present finding contradicts the finding of Rao (1984). He made a study on factors influencing the effective use of new technologies in classroom teaching and reported that the availability

and use of technology are very poor in regular classroom teaching. From the above results, it can be concluded that teachers and schools are most likely to use technology to personalize learning if it supports already existing, student-centered practices and supports to resolve problems or report challenges, and if it is part of a systemic, organization-wide initiative to implement student-centered learning. It can help sustain and develop relationships between educators and students, reinvent our methods of learning and collaboration, and adapt learning experiences to meet the needs of all learners. **Gressard and Loyd (2012)** said that the attitude of teachers towards using technology and technical gadgets is the main factor for implementing a high range of learning styles in education. Though teachers are having favorable attitudes towards new technology for more teacher effectiveness and upgrade of the quality educational system, there is an extreme need to arrange in a service training program on latest emerging technologies so that they can perform their duties effectively and with respect to the standard of working field and moreover it boosts up the efficiency and effectiveness of teachers. It develops a sense of perfect behavior in the working strategies of educators.

References

- Afe, J., (2019). Reflection on Becoming a Teacher and the Challenges of Teacher Education. Inaugural Lecture, Series 64, University of Benin 4(2): 56-62.
- Baylor, A. L., & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers & Education*, 39(4), 395-414.
- Chowdhry, S., (2015). Correlation study of teaching effectiveness and job satisfaction of secondary school teachers in Tinsukia District of Assam, India. *The Clarion International Multidisciplinary Journal*. 4(1):76-83
- Chauhan, A. (2016). A Study of Teacher Effectiveness In relation to Gender, Locale and Academic Stream. *International Journal of Advanced Research in Education & Technology (IJARET)*. 2394-2975 p ISSN: 2394,3(4): 121-123y.
- Evans, C. A. (2002). The effect of computer-assisted main idea instruction on foreign language reading comprehension. *Dissertation abstracts international*. Vol-63 (10), pp-3461.
- Garrison, M. J., & Bromley, H. (2004). Social contexts, defensive pedagogies and the (mis)uses of educational technology. *Educational Policy*, 18(4), 589-613.
<http://dx.doi.org/10.1177/0895904804266643>
- Grazzi, M. & Vergara, S. (2012). ICT in developing countries: are language barriers relevant? Evidence from Paragua Rao, L. N. (1984). A study of factors influencing the effective use of audio-visual equipment and materials in classroom teaching. *Fourth survey of educational research, India*. Vol- 1, pp-794
- Reid, S. (2002). The integration of information and communication technology into classroom teaching. *Alberta journal of educational research*. Vol-18 (1)
- Solachi, T. (1991). A study of the availability and utilization of educational technology in higher secondary schools in Parumpon Thevar Thirumagan District. *Fifth survey of educational research, India*. Vol- 2, pp-1394.
- Vardhini, S., (2017). "Teacher Effectiveness of Secondary School Teachers in Relation to their Teaching Aptitude" *International Journal Advance Research*. ISSN: 2320- 54075 (12), 516-520