

NEW VERTICALS OF THE EDUCATIONISTS TOWARDS PRACTICING TECHNOLOGY IN TEACHING LEARNING METHOD OF SCHOOLS

Abstract

In the digitally enabled globalized era, the importance of technology cannot be overemphasized, and knowledge management is the base of fighting any competition. Technology is transforming education, changing how and where students learn and empowering them at every stage of their journey. This has led education leaders to place greater emphasis on knowledge creation and the use of technology in disseminating information to participate in any competition with the goal of developing human capital that can be maintained with a changing world. The importance of technology can be understood from the basic level to the top to gain a competitive edge in this hi-tech world. In developing countries like India, schools tell the old story with traditional classrooms and unchanged teaching methods. The educational environment does not change with the pace of technology, so this becomes an important area of research to implement technology-based learning to impart quality education and create a technological learning process with innovative methods to improve the skills of our young generation, who are the troupes of tomorrow. The International Society for Technology in Education (ISTE) emphasizes that the forwarding step towards an effective education system can only be achieved by applying technology and training teachers to use vibrant methods in the teaching of the learning scale to overcome this challenge and turn it into a learning prospect. This study focuses on the attitudinal verticals of educationists in schools and what the differences are based on demographic variables regarding the use of technology in the learning process.

Keywords: Educators, Teaching Attitudinal Verticals, Technology, Teaching Learning Process

Introduction

Technology is a way to strengthen the education system and can act as a catalyst that bridges the gap between hope and opportunity. Upskilling is a must and an initiative that holds the curiosity of the population towards the undiscovered arena of technology. Low literacy in India is a challenge for the growth of technological aspects which if implemented can give a different perspective to the education sector. Teaching and learning with the application of technology in various aspects will become novel and schools can be transformed into knowledge creation machines. E-learning and online

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education delivery platforms can help in creating knowledge. By implementing technology, the educational sector will be reconstructed and the traditional classroom will be built into a modern technologically smart room with the active participation of teachers and students. The adoption of technology in the classroom by teachers for teaching and the creation of a learning environment once implemented will not only improve the quality of teaching but also increase the effectiveness of teachers. So, we can infer that technology can be used for better concept learning, better access to information, integration of both sides in learning and creating a digitally healthy and skilled generation.

Conceptual Framework

Hundreds of times during the last two years of the pandemic, it has taught us that technology can be used for systematic learning processes through innovative models and strategies, aiming at the general improvement of the teaching and learning phenomenon. This change in teaching with the help of science and technology can ensure efficiency and increase the qualification of both the beneficiary and the benefactor. By using a wide range of learning devices, technical machines, simulators, hardware and software as essential components in schools, educationist can prevalent educational technology and demonstrate its importance in this Hi-techage. Technology and its techniques can be used for classroom instruction, conducting research, discussions, trend analysis, curriculum development, task analysis, and discovering new ways of learning, and can even impact the leadership aspect of education through greater access to data and information.

A teaching and learning environment can improve the quality of education and can create opportunities for teachers, researchers, trainers, instructors, executives, managers and students to put theory into practical application by escalating the benefits of learning. Technology allows us to customize utility and design, productivity and performance, value and vitality. A new philosophy of teaching and training absorbs the multidimensional applications of both behavioral and physical sciences to create tools and techniques of combination and integration for

educating society using instructional material developed and transmitted through machines and devices. Thus, the learning matrix enables us to apply scientific knowledge through artistic acumen in learning to enhance the purpose of education and create the equivalence of learning, teaching. School education can benefit manifold through technology compatibility and its impact can be visualized through increased teacher educational productivity and student achievement. The education system is the backbone of the society and helps to develop the human power with a better understanding of the roles and responsibilities of all stakeholders. It is a means of making the population skilled and transforming it for the continuous technological advancement of society with the development of society and the result is cultural enrichment.

Technology and School Education

- It is a route and a medium to achieve goals
- It is like encapsulation of both theory and practice
- Teaching methods can be upgraded
- It helps to manage and properly look after the teaching system
- Assists in endless improvement through feedback
- It concentrates on making learning system more efficient
- It can Back up the teacher but can't add-on it
- Whole Set of courses can be designed
- Systematic approach
- Assists in concluding decision and resolving problem
- Practical teaching with the help of simulations and other techniques

Literature Review

According to earlier studies, school leadership is crucial to the adoption of technology in classrooms (Tooms, Acomb & McGlothlin, 2004). Some of the

research covered the influence of technology use in the teaching and learning process on educators in leadership roles. More research in this area has attempted to examine the significance of technology use and training for school administrators, highlighting the critical requirement for strong leaders in favor of the adoption of technology in the educational system (Bozeman & Spuck, 1991; Hope & Brockmeier, 2002). The Principals' Technology Leadership Training Program (PTLT), created by the Indiana Department of Education, was described by Rokman and Sloan in 1993. The curriculum includes lessons on technology introduction and the significance of leadership development for educators. Mentz and Mentz (2002) discovered that principals were aware of the value of student computer use.

Since school leaders make decisions and have an impact on how technology is used in their schools, researchers have stressed the need of technology training for school leadership. Waiti (2018) investigated the many elements that influence the use of technology for instruction in public secondary schools in a Kenyan metropolis. Along with teacher proficiency levels and the availability of technical support for effective technology adoption, the technological infrastructure is the factor that has the most impact on how well technology is incorporated into classroom instruction. In their research, Bagon, Gacnik, and Starcic (2018) focused on the integration of technical know-how into personalized learning and the creation of a support system for activity-based learning in classrooms.

In their study of the importance of information and communication technologies in the teaching-learning process, Kannan, Sivapragasam, and Kumar (2019) concentrated on the enormous power of science and technology in transforming classroom instruction (Adholiya & Adholiya, 2018). Investments in teaching strategies and technical tools can help to increase knowledge capacity and boost the competitiveness of education service providers. The sharing of knowledge empowers the individual and aids in reorienting the body of knowledge in the direction of long-term progress. By incorporating technology into the teaching and learning process, the technological era creates a platform for changing the trend of classroom instruction and improving proficiency.

According to Oko and Michael (2020), technology can offer a proactive teaching learning environment, introduce a practical approach to student and parent education, and improve teaching and learning environments. The goal of Yilmaz & Bayraktar's (2018) study was to develop the next generation into a knowledge society by integrating new technologies into the classroom. The study looked at teachers' attitudes toward using educational technologies in connection to their degrees of innovation. It discovered a strong and favorable relationship between instructors' innovativeness and their attitudes toward using technology in the classroom. Let's examine the functions of technology for teachers and teaching as well as for students and learning since they go hand in hand. According to Stosic (2015), there are three areas of educational technology:

A Tutor : Technology will be an assistance to the teacher

A Teaching Tool: Technology prove to be a tool for teaching but can never replace it.

A Learning Tool: Technology makes learning easy and effective.

Objectives of the Study

- To study the attitude of educational leaders towards the use of technology in teaching learning process in schools
- To study the difference between attitude of male and female educational leaders towards the use of technology in teaching learning process in schools
- To study the difference between attitude of educational leaders towards the use of technology in teaching learning process in schools in relation to their teaching experience.
- To study the difference between attitude of educational leaders towards the use of technology in teaching learning process in schools in relation to type of school.

Research Hypothesis

H₀₁: The educational leaders are indifferent towards the importance of technology in

teaching learning process in schools

H₀₂: There is no significant difference between the attitude of male and female educational leaders to wards the use of technology in teaching learning process in schools

H₀₃: There is no significant difference between the attitude of educational leaders to wards the use of technology in teaching learning process in schools in relation to their teaching experience.

H₀₄: There is no significant difference between the attitude of educational leaders towards the use of technology in teaching learning

process in schools in relation to type of school.

Research Method

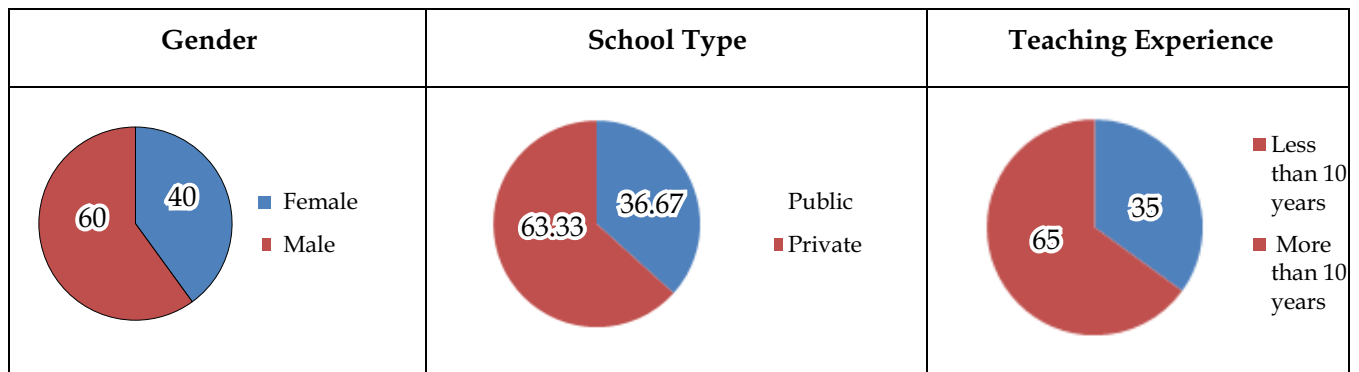
Using a descriptive research design, the research was conducted by surveying 120 educationists working in various public and private schools. All the information related to their demographic profile was gathered through the questionnaire used including also all those questions that were connected to the attitudinal vertical of technology in teaching. Convenience sample techniques was taken into usage for selecting the sample and their demographic profile of these sampled respondents with detailed statistics of are shown below.

Table 1: Descriptive Statistics Related to Demographic of Respondents

	Demographic of Respondents	N	%
Gender	Female	48	40
	Male	72	60
Teaching Experience	Less than 10 years	42	35
	More than 10 years	78	65
School Type	Public	44	36.67
	Private	76	63.33

Source : Primary Data

Graph 1: Demographic of Respondents



Source : Table 1

We saw that 60% of respondents are men and 40% of respondents are women, as shown in the table and graph above. 35% of responders had less than ten years of teaching experience, whereas 65%

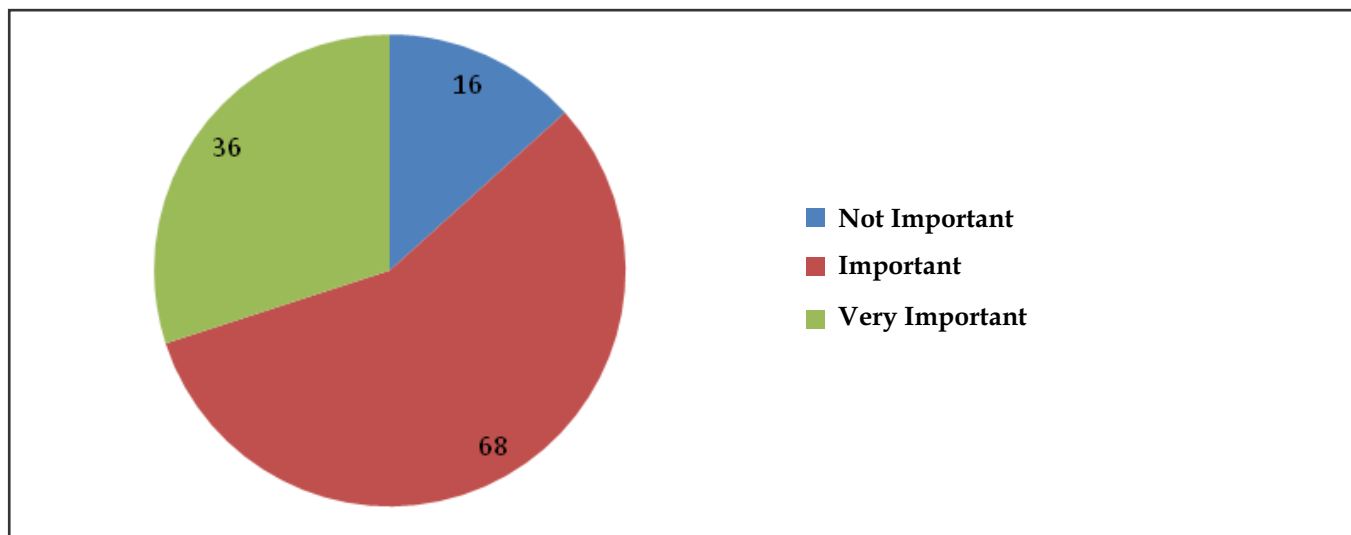
have more than ten years. 36.67% of respondents belongs to public schools, and 63.33% are belongings of private schools, as per the classification of respondents by school type.

Table 2 : Importance of Technology in School Education

Importance of technology in school education	N	%
Not Important	16	13.33
Important	68	56.67
Very Important	36	30
Total	120	100

Source : Primary Data

Graph 2 : Importance of Technology in School Education



Source : Table 2

Interpretation: Only 13.33% of respondents said technology was not important, 30% said it was very important, and a maximum of 56.67% said it was significant, according to the scale of "Not Important, Important, and Very Important"

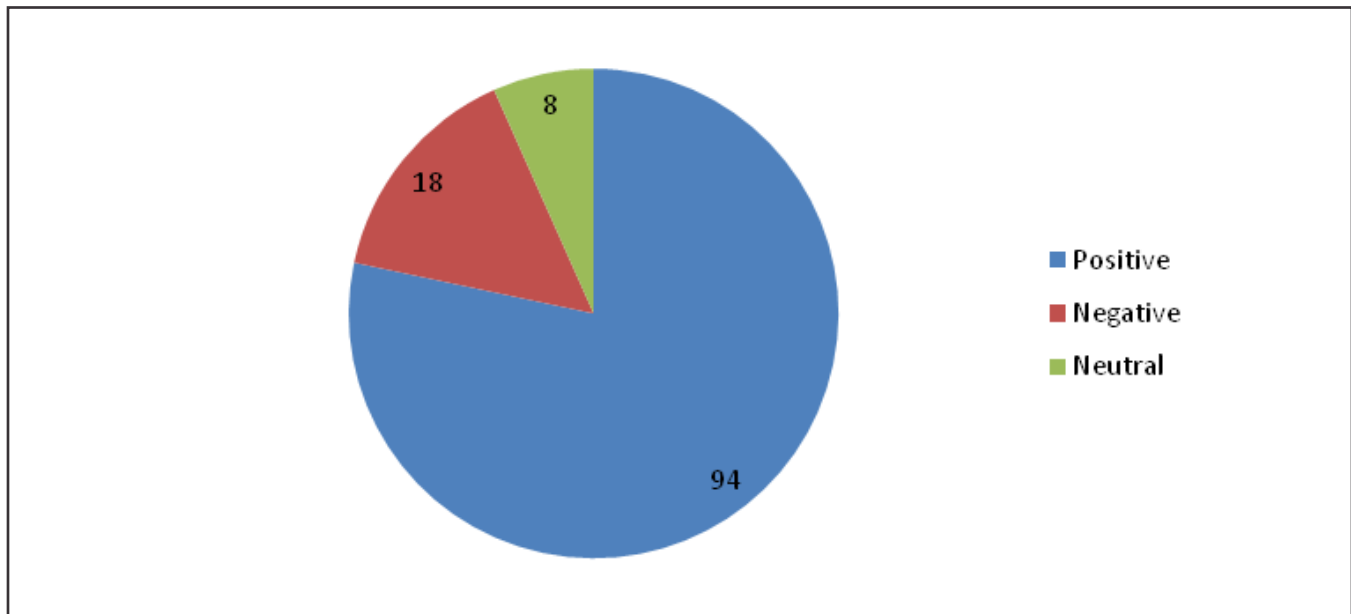
variables. It is possible to conclude that the use of technology in schools has a substantial impact on the education sector. Thus, it concludes that they are not unconcerned with the significance of technology.

Table 3 : Attitude Towards use of Technology in School Education

Attitude	N	%
Positive	94	78.33
Negative	18	15
Neutral	08	6.67
Total	120	100

Source : Primary Data

Graph 3: Attitude Towards use of Technology in School Education



Source : Table 3

Interpretation: The aforementioned table shows the respondents' attitudes on the use of technology in school education as either favorable, negative, or neutral. Only 15% of the 120 respondents, had a negative attitude, and 6.67% were indifferent, giving a positive attitude rate of 78.33% which equals to about 94 out of them.

Analysis & Findings

An Independent samples t-test was applied so to evaluate if the educationist's attitudes towards using technology in schools for the purpose of teaching and learning are different in accordance of gender, experience and school type. There sult of the t-test at 95% level of significance is shown in Table 4 below.

Table 4 : T test for Significance of Difference on the Basis of Gender

Gender	N	Mean	S.D.	't' value	Interpretation
Male	72	4.25	.66	1.65	Not Significant at 0.05 Level
Female	48	3.96	.74		

Source : Primary Data

Here the 't' value is 1.65, which is smaller than the corresponding table value at the 95% level of significance, according to the preceding table. So the interpretation of the above statement says that the null hypothesis is accepted and that the

variable gender has no significant relationship with the attitude of educational leaders towards the use of technology in teaching learning process in schools.

Table 5 : T test for Significance of Difference on the Basis of School Type

School type	N	Mean	S.D.	't' value	Interpretation
Public	44	4.34	.61	3.85	Significant at 0.05 Level
Private	76	4.02	.78		

Source : Primary Data

As it can be clearly seen in the above given table that the obtained 't' value is 3.85 which is more than the corresponding table value at 95% level of significance. So we may conclude from this output

that the null hypothesis is rejected and the variable school type has a significant relationship with the attitude of educational leaders towards the use of technology in teaching learning process in schools.

Table 6 : T test for Significance of Difference on the Basis of Teaching Experience

Teaching Experience	N	Mean	S.D.	't' value	Interpretation
Less than 10 years	42	3.98	0.62		Not Significant at 0.05 Level
More than ten years	78	4.23	0.79	0.58	

Source : Primary Data

Here in this table 0.58 is the gained “t” value which is less than the corresponding value in the table at 95% significance level. So, we may say that the null hypothesis is accepted and the variable pedagogical experience has no significant relationship with the attitude of pedagogical leaders towards the use of technology in the teaching process in schools.

Discussion & Conclusion

At this point when attitudes of educational leaders were studied by the researcher the and most of them were of the opinion that it is important to use technology in school teaching, but due to little awareness and technical skills, it is not used in teaching just because of technology phobia. Thus, the development of teacher skills is necessary to improve the frequency of technology use and also to create a positive attitude towards the successful use of technology in teaching. Therefore, training programs must be organized to inform educational leaders about the need, benefits and practical use of advanced and new technologies. The findings show that gender and teaching experience have no significant relationship with the attitude of educational leaders towards the use of technology in teaching the learning process in schools, but the type of school has a significant relationship with the attitude of educational leaders towards the use of technology in teaching learning process in schools.

Education is always concerned with developing the potential of students for the future and this can only be possible if both leaders and teachers embrace technological advancements in their teaching process. Education providers have sought to have an instinct to learn new skills to be able to act as agents of change, and education leaders should provide them with every advantage and resource to fulfill the new goals of learning in the age of technology.

The quality of education can be improved by new technological developments and their application to develop a positive attitude towards the use of technology.

Educators should always strive to improve themselves in order to provide advanced

education to students, whether it is a public or private school, and technology is a tool that provides them with techniques and methods that help them create blended learning environments and use technical tools to assessment, bringing new models for learning and teaching.

Technology in education is a must around the clock, and choosing the right devices and techniques can help prepare students for future career challenges. Learning by doing with a maker mindset and environment can be very engaging if designed and integrated with the right technology.

Educational leaders at the school level have difficult decisions to make in selecting the devices and technology models that will help achieve their visions of transforming learning. They should create an environment in which all stakeholders are motivated to adopt new teaching and learning methods. This decision will help to increase the efficiency not only of individuals but also of schools. Technology can be used in different ways and can involve multiple stakeholders to develop different models such as everyday learning, curriculum development, content assimilation, attendance records, exams and assessments, etc. Technological infrastructure and its application in the teaching process is the basis of 360-degree learning and enhances operational efficiency and provides greater satisfaction to all.

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