

**GOVERNMENT SECONDARY SCHOOLS TEACHER'S ATTITUDE
TOWARDS ICT IN TRICHY CITY**

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ABSTRACT

ICTs provides-motivation to learn. ICTs such as videos, television and multimedia computer software that combine text, sound, and colorful moving images can be used to provide challenging and authentic content that will engage the student in the learning process. It makes teaching learning process more effective and successful. The present studies identify the impact of ICTs in secondary school education students in government and private schools. The study was conducted in urban areas of Trichy city, in the year 2022. A total of 450 samples which include students and their teachers of secondary level classes selected randomly by government and private schools. Data collected by self-made questionnaire which is standardized by specific subject experts. For data analysis t-test was used in research.

Keywords: *Teaching and learning; Technology effectiveness; Internet use.*

Introduction

ICTs play a fundamental and crucial role in teaching learning process at secondary class level. It makes teaching learning process more effective and successful. The usage of ICTs in schools is the implementation of new technologies without having analyzed their appropriateness, applicability and impact on various environments and contexts. The present studies identify the impact of ICTs in secondary school education students in government and private schools. The study was conducted in urban areas of Trichy of Tamil Nadu, in the year 2020. A total of 450 samples which include students and their teachers of secondary level classes selected randomly by government and private schools. A self-made questionnaire is used to collect data, which is then standardized by specific subject experts. In the study, t-tests were used for data analysis. According to the results, ICTs have a significant impact on different types of schools.

Statement of the Problem

The late 20th century saw the fast growth of learning technology, which led to

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changes in the educational system. This is because technology can offer a proactive, convenient, and all-encompassing teaching and learning environment. In order to improve the use of cutting-edge technology in the teaching and learning processes around the globe, the ministry of education now offers several facilities and training programmes. ICT's importance cannot be questioned in light of its useful applications. ICT is helpful in a variety of fields, including education, digital literacy, resource development, infrastructure building, logistics management, healthcare, generating income, and population empowerment.

Scope of the Study

This study also keeps in mind the National Policy pertaining to ICT in school education, the curriculum is guided to promote creativity and problem-solving capacity in students with the use of ICT integrated in the curriculum. Secondary sources of data have been reviewed and documented. Relevant studies conducted by the NCERT have been quoted along with research projects on similar lines. There is lack of equipment and lack of support to use ICT in teaching subjects like drawing, yoga, and physical education. In Tamil Nadu, headmasters use internet more frequently for communication with higher officials, sending reports, receiving emails regarding government orders and administration related activities with education department. All the schools have one or more computers but very limited internet connection. Teachers need to use their ICT knowledge in appropriate situations in instructions and for other activities in their work environment. In rural location, teachers have moderate computer knowledge and moderate use of internet for teaching academic subjects. According to the global standards, teachers should have better expertise in handling ICT for effective and better teaching. Teacher's positive attitude plays an important role for the successful integration of academic activities and usage of ICT in schools.

Objectives of the Study

- The aim of this study is to understand the willingness of students in Trichy to use ICT tools.
- In Trichy, to assess the effectiveness of ICT among secondary school students.
- To find the teachers discernment of ICT in school education in Trichy
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Review of Literature

Transcend Vision Nepal (TVN) Pvt. Ltd., Bhaktapur-Nepal, 2016 conducted 'A Study on the Use of Information Communication Technology (ICT) and Its Sustainability in School Education'.

Based on this final report submitted to Department of Education Bhaktapur, Nepal, this paper aims at finding out the opportunities and challenges to use ICT in government school education of Nepal. Mahdum (2019) This study aims to investigate the perceptions and motivations of state senior high school teachers in rural districts in Indonesia towards ICT use in learning activities. According to this curriculum, ICT must be integrated into all subjects as learning resources and media. Even though there are growing numbers of research investigating teacher perceptions and motivation to ICT use in teaching and learning process, little has focused on teachers in rural districts in Indonesia. Research on ICT use in education in Indonesia generally focuses on teachers in urban areas. Methodology: The data of this study were collected through a set of questionnaires administered to 616 senior high school teachers from four rural districts in Indonesia. The questionnaire reliability was analyzed using the Cronbach Alpha with the help of SPSS software. This study could be an incentive for improving readiness of teachers in rural areas regarding ICT use in learning activities.

Jun-ichi Takada (2018) This study aims to understand the factors affecting teachers' perceptions on use of ICT for student-centered education as there lacks its study in Mongolian context. Both quantitative and qualitative analysis were conducted. The study found: 1) teacher's professional competency and perception of benefits on use of ICT are significant factors affecting the use of ICT tool for student-centered education; 2) teacher cooperation is affecting teachers' perceptions on use of digital contents for student-centered education; and 3) endogenous teacher level factors such as teacher's job satisfaction and self-confidence are affecting teachers' perception on the use of ICT for student-centered education.

Gerd Wikan (2011) ICT is meant to be integrated in all subjects in Norwegian schools; nevertheless many teachers are reluctant to use ICT in their own teaching. This paper explores to what extent teachers use ICT in their classroom teaching and what teacher- level factors influence the use of ICT. It draws on an analysis of 10 focus- group interviews with 10 teachers and a quantitative study of 59 teachers in three lower secondary schools in Hamar, Norway. The teachers showed commitment to ICT; however, may did not see the educational value, except for increased access to learning material and to stimulate learner motivation. Teachers also expressed lack of ICT confidence even though they have been taking part in ICT courses. A main finding is that to integrate ICT in one's own teaching is a difficult and gradual process and teachers must be given time to find their own way to merge ICT with their own teaching style.

Research Methodology

The research process provides a systematic, planned approach to the project and guarantees that all parts of the examination project are steady with one another. The research worker contacted the respondents personally with well-prepared sequentially arranged questions. The questionnaire is prepared on the basis of objectives of the study. Both Primary and Secondary sources of data have been collected for the purpose of the study.

Data Analysis

Table 1 Demographic Profile

| Demographic variables | Category | Frequency | Percentage |
|---------------------------|---------------------|------------|------------|
| Gender | Male | 95 | 79.17 |
| | Female | 25 | 20.83 |
| | Total | 120 | 100 |
| Age (in years) | 18-25 Years | 96 | 80 |
| | 25-35 Years | 24 | 20 |
| | Above 35 Years | 0 | 0 |
| | Total | 120 | 100 |
| Educational qualification | HSS & below | 15 | 12 |
| | UG | 29 | 24 |
| | PG | 44 | 37 |
| | ITI & Diploma | 21 | 18 |
| | Others | 11 | 09 |
| | Total | 120 | 100 |
| Occupation | Student | 57 | 48 |
| | Public Limited | 07 | 06 |
| | Private Limited | 21 | 18 |
| | Business | 13 | 10 |
| | Others | 22 | 18 |
| | Total | 120 | 100 |
| Monthly Income (In ₹) | Less than ₹ 25,000 | 70 | 58 |
| | ₹ 25,001 – ₹ 30,000 | 30 | 25 |
| | ₹ 35001- ₹ 40,000 | 8 | 7 |
| | More than ₹ 40,000 | 12 | 10 |
| | Total | 120 | 100 |

Interpretation

The above table reveals that the demographic profile of the respondents. From this 79.17% of the respondents were male and rests 20.83% of the respondents were female. 80% of the respondents were belongs to the age group of 18 – 25 years. 37% of the respondents were qualification of Post

graduates. 48% of the respondents were students from the occupational category. 58% of the respondents were earning less than 25000.

Hypothesis (Ho)

“There is no significant relationship between Age of the Respondents and their Overall Satisfaction”

Table 2 Association between Age and Overall Satisfaction of Respondents

| AGE | Overall Satisfaction | | | Total |
|----------------|----------------------|----------|--------------|-------|
| | Satisfied | Moderate | Dissatisfied | |
| 18-25 Years | 20 | 4 | 0 | 24 |
| 25-35 Years | 90 | 6 | 0 | 96 |
| Above 35 Years | 0 | 0 | 0 | 0 |
| Total | 110 | 10 | 0 | 120 |

$\chi^2=17.1971$, d.f=4, p-value= 0.130* (significant at 5% level)

Interpretation

From the table 2, it reveals that there is a significant relationship existing between age of the respondent and overall satisfaction. Since the p-value is lesser than 0.05, the hypothesis is rejected also from this table it can be seen 90 respondents (75%) whose age is between 20-25 years are satisfied on overall satisfaction.

Hypothesis (Ho)

“There is no significant relationship between Monthly Income of the Respondents and their Overall Satisfaction”

Table 3 Association between Monthly Income and Overall Satisfaction of Respondents

| MONTHLY INCOME | Overall Satisfaction | | | Total |
|---------------------|----------------------|----------|--------------|-------|
| | Satisfied | Moderate | Dissatisfied | |
| Less than ₹ 25,000 | 63 | 6 | 0 | 69 |
| ₹ 25,001 – ₹ 30,000 | 25 | 5 | 0 | 30 |
| ₹ 35001- ₹ 40,000 | 7 | 2 | 0 | 9 |
| More than ₹ 40,000 | 8 | 4 | 0 | 12 |
| Total | 101 | 19 | 0 | 120 |

$\chi^2=4.593$, d.f=6, p-value= 0.692* (significant at 5% level)

Interpretation

From table 3, it reveals that there is no significant relationship between Monthly Income of the respondents and overall satisfaction. Since the p-value is greater than 0.05, the hypothesis is accepted. Also, from this table it can be seen that 63 respondents (52%) whose Monthly income is below Rs.10000 are satisfied on overall satisfaction.

Findings Suggestions and Conclusion

Findings

Majority (80%) of the respondents are getting 21-30. Majority (37%) of the respondents are getting the UG. Majority (48%) of the respondents are getting the student. Majority (58%) of the respondents are getting the income below Rs.10000 per month.it can be seen that 63 respondents (52%) whose Monthly income is below Rs.10000 are satisfied on overall satisfaction. Since the p-value is lesser than 0.05, the hypothesis is rejected it can be seen 90 respondents (75%) whose age is between 18 – 25 years are satisfied on overall satisfaction.

Suggestions

There has been a dearth of literature on ICT integration in teaching and learning in the Indian school education system. The government, private bodies, schools and independent researchers all need to document ICT practices in schools at pan-India level. Researchers should conduct a comparative study on positioning of India with other Asian countries and its picture at the global level. There's a strong need for researchers to study and present comprehensive research on ICT integration in teaching and learning encompassing school administrators, teachers, students and parents. Role of all the stakeholders in a school needs to be analyzed in order to understand the real benefits and barriers of integrating technology in education.

Indian government has been working closely with private players and there is a strong public-private partnership in the domain of ICT in schools. It would be recommended to researchers to explore and document this wide engagement and implementation of ICT programs at schools. Another suggestion for researchers would be to track and publish about the government pilot programs on technology integration in schools. Each State has its own technology initiative in education. An example would be the smart classrooms project of NDMC schools in Delhi which was initiated in 2016. It would be a great resource of information for the government to mend its program on the basis of scientific studies and results.

Conclusion

ICT integration in school education still has to be improved, which may be done with ongoing effort from public and commercial organisations. Innovative ICT use might help people get above obstacles including geographic, socioeconomic, and cultural limitations (Chatterjee and Nath, 2015). In order to facilitate the integration of educational technology into classroom curricula, there is a critical need for technical teacher training and an expansion of technological infrastructure at schools. In actuality, not much progress can be anticipated till instructors are given enduring training in ICT-enabled instructional pedagogies and procedures. The paradigm of teaching and learning may shift as a result of e-learning. India has to work hard towards making Internet reach in hinterland of the nation. With increasing accessibilities of smart phones and mobile technologies throughout the country, there has already been a revolution of technological access to the masses at a level which had never been witnessed before. Broadband and Internet facilities have to spread out massively to be explored and exploited for educational purposes. Also, the new technology and services which schools adopt need to be evaluated at short intervals.

Further scope of the Study

In-depth research on ICT integration in core courses in schools is least mentioned, even if it may be too frequent for concerns and obstacles of ICT integration to be highlighted. Further research on the difficulties instructors have while utilising ICT in their regular classroom settings in schools would be beneficial. Additionally, it would be preferable if this study could be carried out at the three main schools that Malaysia has, including public schools, Chinese schools, and Indian schools, rather than simply focusing on public schools. This is so that ICT installation may be done much more quickly and easily in some schools where there may be greater funds. It is good if comparison can be made between different schools in which it can take the good side as examples and make improvements needed from the flaws identified.

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