

An Assessment of the Trainee Teachers' Attitude towards ICT

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Abstract: Recent technological advancements have altered the world outside and within the classroom, making these topics more engaging and relevant to pupils. The expectations placed on schools have evolved in response to changes in how knowledge and information are applied and disseminated. In recent years, researchers in the field of education have been more curious in the effects of incorporating information and communication technology (ICT) into the classroom setting. In light of this, the author of this piece set out to determine how students in teacher preparation programmes feel about information and communication technologies (ICT) and whether or not this feeling differs across demographic categories (gender, marital status, level of computer literacy). The study included 500 preservice teachers from B.Ed. programmes in Paschim and Purba Medinipur. The sample was picked using a method called Simple Random Sampling. Samuel Gnanamuthu and Krishnakumar R. developed and validated the Student Teachers' Attitude Towards ICT Scale. Twenty items make up the Student Teachers' Attitude Towards ICT Scale, each with five possible responses: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. The study's findings show that overall, student teachers have a positive outlook on ICT, but that there are substantial differences in outlook between married and unmarried student teachers. The attitudes of student instructors who are familiar with computers and those who are not are quite different from one another.

Keywords: Communication Technology, Researchers, Assessment, Training.

Introduction: Attitudes are formed by repeated exposure to a certain stimulus and subsequent reinforcement. They might be good or bad, depending on who or what they're aimed towards. We may form opinions about things before we have all the facts, and this is called bias. A person's preconceived notions about an accused criminal might cloud their ability to objectively evaluate the facts. It's possible to have favouritism, too. However, when "prejudice" is used unqualifiedly, it usually means a negative assessment with insufficient reasons.

It is often agreed that there are three parts to an attitude: one's thoughts, emotions, and actions. The first component is cognitive, and it entails the way a person thinks about the issue at hand in terms of their beliefs. The second criterion has to do with worth, and it has to do with how someone feels about the issue at hand (attracted, repulsed, or ambivalent). The third component is a natural tendency to act in a certain way.

REVIEW OF LITERATURE:

According to Allport (1985), attitude is defined as the mental status of readiness organised through experience upon the individuals response to all objects and situation with which it is related. Attitudes are defined as a mental predisposition to act that is expressed by evaluating a particular entity with some degree of favour or disfavour. Attitude may be considered as hypothetical constructs in which a person's diverse thoughts, feeling and tendencies to act are arranged into a more or less coherent pattern.

According to Morgus (1934), “Attitude is literally mental postures, gender for conduct to which each new experience is referred before is made”. According to Cantrill (1934), “An attitude is a fixed style of thinking that causes one to respond in a consistent fashion to everything that could be remotely connected to the topic in question. So, one way to define attitude is as the mental state of being prepared to react. Teachers' ICT usage, as well as teachers' beliefs and practises around the integration of ICT into the classroom, were the primary foci of Matthiasdottir et al. Fourteen public and one private high schools in Iceland participated in the study. There were 423 responses out of 906, for a response rate of 47%. In 2002, the authors created the questionnaire specifically for this research. The majority of Icelandic high school educators surveyed in this research reported using the Internet in their classrooms. Teachers used the Internet to find resources, communicate with colleagues, and share and receive student work. Most educators (81%) felt that using computers in the classroom was desirable, but they were not taking full use of the many possibilities offered by ICT, such as interactive assessments and web-based debates. They also didn't think it was true that incorporating technology into the classroom would improve learning results.

Mudasiru and Modupe (2011) conducted a case study at a Nigerian university to examine student-teachers' knowledge and feelings towards ICT. The primary goal of this research was to examine student instructors' familiarity with and disposition towards ICT. The study included 382 pre-service educators from across the university's five schools in Ilorin, Kwara State, Nigeria. Undergraduates enrolled in two separate but related teacher preparation courses. Percentages, means, and chi-square tests were used to break down the survey data we gathered. According to the results, most future educators have a favourable impression of ICT and can handle simple applications with ease. There was no conclusive evidence that male and female student instructors had different perspectives on or approaches to the use of ICT. The inference is that the preservice educators lacked the skills to fully incorporate ICT into their lessons. This highlights the need to enhance the information and communications technology (ICT) component of teacher education programmes at universities in underdeveloped countries.

In Mirunalini and Anandan (2012), surveyed future educators on their feelings towards information and communication technologies. The purpose of this research was to examine the attitudes of future teachers towards ICTs in teacher education programmes. The study's sample size was calculated using the Random Sampling Technique, and it consisted of 250 student teachers. The researchers came up with a tool called "Attitude on ICT," which consists of five factors each measured on a four-point scale. In order to assess the data, the researchers employed the Mean, Standard Deviation, and t-test. (a) Teacher-in-training participants had generally positive attitudes towards information and communication technologies. Teacher-in-training females are more likely to have a favourable attitude towards ICT than their male counterparts, regardless of age, education level, or gender, and teacher-in-training females are more likely to have a favourable attitude towards ICT's multimedia components.

Significance of the Study: Instead of focusing exclusively on the technology themselves, instructors who make use of ICT in the classroom need to develop skills in information discrimination, analysis, and filtering. The effective integration of technology into the classroom cannot be guaranteed by training that only teaches fundamental skills. Teachers require extensive curriculum-based technology training that goes beyond the acquisition of fundamental computer skills and into activities that educate them how to smoothly integrate ICT into the curriculum in order to successfully infuse technology into the curriculum. Teachers' familiarity and confidence in ICT infusion pedagogical strategies was more important than their expertise in a wider range of technology applications for successful integration. Teachers' familiarity with instructional approaches for incorporating technology was a better predictor of success than teachers' mastery of specific ICT programmes.

Objectives: The present study has been carried out with the following objectives-

- To find out the Student Teachers' Attitude towards ICT.
- To find out whether there is any significant difference between the selected subgroups of Student Teachers with respect to their Attitude towards ICT. (Gender, Marital Status, Computer Knowledge)

Hypothesis:

Hp1-Student Teachers' Attitude towards ICT is High.

Hp2-There is no significant Difference in Attitude towards ICT in respect of gender, marital status and Computer Literacy

Methodology: 500 preservice teachers from B.Ed programmes in Paschim and Purba Medinipur participated in the current research. The sample was picked using a method called simple random sampling.

Samuel Gnanamuthu and Krishnakumar R. developed and validated the Student Teachers' Attitude towards ICT Scale. Twenty items make up the Student Teachers' Attitude towards ICT Scale, each with five possible responses: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree.

DATA ANALYSIS:

Table 1- Descriptive Statistics for Student Teachers' Attitude towards ICT

| Variables | Values |
|-----------|---------|
| N | 500 |
| Minimum | 3 |
| Maximum | 78 |
| Mean | 47.536 |
| Median | 49 |
| Mode | 45 |
| SD | 15.8621 |
| SEM | 0.7093 |
| Skewness | -0.3918 |
| Kurtosis | 2.4366 |

From the above table it is clear that the mean score for attitude towards the ICT is 47.536 and SD is 15.8621 with the minimum range 3 and maximum 78. The skewness value is -0.3918 and kurtosis value is 2.4366. The research hypothesis is analyzed in the light of the mean scores for the total group. One can score the maximum of 80 for student teacher Attitude. The higher the mean score is the indication of high level of student teacher Attitude. The mean score of the total sample for the present study is found to be 47.536 which are higher than the mid value of 40. Hence it is concluded that the student teachers have high level of Attitude towards ICT. So the research hypothesis is accepted.

Table 2- Difference between Male and Female Student Teachers in Attitude towards ICT Scores

| Variable | Sub-Groups | N | Mean | S.D | df | 't' value |
|----------|------------|-----|-------|------|-----|-----------|
| Attitude | Male | 140 | 46.13 | 8.36 | 498 | 1.2013 |
| | Female | 360 | 45.14 | 8.24 | | |

To find the significant difference between the Attitude towards ICT scores of the two sub-groups the 't' value for Attitude has been calculated.

It is found from table that the calculated 't' value 1.2013 of Attitude is found to be significant. Hence the research hypothesis is rejected and it is concluded that male and female student teachers differ significantly in their Attitude towards ICT.

Table 3-Difference between Married and Unmarried Student Teachers in Attitude towards ICT Scores

| Variable | Sub-Groups | N | Mean | S.D | df | 't' value |
|----------|------------|-----|-------|------|-----|-----------|
| Attitude | Married | 79 | 47.26 | 7.96 | 498 | 0.8469 |
| | Unmarried | 421 | 48.12 | 8.34 | | |

It may be remembered that one of the objectives of the present study is to find if there is any significant difference between the married and unmarried student teachers in their Attitude towards ICT.

To find the significant difference between the Attitude towards ICT scores of the two sub-groups the 't' value has been calculated.

It is found from table that the calculated 't' value 0.8469 of Attitude is found to be not significant. Hence the research null hypothesis is rejected and it is concluded that married and unmarried student teachers differ significantly in their Attitude towards ICT.

Table 4-Difference between Student Teachers having Computer Knowledge and Student Teachers who do not have Computer Knowledge in Attitude towards ICT Scores

| Variable | Sub-Groups | N | Mean | S.D | df | 't' value |
|----------|---------------------|-----|-------|------|-----|-----------|
| Attitude | Computer Literate | 410 | 51.46 | 7.96 | 498 | 4.4284 |
| | Computer Illiterate | 90 | 47.34 | 8.14 | | |

To find the significant difference between the Attitude towards ICT scores of the two sub-groups the 't' value for Attitude has been calculated.

It is found from table that the calculated 't' value 4.4284 of Attitude is found to be significant. Hence the research hypothesis is accepted and it is concluded that student teachers having computer knowledge and student teachers who do not have computer knowledge differ significantly in their Attitude towards ICT.

Findings:

- Student teachers' attitude towards ICT is high
- Married and unmarried student teachers differ significantly in their Attitude towards ICT
- Student teachers having computer knowledge and student teachers who do not have computer knowledge differ significantly in their Attitude towards ICT

Conclusion: Computer attitudes are not only affected by gender there are many factors those can affect towards computer attitude. Social status also is a factor for computer attitude, like township schools would have a less positive attitude than students from the upper and middle class schools. Although no significant gender differences were found in students' computer attitude (Bovee, Voogt, & Meelissen, 2007). Sindhwani, A. (2012) reported that College teachers in Haryana had positive attitude towards use of ICT. The teachers considered using the ICT as essential and necessary in a period of modern technology. It seemed that they naturally accepted the use of technology as an undeniable part of instruction so their study indicates that the teachers' perceptions and attitudes towards ICT are generally positive.

REFERENCES

1. Aydın M.K., Gürol M., & Vanderline R. (2016). Evaluating ICT integration in Turkish K-12 schools through teachers' views. *Eurasia Journal of Mathematics Science and Technology Education*, 12(4), 747-766. doi:<https://doi.org/10.12973/eurasia.2016.1227a>
2. Allport, G.W. (1935). Attitudes. In C. Murchison (Ed.), *Handbook of social psychology*. Worcester, Mass: Clark University Press.
3. *Mudasiru and Modupe (2011) Student-Teachers' Competence And Attitude Towards Information And Communication Technology: A Case Study In A Nigerian University*, Cont Ed Technology, Volume 2, Issue 1, pp. 18-36.
4. Eyyam, R., Meneviş, I., & Doğruer, N. (2010). Perceptions of prospective teachers towards technology use in class. *Procedia Social and Behavioral Sciences*, 3, 88-93. doi: <https://doi.org/10.1016/j.sbspro.2010.07.016>.
5. Mogy, N & Watt, H (2009). The use of computers in the assessment of student learning. Retrieved from <http://www.icbl.hw.ac.uk/lti/implementing-it/using.htm> on 2nd July, 2019.
6. Karaca, F., Can, G., & Yildirim, S. (2013). A path model for technology integration into elementary school settings in Turkey. *Computers & Education*, 68, 353-365. doi: <https://doi.org/10.1016/j.compedu.2013.05.017>.
7. Rana, N (2012). A study to assess teacher educators' attitudes towards technology integration in classrooms. *MIER Journal of Educational Studies, Trends & Practices*, 2(2), 190-205.
8. Oduma, C. A. and Ile, C.M. (2014). ICT Education for Teachers and ICT Supported Instruction: Problems and Prospects in the Nigerian Education System. *African Research Review*. 8 (2), 199-216.
9. Sabzian, F., & Gilakjani, A. P. (2013). Teachers' attitudes about computer technology training, professional development, integration, experience, anxiety, and literacy in English language teaching and learning. *International Journal of Applied Science and Technology*, 3(1). 67-75