



ATTITUDE OF SECONDARY SCHOOL STAGE PUPIL- TEACHERS' TOWARDS TECHNOLOGICAL PRACTICES

¹Ritu Sarkar, ²Dr. Zacharias Tirkey

¹ Research Scholar, ² Assistant Professor

¹Department of Education,

¹Assam Don Bosco University, Guwahati, Inida

Abstract: We live in a technological era in which we use scientific approaches to solve issues and improve our lives. However, we are also adopting various technological practices to make our teaching and learning process simpler and easier so that student can comprehend it in a better manner. Technology saves time, energy and helps learners to progress at their own pace. Hence it is the need of the hour that we need to make our future pupil-teacher more aware of all the types of technology that they can adopt to teach the new generation students. The present study tries to study the attitude of secondary school stage pupil-teacher towards technological practices with respect to their gender, locality and discipline.

IndexTerms – TECHNOLOGICAL PRACTICES, ICT, SECONDARY SCHOOL STAGE-TEACHERS

1.0 INTRODUCTION

As a result of the widespread use of technology in today's environment, using technology in teaching and learning is critical if we are to have a long-term influence on how a child learns. With the use of technology in classrooms as a tool student performance can increase. Policymakers and educators are to reorganize the curriculum approaches that will have the greatest impact on education and student outcomes.

Teacher education institution need to prepare their pupil-teachers so that they are well aware and well trained when they step in their teaching profession. As they are the one who is going to build the future.

National Education Policy 2020 suggested that The National Educational Technology Forum (NETF) to be established as an autonomous entity to provide a forum for the open exchange of ideas on the use of technology to improve learning, evaluation, planning, and administration, among other things, in secondary and higher education. It also underlined the need of successful blended learning, effective digital content development, integrating technology in teaching, learning, and assessment, and performing pilot research to test implementation and results.

Teachers in the twenty-first century must assess the requirements of their pupils and prepare them to confront future challenges. A teacher's job is regarded difficult and demanding. A high-quality professional teacher development programme is required for the development of a high-quality professional teaching force. The incorporation of technology in teaching must be integrated into the teacher training curriculum.

Technological practices are those hardware and software which a teacher incorporates in the teaching-learning process. Secondary school stage pupil-teachers are the teacher trainees who are being trained to teach secondary school students.

2.0 REVIEW OF RELATED LITERATURE

Dixit & Kaur (2015) in their study made the following conclusions which was reached based on the data collected over the course of the investigation:

1. Pupil-teacher had a positive attitude toward ICT instruction.
2. There were significant differences between urban and rural pupil-teachers' in their attitudes toward ICT instruction.
3. There was no significant difference between male and female pupil-teachers' in their attitudes regarding ICT instruction.

Mahajan (2016) conducted a study which revealed that only 25% teachers expressed favourable attitude towards the use of technology in teaching, and also no significant difference was found in between the male and females.

In their study, Rahman & Chetia (2020) found that B.Ed teacher educators had a favourable attitude toward information and communication technology (ICT). The teacher will be better able to use or incorporate ICT and various multimedia techniques into the teaching-learning process if they have a positive attitude toward ICT. Additionally, it was discovered that the attitudes of instructors from public and private B.Ed. colleges, male and female teachers, and experience variables did not significantly differ from one another. Different technology tools may be used to enhance the learning environment in the classroom and develop future citizens' skills. A positive and accommodating approach toward ICT aids in the teacher's professional development and equips them to effectively navigate a rapidly changing environment.

Anal & Amareswaran (2022) their study showed that most student instructors had a favourable attitude toward ICT. Regarding the demographic characteristics of gender, locality, type of student-teacher, and educational background of student teachers, there was no discernible variation in attitudes toward ICT. The study stated that throughout the teacher-training phase, student instructors must become ingrained with the value of ICT integration in teaching and learning programmes. In order to instill in student teachers a good attitude toward ICT, teacher education institutes must take into account ICT practises and applications. As a result, one of the torchbearers for raising the standard of education in the nation is the teacher education institutes.

3.0 OBJECTIVE

- i. To compare the mean score of attitude of male and female secondary school stage pupil- teacher's towards technological practices.
- ii. To compare the mean score of attitude of urban and rural secondary school stage pupil- teacher's towards technological practices.
- iii. To compare the mean score of attitude of arts and science secondary school stage pupil- teacher's towards technological practices.

4.0 HYPOTHESES

- i. There is no significant difference between the mean score of attitude of male and female secondary school stage pupil-teacher's towards technological practices.
- ii. There is no significant difference between the mean score of attitude of urban and rural secondary school stage pupil-teacher's towards technological practices.
- iii. There is no significant difference between the mean score of attitude of arts and science secondary school stage pupil-teacher's towards technological practices.

5.0 METHODOLOGY

Methodology of the study comprises of various components which are listed under in order to complete the research systematically:

5.1 Method

The method of the study is descriptive survey method.

5.2 Population

The present study consisted of pupil-teachers of teacher education institute of Meghalaya. The total number of secondary school stage pupil-teacher is 565.

5.3 Sample

The sample comprises of 280 secondary school stage pupil-teachers.

5.4 Tools of the study

The investigator developed attitude scale in alignment with Likert scale.

The attitude scale comprises of 50 percent positive statement and 50 percent negative statements was used. A positive item weighed score of 1 for Strongly Agreed (SA), 3 for Agreed (A), 2 for Undecided (U), 0 for Disagreed (D) and 4 or Strongly Disagreed (SD) and a negative item weighed score of for Strongly Agreed (SA), 2 for Agreed (A), 0 for Undecided (U), 3 for Disagreed (D) and 1 for Strongly Disagreed (SD).

5.5 Statistical tools

Mean, median, mode, standard deviation, t-test were used for data analysis as statistical technique.

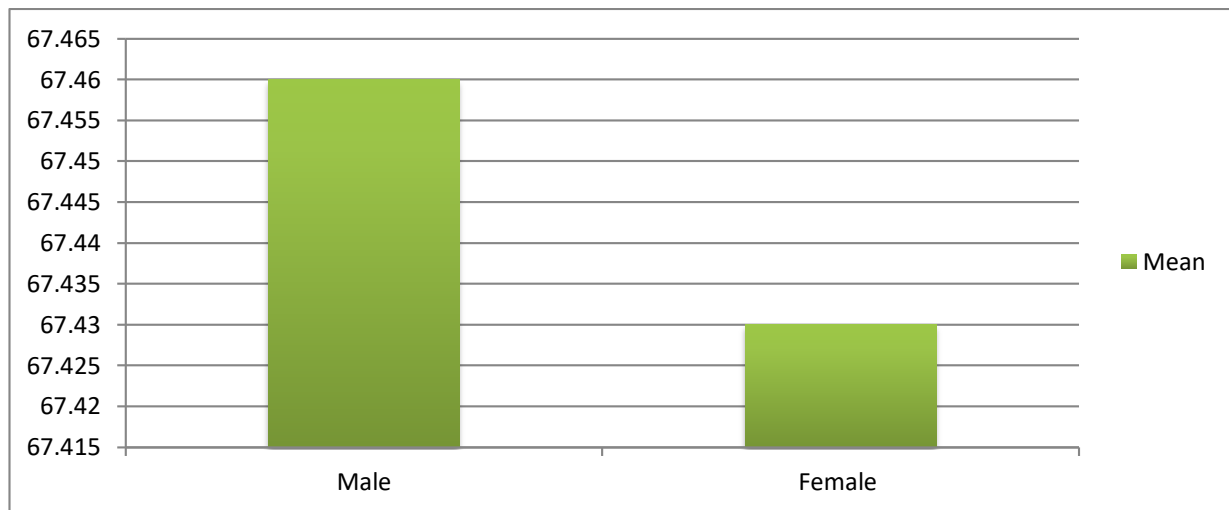
6.0 ANALYSIS AND DISCUSSION

Objective 1: To compare the mean score of attitude of male and female secondary school stage pupil- teacher's towards technological practices.

Table 1: Mean difference between the attitude of male and female secondary school stage pupil- teacher's towards technological practices

Gender	N	Mean	SD	df	't' value	Level of significance (.05)
Male	52	67.46	7.68	278	0.0205	NS
Female	228	67.43	8.89			

Chart 1: Graphical representation of mean difference between the attitude of male and female secondary school stage pupil- teacher's towards technological practices



From data presented in table 1 above, there is an indication statistically that there is no significant difference among the male and female secondary school stage pupil-teachers towards the technological practices, the mean score are 67.46, SD = 7.68 for male pupil-teacher and for female pupil-teacher mean score = 67.43, SD = 8.89, where 't' value = 0.0205. The mean score for male & female secondary school pupil-teachers' indicate that both the gender have same level of attitude towards technological practices. Chart 1 shows the graphical representation of mean differences between the attitude of male and female secondary school stage pupil-teachers' towards technological practices for better understanding.

Hypothesis 1: There is no significant difference between the mean score of attitude of male and female secondary school stage pupil-teacher's towards technological practices.

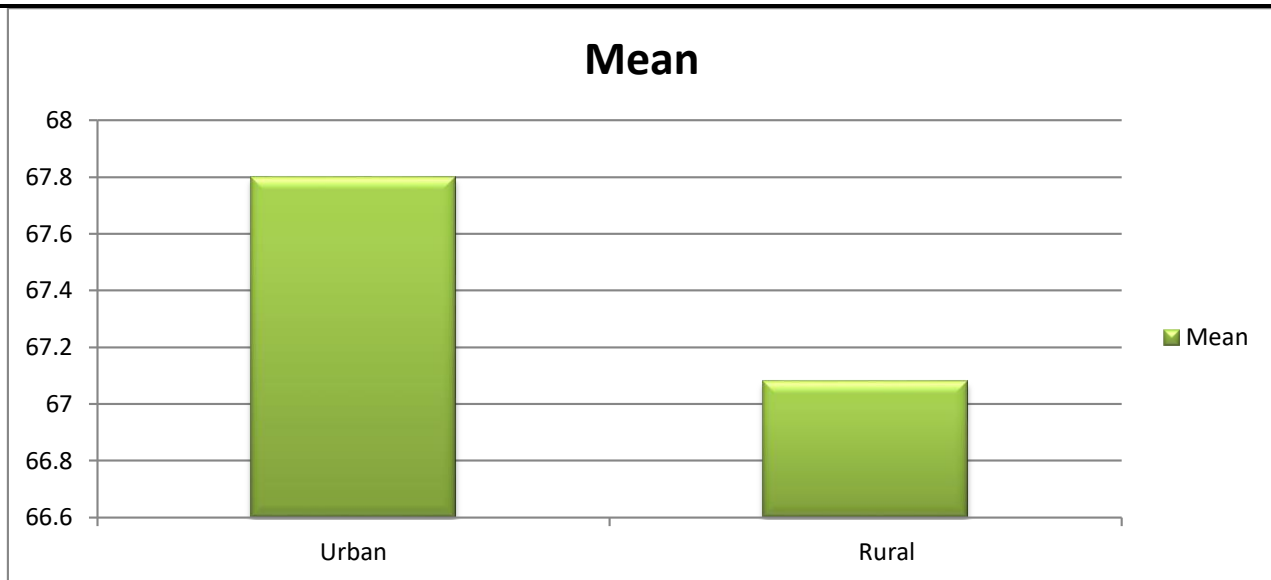
For the mean difference between attitude of male and female secondary school stage pupil-teachers' towards technological practices, the t-value in the above table was found to be 0.0205, which indicates that the attitude between male and female secondary school stage pupil-teachers' towards technological practices is not significant at 0.05 level of significance. Hence, the hypothesis 1 which states that there is no significant difference between the mean score of attitude of male and female secondary school stage pupil- teacher's towards technological practices.

Objective 2: To compare the mean score of attitude of urban and rural secondary school stage pupil- teacher's towards technological practices.

Table 2: Mean difference between the attitude of urban and rural secondary school stage pupil- teacher's towards technological practices.

Locality	N	Mean	SD	df	't' value	Level of significance (.05)
Urban	140	67.80	8.96	278	0.6956	NS
Rural	140	67.08	8.38			

Chart 2: Graphical representation of mean difference between the attitude of urban and rural secondary school stage pupil- teacher's towards technological practices.



From data presented in table 2 above, there is an indication statistically that there is no significant difference among the urban and rural secondary school stage pupil-teachers towards the technological practices, the mean score are 67.80, SD = 8.96 for male pupil-teacher and for female pupil-teacher mean score = 67.08, SD = 8.38 belonging from urban and rural locality, where 't' value = 0.6956. The mean score for male & female secondary school pupil-teachers' belonging from urban to rural locality indicate that they have same level of attitude towards technological practices. Chart 2 shows the graphical representation of mean difference between the attitude of urban and rural secondary school stage pupil- teacher's towards technological practices for better understanding.

Hypothesis 2: There is no significant difference between the mean score of attitude of urban and rural secondary school stage pupil-teacher's towards technological practices.

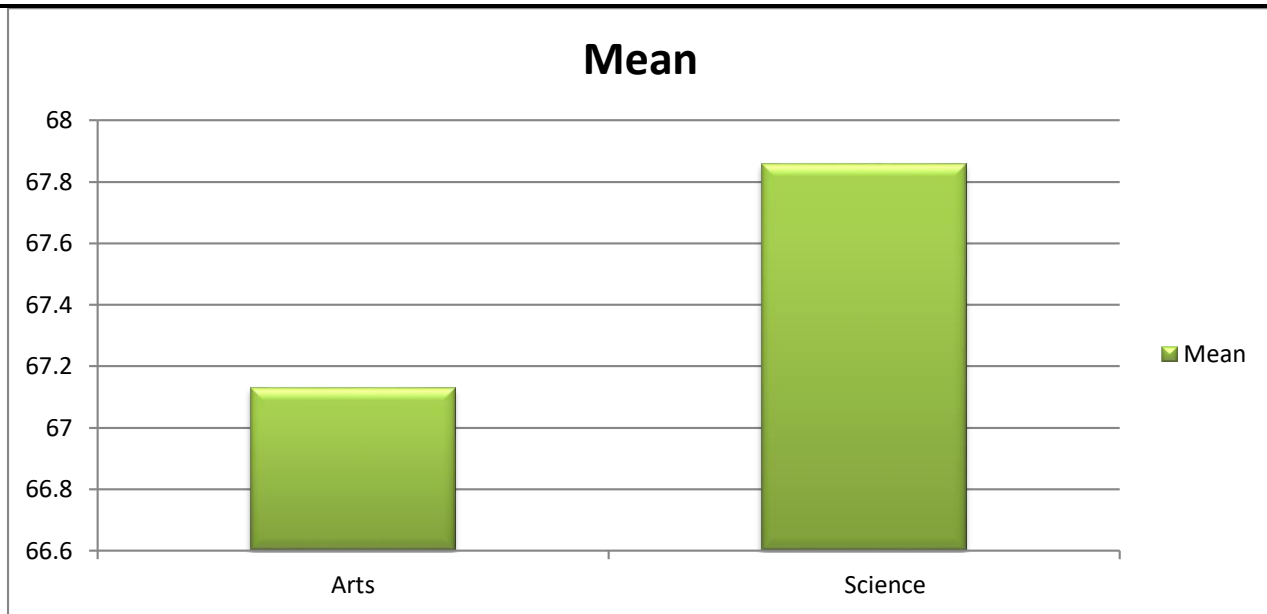
For the mean difference between the mean score of attitude of urban and rural secondary school stage pupil-teachers' towards technological practices, the t-value in the above table was found to be 0.6956, which indicates that the attitude between urban and rural secondary school stage pupil-teachers' towards technological practices is not significant at 0.05 level of significance. Hence, the hypothesis 2 which states that there is no significant difference between the mean score of attitude of urban and rural secondary school stage pupil- teacher's towards technological practices.

Objective 3: To compare the mean score of attitude of arts and science secondary school stage pupil- teacher's towards technological practices.

Table 3: Mean difference between the attitude of arts and science secondary school stage pupil- teacher's towards technological practices.

Discipline	N	Mean	SD	df	't' value	Level of significance (.05)
Arts	162	67.13	9.30	278	0.6997	NS
Science	118	67.86	7.74			

Chart 2: Graphical representation of mean difference between the attitude of arts and science secondary school stage pupil- teacher's towards technological practices.



From data presented in table 2 above, there is an indication statistically that there is no significant difference among the arts and science secondary school stage pupil-teachers towards the technological practices, the mean score are 67.13, SD = 9.30 for male pupil-teacher and for female pupil-teacher mean score = 67.86, SD = 7.74 belonging from arts and science discipline, where 't' value = 0.6997. The mean score for arts & science secondary school stage pupil-teachers' indicate that they have same level of attitude towards technological practices. Chart 3 shows the graphical representation of mean difference between the attitude of arts and science secondary school stage pupil- teacher's towards technological practices for better understanding.

Hypothesis 3: There is no significant difference between the mean score of attitude of arts and science secondary school stage pupil-teacher's towards technological practices.

For the mean difference between the mean score of attitude of arts and science secondary school stage pupil-teachers' towards technological practices, the t-value in the above table was found to be 0.6997, which indicates that the attitude between arts and science secondary school stage pupil-teachers' towards technological practices is not significant at 0.05 level of significance. Hence, the hypothesis 3 which states that there is no significant difference between the mean score of attitude of arts and science secondary school stage pupil- teacher's towards technological practices.

7.0 Findings

a. Mean score are 67.46, SD = 7.68 for male pupil-teacher and mean score = 67.43, SD = 8.89 for female pupil-teacher where 't' value = 0.0205. The mean score for male & female secondary school pupil-teachers' indicate that both the gender positive attitude towards technological practices.

b. Mean score are 67.80, SD = 8.96 for male pupil-teacher and for female pupil-teacher mean score = 67.08, SD = 8.38 belonging from urban and rural locality, where 't' value = 0.6956. The mean score for male & female secondary school pupil-teachers' belonging from urban to rural locality indicate that they have same level of attitude towards technological practices.

c. Mean score are 67.13, SD = 9.30 for male pupil-teacher and for female pupil-teacher mean score = 67.86, SD = 7.74 belonging from arts and science discipline, where 't' value = 0.6997. The mean score for arts & science secondary school stage pupil-teachers' indicate that they have favourable of attitude towards technological practices.

8.0 Suggestion and Conclusion

The integration of ICT into the teaching process greatly dependent on the attitude and perception of instructors about ICT integration. The new era demands that the teacher must integrate technology into the learning process to make teaching and learning intriguing, dynamic, and engaging. As technology advances quickly, there are already several new ICT applications in use. These applications might be effectively adapted and utilized to support the teaching and learning process. Any technological practices that are aligned with education area must be embraced for better educational achievements of students. The addition of a distinct ICT instructor to the teacher education programme who is knowledgeable about the different technological practices that may be implemented into the curriculum would undoubtedly inspire the future student-teachers. It is important to remember that information and communication technology (ICT) is the key to global technological growth as civilization develops and we need to prepare ourselves for future.

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