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TEACHER TRAINEES' ATTITUDE TOWARDS WEB-BASED EVALUATION: A STUDY BASED ON PURULIA DISTRICT

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ABSTRACT

As we know, the four essential components of education are teaching, learning, course content or curriculum, and evaluative process. Thus, the evaluation process is an integral part of the educational system. Through evaluation, we know whether the students attain the learning experiences and vice versa and whether the teaching strategies are effective within the teaching-learning processes. Thus, the academic world is tailored to invent several techniques and procedures for evaluation processes. This article explores the attitude of teachers' trainees towards a web-based evaluation system. The study's main objective is to determine the attitudinal differences towards web-based evaluation systems in terms of gender, locality, and stream of study. This study is based on descriptive-cum survey type research. Using a purposive sampling technique, the study sample consists of 46 teacher trainees (male =10, female =36). The research findings revealed no significant attitudinal difference between teacher trainees' views on web-based Evaluations regarding their gender, locality, and stream. It means that with respect to gender, locality, and stream, all have favorable opinions and attitudes towards Web-Based evaluation. It also indicates that technology significantly impacts all sectors, including students who want to develop an inclusive education by incorporating technology in educational sectors. According to the study outcomes, it can be said that technology-driven education is the most welcome at this juncture. Thus, we must become familiar with technology and build our educational process on technological intervention or artificial intelligence support.

KEYWORDS: *Teacher trainees', Attitude, Web-based Evaluation system.*

1.0 INTRODUCTION

The evaluation system is a significant parameter for our Teaching-Learning system. Present society is much more involved in tech-centric skills. Due to the inversion of modern technologies, our evaluation system is shifting from traditional pen-paper tests to web-based tests. We can say that web-based evaluation is a paradigm shift for the contemporary education system. Web-based evaluation is an umbrella term that uses the internet and computers to assess and evaluate things, such as courses, systems, and learning. As the amount of available digital information grows, especially on the World Wide Web, the ability to search it becomes increasingly important. Google claims its index contains over eight billion pages, while others claim index sizes are in the billions. On the web, the usability of a particular information system is a significant factor. Familiar users want to accomplish specific tasks as timely, accurately, and thoroughly as possible, and the interaction experience of doing so is as pleasurable with minimal user frustration. **(Stoimenova 2010)**. National Education Policy also focuses on the online learning platform and web-based evaluation system. Usually, web-based evaluation is carried out by organizations to evaluate or analyze a candidate's aptitude, performance level, and capability. Integrating stuff such as multiple-choice questions, descriptive answers, analytical questionnaires, etc, the web-based evaluation simplifies the evaluation task of the teacher. NEP-2020 recommended several bodies to improve teaching-learning and expand opportunities for pupils through their long-term assessment of and learning research initiatives. NTA (National Testing Agencies) and PARAKH (Performance Assessment, Review and Analysis of Knowledge for Holistic Development) are the bodies formed through the recommendation of NEP-2020. National Testing Agency has conducted examinations like the UGC National Eligibility Test, Joint Entrance Examination, Common Management Admission Test, Universities Entrance Examination, Hotel Management Joint Entrance

Examination, PhD Entrance Examination, etc. On the other body, PARAKH was set up by the NCERT, which focuses on capacity development in competency-based assessment, large-scale achievement surveys, equivalence of school boards, and holistic progress cards for the foundational, preoperational, middle, and secondary stages. The cohesion of artificial intelligence (AI) can transform the changes in the field of education by offering personalized, innovative educational content. AI also plays a vital role in assessment and evaluation systems across various fields, such as automated grading, predictive analytics, standardized testing, data analysis, etc. NEP 2020 also asserted AI-based software that students would use to help and track their growth through their school years based on students' learning data and interactive questionnaires for parents, pupils, and teachers to provide learners valuable information on their strengths and weaknesses, areas of interest, and needed areas of focus. It can help them to make their optimal career choices. In this paper, the researcher attempts to determine the B.Ed trainees' attitudes and perceptions towards a web-based evaluation system in the Purulia district.

2.0 REVIEW OF RELATED RESEARCH LITERATURE

Bag (2023) conducted a study on 'Assessing University-Level Students' attitude towards online learning.' The study's primary objectives were university students' attitudes toward online learning regarding gender, region, background, and academic achievement. The study employed 241 Postgraduate students using a purposive sampling method. The study's major findings showed no significant differences in attitudes toward online learning between gender, region, and background. However, there was an important difference between high- and low-achieving university-level students interested in online education.

Sarigoz (2023) conducted a study on Teachers' opinions on using web-based e-assessment and evaluation applications in education. The study's primary objectives were the opinions of teachers about web-based e-assessment and evaluation applications based on digitalization. This study employed a phenomenological design for 44 teachers working in state high schools in Hatay, Turkey. The data were collected using a face-to-face, semi-structured interview format with five questions. The digital e-assessment evaluation tools have advantages, are time-independent and practical, and have disadvantages such as technical problems, preliminary perception, and not being suitable for every course. The study's findings revealed the effectiveness of web-based e-assessment and evaluation in the education system.

Stoimenova (2010) conducted a study on evaluating web-based information systems: users' information criteria. The primary purpose of the study was to measure the usability of information systems in four aspects: technological measures, effectiveness measures, user-oriented measures, and feedback provided by the system.

Dahalan and Hussain (2010) conducted a study on developing web-based assessments in teaching and learning management systems (e-ATLMS). Web-based assessment plays a vital role in teaching learning and management systems. Web-based assessment was designed with the definite purpose of helping teachers conduct examination questions and define student learning. The findings showed viewers' opinions, which supported the development of web-based assessment in teaching and learning management systems. They also provided information about the advantages and disadvantages of e-ATLMS. So, it can be asserted that e-ATLMS is used as a substitute for school-based assessment systems.

Azil and Othman (2008) studied a Web-based evaluation system for a problem-based laboratory. They stated that problem-based learning is a method practiced and implied by the faculty of electrical engineering at the University of Technology Malaysia. More than 500 students were registered in this laboratory. This laboratory requires each group of four to five students to solve problems in three different laboratories per semester. In this developed evaluation system, laboratory coordinators can upload students' information, such as group division, mark insertion, and total marks calculation for the final grade. The study's findings revealed that web-based evaluation systems can depict the reliability and security in determining a student's grade in a problem-based laboratory in a shorter time, especially when dealing with many students.

3.0 STATEMENT OF THE PROBLEM

The above problem is *'A study on teacher trainees' attitude towards Web-based Evaluation system in Purulia district.'*

4.0 OBJECTIVES OF THE STUDY

I. To know the attitude towards web-based evaluation among male and female Teacher trainees.
II. To determine the attitudinal differences toward Web-based Evaluation among urban and rural teacher trainees.
III. To determine the attitudinal difference towards web-based evaluation among the arts and science stream teacher trainees

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5.0 HYPOTHESES

a) There is no significant difference in the attitudes of the male and female teacher trainees toward web-based evaluation.
b) There is no significant difference in attitude towards web-based evaluation among urban and rural teacher trainees.
c) There is no significant difference in attitude towards web-based evaluation among the arts and science teacher trainees.

6.0 THE RATIONALE OF THE STUDY

Justification of the selection of this problem is based on the following points:

- A web-based evaluation system can potentially ennoble the student evaluation process. Moving the process from pen-and-paper to online can make it more efficient and accessible to all stakeholders, such as teachers, students, parents, and administrators.
- It can also provide a secure, centralized platform for collecting, analyzing, and reporting evaluation data.
- A web-based evaluation system is more potentially credible in facilitating the assessment process, ultimately contributing to the prosperity of the quality of teaching and accelerating learning outcomes.
- This evaluation system allows for simple customization and amalgamation with other educational technology and data processing systems. Further, it can be readily applicable to the learner.

7.0 METHODOLOGY OF THE STUDY

a) Nature of the study

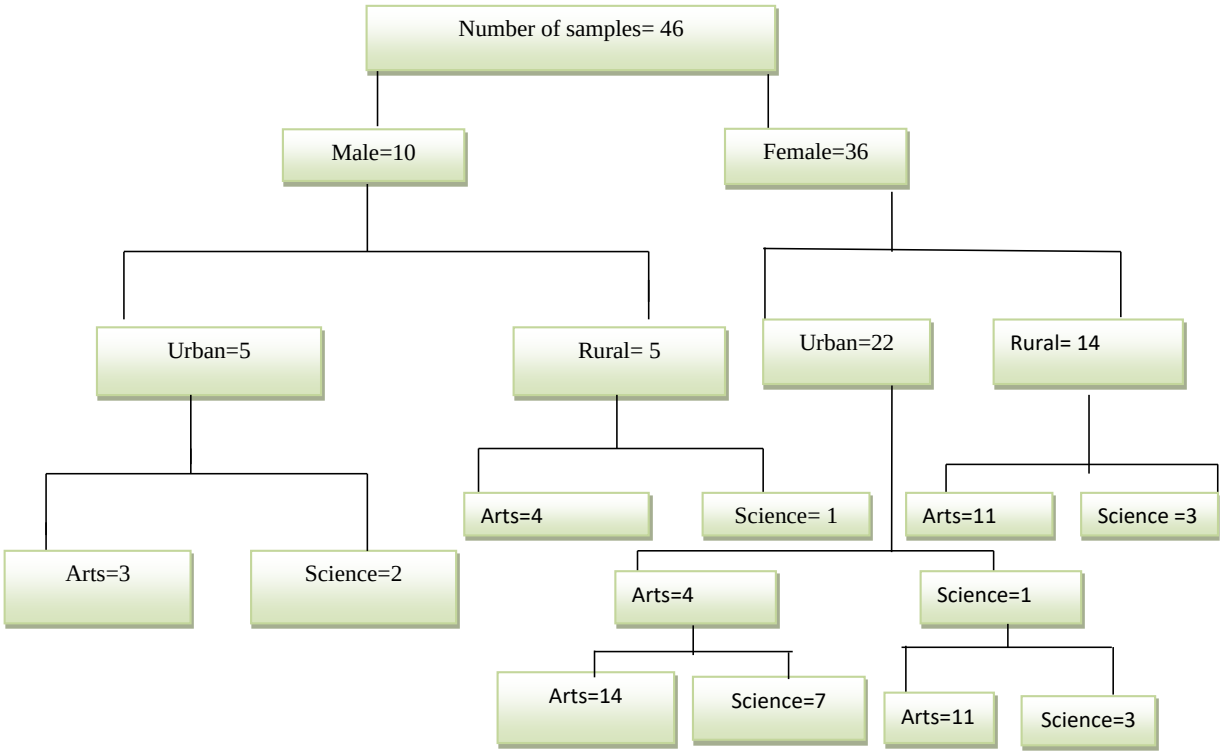
This study is descriptive -cum survey type in which data are primarily based on primary data, and the researcher has collected data with the help of a Five-point Likert-type questionnaire.

b) Population of the study

In this study, the researcher considers all Teacher trainees in the Purulia district as a population.

c) Sample and Sampling Design of the study

Using purposive sampling, the researcher has selected only 46 samples from the entire population.



d. Tools used for the data collection: The researchers prepared a five-point Likert-type questionnaire to collect suitable data.

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e. Statistical Treatment: The researcher has expressed and interpreted the data using various statistical techniques, such as t-tests, mean, and SD, as well as graphical representations of data, such as Bar graphs and Histograms.

Table 1: Methodological Diagram

Objectives	Hypothesis	Nature of study	Data collection device to be used	Statistical techniques will be used
To know the attitude towards web-based evaluation among male and female teacher trainees.	There is no significant difference in the attitudes of the male and female teacher trainees toward web-based evaluation.	Quantitative in nature	Questionnaire self-made	Mean, SD, t-test
To determine the attitudinal differences towards Web-based Evaluation among urban and rural teacher trainees.	There is no significant difference in attitude towards web-based evaluation among urban and rural teacher trainees.	Quantitative in nature	Questionnaire self-made	Mean, SD, t-test
To determine the attitudinal difference towards web-based evaluation among arts and science stream teacher trainees.	There is no significant difference in attitude toward web-based evaluation among the arts and science teacher trainees.	Quantitative in nature	Questionnaire self-made	Mean, SD, t-test

f. Objective-wise Data Analysis and Interpretations

Here, the researcher analyses the data in three sections:

Section-1:

Objective 1: To know the attitude towards web-based evaluation among male and female teacher trainees.

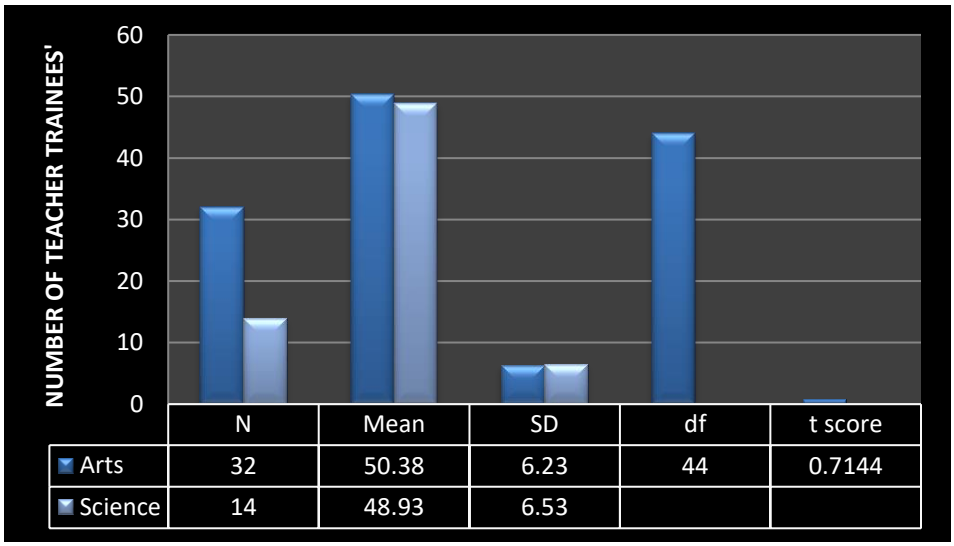
In this objective fulfillment, the researcher set a null hypothesis and then different the two means by t-test. The null hypothesis is:

H_{01}: The attitudes of the male and female teacher trainees towards web-based evaluation are the same.

Table: 2 The attitudinal difference among teacher trainees with respect to gender(Male/Female).

Groups	N	Mean	∑	Df	Calculated t-value	Critical t-value	Ns/N	Remarks
Male	10	48.50	6.02	44	0.8131	0.05 level=1.985	Ns at 0.05 level	Failed to reject or Accepted
Female	36	50.33	6.38			0.01 level=2.627	Ns at 0.01 level	Failed to reject or accepted

A graph shows the mean difference between male and female students regarding Web-based evaluation among teacher trainees.



Male and Female teachers' trainees' attitude towards web-based

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Not significant at 0.05 and 0.01 level both

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By conventional criteria, the difference is considered to be not statistically significant intermediate values used in calculations:
t= 0.8131
df= 44
Standard error of difference=2.255

The researcher shows that the calculated t-value is 0.8131, the critical table t-value is 0.05, and the significance level is 1.985. Since the calculated t-value is lower than the table value, the null hypothesis is accepted,it mean failed to reject. Now, we can say that there is no significant difference in the attitude of male and female teacher trainees towards a web-based evaluation system.

The researcher also tested the hypothesis at a 0.01 significance level. The calculated t-value is 0.8131, and the critical table t-value is 2.627. The calculated t-value is lower than the table value, so the null hypothesis is accepted. Now, we can say that there is no significant difference in the attitude of teacher trainees towards a web-based evaluation system.

Section-2

Objective 2: To find out the attitudinal differences toward Web-based Evaluation among urban and rural teacher trainees

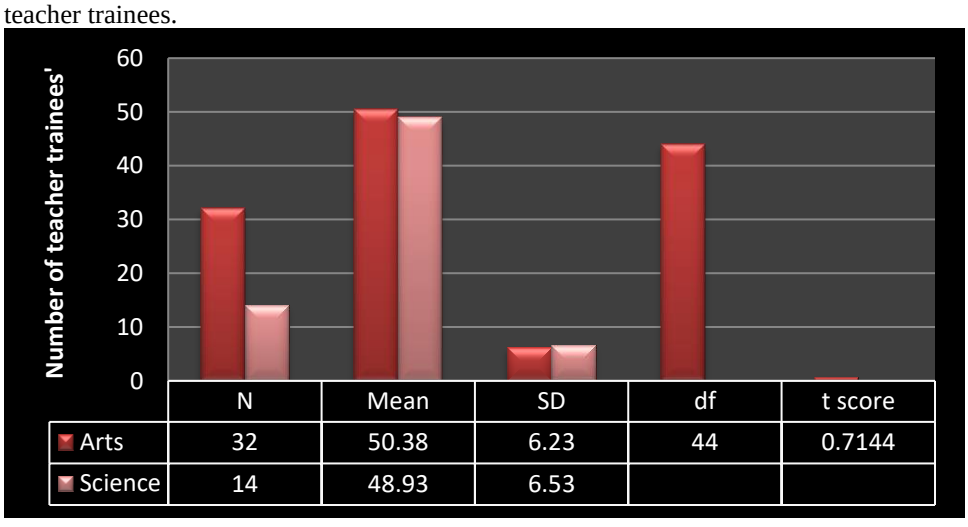
In this objective fulfillment, the researcher set a null hypothesis and then different the two means by t-test. The null hypothesis is

H_{02}: There is no significant different in the attitude towards web-based evaluation among the urban and rural teacher trainees.

Table 3: The attitudinal difference among teacher trainees concerning location (Urban/Rural)

Groups	N	Mean	∑	Df	Calculated t value	Critical t value	Ns/N	Remarks
Urban	25	49.81	6.88	44	0.1527	0.05 level=1.985	Ns at 0.05 level	Accepted Or fail to Reject
Rural	19	50.11	5.50			0.01 level=2.627	Ns at 0.01 level	Accepted Or failed to Reject

A graph shows the mean difference between urban and rural areas regarding web-based evaluation among teacher trainees.



Urban and Rural teacher trainees' attitude towards web-based

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Not significant at 0.05 and 0.01 level both

By conventional criteria, this difference is considered to be not statistically significant intermediate values used in calculations:
t=0.1527
df=44
Standard error of difference =1.902

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So, the researcher shows that the calculated t-value is 0.1527, and the critical table t-value is 0.05. The significant level is 1.985. The calculated t-value is lower than the table value, so the null hypothesis is accepted. Now, we can say that there is no significant difference in the attitude of teacher trainees towards web-based evaluation systems in urban and rural teacher trainees.

The researcher also tested at a 0.01 significant level. The calculated t-value is 0.1527, and the critical table value t-value is 2.627. The null hypothesis is accepted since the calculated t-value is lower than the table value. Now, we can say that there is no significant difference in the attitude of urban and rural teacher trainees towards a web-based evaluation system.

Section 3

Objective 3: To determine the attitudinal differences among teacher trainees in the arts and science streams regarding web-based evaluation.

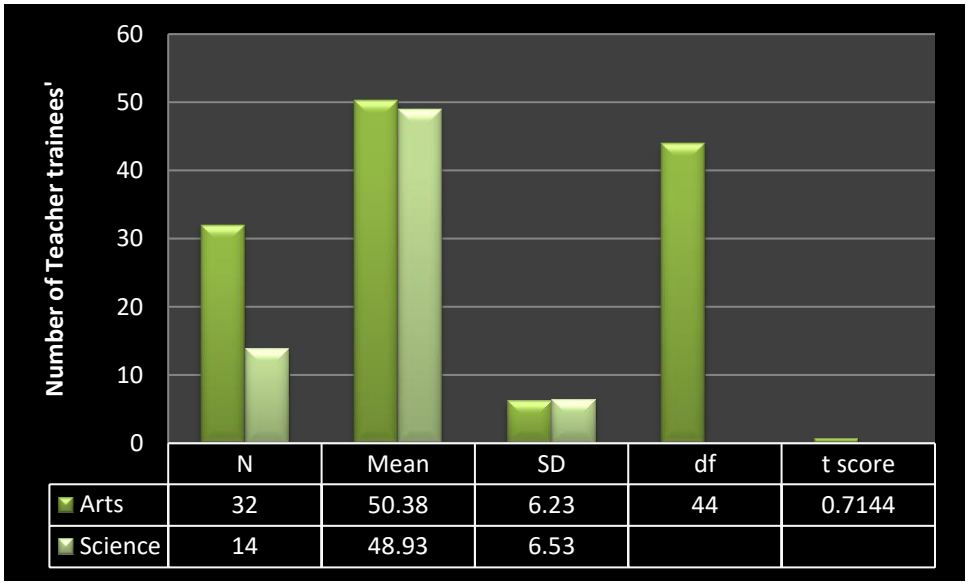
In this objective fulfillment, the researcher set a null hypothesis and then different the two means by t-test; the null hypothesis is:

H_{03}: There is no significant attitude towards web-based evaluation among the arts and science teacher trainees.

Table 4: The attitudinal difference among Teacher trainees with respect to their stream(Arts/Science).

Group	N	Mean	∑	Df	Calculated t-value	Critical t-value	Ns/N	Remarks
Arts	32	50.38	6.23	44	0.7144	0.05 level = 1.985	Ns at 0.05 level	Accepted Or Fail to reject
Science	14	48.93	6.53			0.01 level = 2.627	Ns at 0.01 level	Accepted Or Fail to Rejected

The above graph shows the mean difference between arts and science teacher trainees regarding web-based evaluation.



Arts and Science teachers' trainees' attitude towards web-based

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Not significant at 0.05 and 0.01 level both

By conventional criteria, this difference is considered to be not statistically significant intermediate values used in calculations:
t = 0.7144
df = 44
Standard error of difference = 2.025
So, the researcher shows that the calculated t-value is 0.7144, the critical table t-value is 0.05, and the significant level is 1.985. The calculated t-value is lower than the table value, so the null hypothesis is accepted. Now, we can say that there is no significant difference in the attitude of Arts and Science stream teacher trainees towards a web-based evaluation system.

The researcher also tested at a 0.01 significant level. The calculated t-value is 0.7144, and the critical table value t-value is 2.627. The null hypothesis is accepted since the computed t-value is lower than the table value. Now, we can say that there is no significant difference in the attitude of Arts and Science stream teacher trainees towards a web-based evaluation system.

8.0 CONCLUSION

The above analysis and interpretation of findings indicate that the all-B.Ed. Teacher trainees have a favourable attitude toward the Web-Based Evaluation process. Through this study, the researcher explores the attitude of teacher trainees toward a web-based evaluation system based on their gender (male and female), locality (urban and rural), and stream (arts and science). It is apparent from the above discussion that the all-teacher trainees have a favourable attitude toward Web-Based Evaluation. So, Web-based evaluation revitalizes the assessment and evaluation system tailored to their needs, pace, and learning styles.

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