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Attitude of Trainee Teachers Towards the Use of ICT in Education

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Abstract:

Studies claim that the positive mindset regarding technological advancements can enhance educational quality. This research paper is an attempt to explore the perspectives of trainee teachers on the integration of Information Communication Technology (ICT) in education. The study focuses on trainee teachers from the Aligarh district. It assesses the overall mindset of trainee teachers towards ICT and also investigates differences in their attitudes based on gender and academic discipline. The researcher employed a stratified simple random sampling method to gather data from 120 trainee teachers using a self-made attitude scale. The results indicate that trainee teachers in the Aligarh district exhibit a favorable attitude towards incorporating ICT in education. Both Art and Science stream trainee teachers have similar mindset regarding deployment of ICT in education, thus there is found no difference regarding ICT use on the bases of steam. No significant difference is observed in the attitudes of male and female trainee teachers regarding the application of ICT in education.

Keywords: Technology, ICT, Blended Learning.

Introduction:

Information Communication and Technology (ICT) has become the part and parcel in every field of human life. Its presence can be seen in hospital, aviation, railways, industries, banks, school, colleges, universities and so on. We can not imagine our life without ICT means. It is serving as a strong tool to keep pace with the modern era. Now the society has changed altogether, so there is need to integrate technology in education field efficiently to cater the need of society. Students come from different background and belong to varied society. Each student is unique in itself. It is quite difficult for a teacher to teach effectively ensuring the desired goals. Today's trainee teachers are the coming educators, so there is need to train all trainee teachers about technological tools that are used in education field to ensure the desired outcomes. It is crystal clear that the success of technological tools depend on the attitude and willingness of the user. Therefore, the researcher has examined the perspectives of trainee teachers regarding the deployment of ICT resources in education. It also

pertains to the preparedness of trainee teachers to incorporate ICT means in education to enhance desired teaching-learning experience.

Society and its demands are quite different from earlier now, therefore there is need to restructure our education system as well. To address the needs of this diverse society, it is essential to integrate ICT into education. This integration also forming new teaching methods like flipped learning in which students first of all study with help of video or e content at home, later on they discuss the problems with the teachers in school. Thus, application of ICT is reshaping every aspect of education. Even this concept has become the part of our syllabus of almost all courses. It is being taught in all professional courses. It is also having its distinct place in teaching training courses that train the teachers to incorporate technology education system effectively.

The Ministry of Education states that using ICT in the classroom facilitates easier, more engaging and scientifically grounded learning for improved comprehension. Cure and Ozdeser, 2008; Foley & Ojeda, 2008; According to Karagiorgim & Charalambous (2006), teachers hold a favorable view of ICT.

It is clear that the success of everything depends on the mindset of the users. If educators maintain a positive outlook towards incorporating ICT in education, it can certainly lead to a significant impact. Therefore, positive mindset is quite important for the successful implication of technological tools in the education. The research examines the perspectives of trainee teachers regarding whether they hold a positive attitude or not on the subject. Attitude is not the outcome of any one aspect, it shows the overall view of the user towards any particular thing. Here, the researcher puts light on how aspiring educators feel about using ICT in education covering various important dimensions for the attitude point of views.

Operational Definition:

Attitude- It denotes the positive or negative feelings, beliefs or disbeliefs and perception of usefulness of trainee teachers to adopt ICT in education.

Trainee teachers- Students who are pursuing B.Ed. from the teachers training institutes of Aligarh district.

ICT- It stands for Information communication and Technology that includes devices, software and network to facilitate digital communication, information sharing and learning.

Objectives of the Study:

- 1) To examine the attitude of trainee teachers on the implementation of ICT in education.
- 2) To understand the difference between the attitude of male and female trainee teachers regarding the application of ICT in education.
- 3) To know the difference between art and science trainee teachers' attitude regarding the application of ICT in education.

Hypothesis:

- 1) There is no significant positive attitude of trainee teachers towards the use of ICT in education.
- 2) There is no significant difference in the attitude of male and female trainee teachers towards the use ICT in education.
- 3) There is no significant difference in the attitude of art and science stream trainee teachers towards the use of ICT in education.

Delimitations

- 1) The study is delimited to Aligarh district only.
- 2) The study is confined to only those students who are pursuing B.Ed. course.
- 3) The study is delimited to male-female gender and Art-Science academic stream.

Related Literature:

Researcher went through some studies for the review purpose. A study was conducted by Kumar and Kumar in 2020, in which researcher concluded that the trainee teachers' attitude is positive for ICT but they do not enough use ICT means in education. This study also suggests to develop confidence for the proper use of these technological tools.

A study of Singh and Rana (2022) concludes that ICT competency of teacher educators also effects the attitude of trainee teachers for the application of ICT resources in education. This study also suggests to provide proper ICT training to teacher educators.

A study of Patel and Patel (2023) was conducted to know the effect of ICT integration in teacher education program in which results suggested that the attitude of trainee teachers significantly improves their skills and effectiveness in educational field. After doing this research review, researcher finds that there has been conducted many studies on ICT uses in several sectors but still it is felt that due to the emergence of new and innovative technological tools, this sorts of studies can be done again specially in relation to the Aligarh district. Recently educational institutes have enriched themselves in ICT resources. Researcher conducted this study for the teachers' training colleges that are affiliated to the Raja Mahendra Pratap Singh University. This university has both government aided and self financed colleges for this course. Therefore, it is new to conduct this study in this district to know the opinion of pupil teachers.

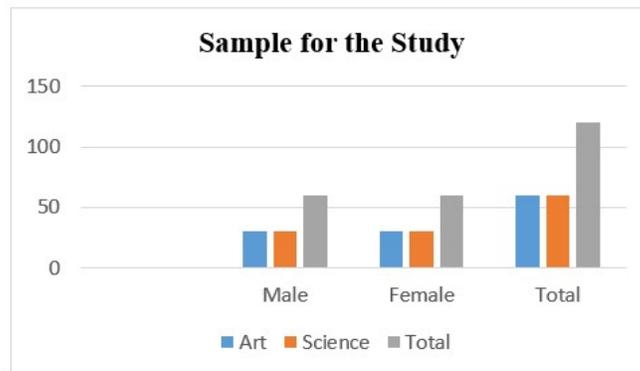
Research Methodology:

Researcher has applied the *descriptive survey method* to understand the attitudes of trainee teachers regarding the integration of ICT in education.

In this study, *population* incorporates all the trainee teachers of Aligarh district. Researcher has chosen the Government aided teachers training Colleges of Aligarh district. For the convenience of the study, the researcher has taken the *sample* of 120 trainee teachers from the different colleges as follows-

| Gender & Stream | Art | Science | Total |
|-----------------|-----|---------|-------|
| Male | 30 | 30 | 60 |
| Female | 30 | 30 | 60 |
| Total | 60 | 60 | 120 |

Table-1



Researcher has applied *stratified simple random sampling* for the selection of sample of the study.

For *Statistical analysis*, researcher has used T-Test, Mean and SD to obtain the desired findings of the research.

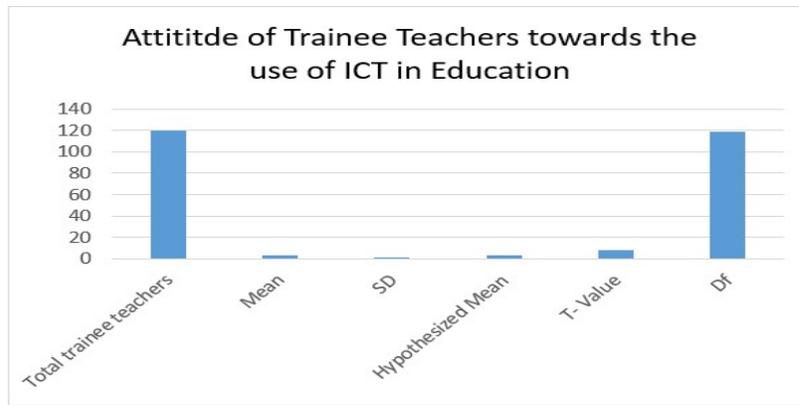
Objective 1 - To examine the attitude of trainee teachers on the implementation of ICT in education.

Hypothesis- There is no significant positive attitude of trainee teachers towards the use of ICT in education.

| Total trainee teachers | Mean | SD | Hypothesized Mean | T- Value | df |
|------------------------|------|-----|-------------------|----------|-----|
| 120 | 3.6 | 0.8 | 3.0 | 8.22 | 119 |

Table-2

Researcher has used the self-made tool of 40 items. The tool is based on 5 points likert scale. The tool covers various dimensions that are related to the opinion of the trainee teachers on the application of ICT resources in educational domain.



Researcher has applied the One- Sample t-test to determine the overall attitude of trainee teachers about the application of ICT means in education. There has been used five points likert scale to collect data, therefore researcher takes neutral midpoint 3 in the scale for the analysis of data. The present study shows 3.6 mean score that is above the attitude scale mid point or neutral value or hypothesized mean 3.0, and t value 8.22 is significantly greater than value of table 1.98 at .05 level, therefore this null hypothesis of no positive attitude is rejected.

Hence, it has been known that the trainee teachers have positive attitude towards the utilisation of ICT resources in education. That is, they are in favour of utilizing these tools in educational aspect.

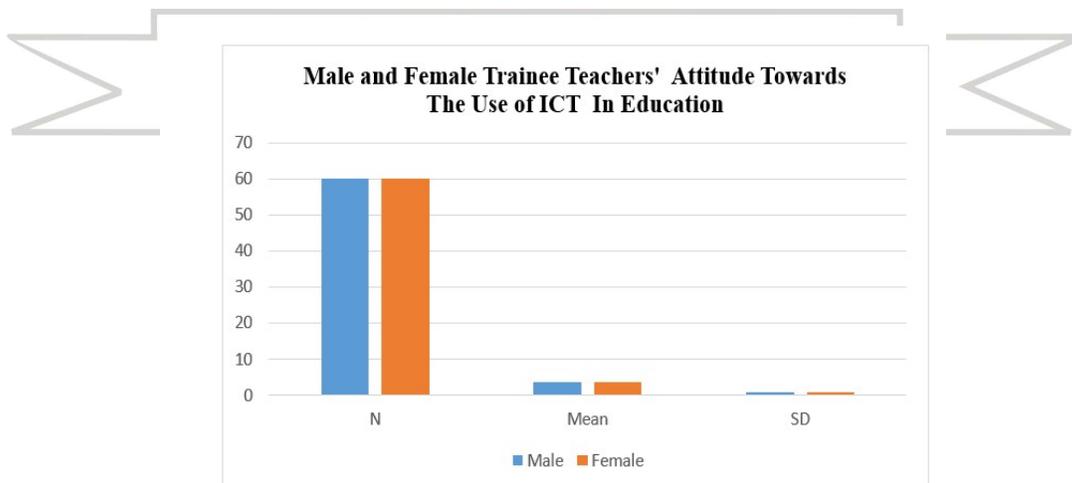
Objective 2- To understand the difference between the attitude of male and female trainee teachers regarding the application of ICT in education.

Hypothesis- There is no significant difference in the attitude of male and female trainee teachers towards the use ICT in education.

| Gender | N | Mean | SD | T-Value | Result |
|--------|----|------|------|---------|-----------------|
| Male | 60 | 3.58 | 0.82 | 0.34 | Not Significant |
| Female | 60 | 3.62 | 0.78 | | |

df=118

table-3



Here, calculated t value 0.34 lesser than the table value 1.98 at .05 level, therefore the null hypotheses is accepted that there is no significant difference in the attitude of male and female trainee teachers towards the use of ICT in education. Acceptance of this hypothesis clears that both these groups don't differ in this respect on the bases of their gender male and female.

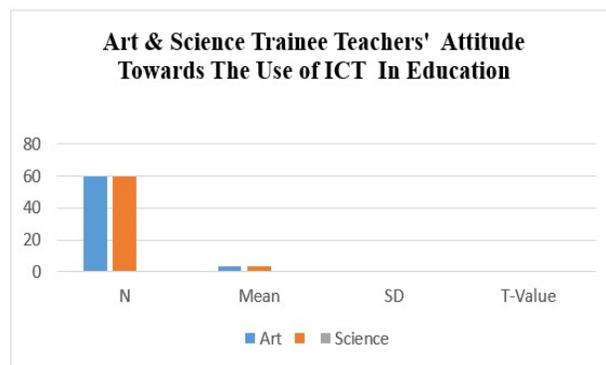
Objective 3- To know the difference between art and science trainee teachers' attitude regarding the application of ICT in education.

Hypothesis -There is no significant difference in the attitude of art and science stream trainee teachers towards the use of ICT in education.

| Stream | N | Mean | SD | T-Value | Result |
|---------|----|------|------|---------|-----------------|
| Art | 60 | 3.57 | 0.79 | 0.42 | Not Significant |
| Science | 60 | 3.63 | 0.81 | | |

df=118

table-4



This table shows calculated t value 0.42 is less than 1.98 the value of table that is not significant value, therefore the hypothesis that there is no significant difference in the attitude of male and female trainee teachers is accepted. Acceptance of this hypothesis clears that both these groups do not differ in this respect on the bases of their art and science stream.

Findings of the Study:

Researcher has conducted the study to explore the attitudes of trainee teachers regarding the ICT integration in the educational domain. A self made tool was administered to know the teachers' view on use of ICT by the researcher .Here, researcher can conclude that the ICT use in the classroom is viewed positively by the trainee teachers. They are comfortable with the technological tools. They are also ready to know about new technological tools. They acknowledge that education standard can be enhanced with the application of ICT means. Their positive attitude shows their inclination towards ICT uses for securing the better outcomes in educational prospect.

Study also seeks difference in opinion of pupil teachers for application of ICT means and tools in Education on the bases of gender male and female. Here, the study reveals that male and female trainee teachers' attitude is same, there is found no difference regarding this. Both have almost similar

positive attitude in this aspect. Thus it clears that the aspect of being male and female gender does not matter for the use of ICT means in educational prospective. Therefore both male and female trainee teachers have same opinion on the utilisation of ICT resource in educational domain.

Now Researcher studied the difference of attitude of trainee teachers on the bases of their art and science stream. Here, the results tell that both the art and science trainee teachers are same and there is found no difference on the bases of their stream for the use of ICT facilities in this regarding. Both art and science background trainee teachers have almost similar attitude. Thus, here it can be concluded that academic background stream of the trainee teachers does not make any difference on their attitude in this matter. Researcher also finds some concerns that may effect the development of attitude of pupil teachers. As it is seen that usually there is no ICT laboratory in teaches' training colleges or if it exists in any college then there is noticed that there is no proper facility available regarding ICT laboratory. This makes the adverse effect on the attitude of trainee teachers.

Suggestions and Implications of the Study:

This study shows how trainee teachers feel about the inclusion of ICT into the educational domain. The research reveals that trainee teachers possess a positive view for the deployment of ICT for securing the better outcomes in education. They are inclined towards the application of these ICT resources. The study also brings into light that teachers themselves acknowledge this view that application of ICT means bring improvement in quality of education. Thus, it is inevitable to provide proper ICT Training to the trainee teachers for the effective use of its various tools in enhancing quality of education. For this teachers educators must have sound knowledge about different educational ICT means that can be applied effectively to secure outcomes in a better way, then trainee teachers can be skilled for the use of these resources altogether. Therefore it is suggested that it is also mandatory to train teacher educators to train the trainee teachers about ICT tools. Study finds that in most of the teachers' training institutes there is found no ICT lab. The study also suggests that the Teachers training institute must maintain an ICT lab for the proper training of trainee teachers. This study also suggest that there should be an ICT laboratory equipped with proper facility that may help in the development of the attitude of the trainee teachers for the proper application of ICT resources.

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