



Study Of Awareness Towards Mobile Learning Of B.Ed Trainees Of Lucknow District

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SUMMARY :

The present study is a study of the awareness of mobile-learning of B.Ed trainees of Lucknow district. For this study, a sample of B.Ed trainees studying in Lucknow district has been taken. This includes government and non-government teachers training colleges of Lucknow district. 80 male trainees and 80 female trainees were selected from all teacher training colleges, in which a total of 160 trainees were selected for the research. Hypotheses such as, there is no significant difference in the awareness of mobile learning among the male trainees studying in B.Ed course in government and non-government colleges. There is no significant difference in the awareness towards mobile learning of the female trainees studying in B.Ed course in government and non-government colleges. There is no significant difference in the awareness towards mobile learning of the all trainees studying in B.Ed course in government and non-government colleges. These hypotheses were tested and the results were presented through charts, tables, etc. This study is helpful in increasing the awareness of B.Ed trainees towards mobile learning and making important contribution in the field of education.

Key words - Technology, Mobile-Learning, Study, B.Ed trainee, Teachers training college, Student Mobile phone, Virtual library, Self-reliance.

Introduction :

The growth of knowledge is unprecedented, knowledge is no longer limited to books, and the use of technology related applications such as websites, apps, video live chat, mobile learning, etc. is increasing daily. Technology has replaced the use of paper and pen and is now integrated with everything humans do. Technological affordances have changed the way students learn, especially in higher education. For example, while in the traditional classroom setting students sit and listen to lectures given by lecturers, mobile learning provides them with the option of listening to a live lecture or recording or downloading it and watching it at their own pace.

Mobile learning has become a defining force in the lives of students, and its relevance is spreading across every field in some form or the other. Mobile learning allows flexible learning, because of the blend of information and communication technologies (ICT), providing education anytime and anywhere. Mobile learning also takes care of the administration of educational systems and helps in enhancing the communication between institutions and students. Mobile learning (M-learning) is quite popular among the new generation.

Description of the problem :

Study of awareness towards mobile learning of B.Ed trainees of Lucknow district.

Operational definitions of specific terms used in the study Lucknow :

Lucknow is the capital of the Indian state of Uttar Pradesh. Lucknow is situated at an altitude of about 123 meters (404 ft) above sea level. Lucknow district covers an area of 2,528 square kilometers (976 sq mi) Bounded on the east by Barabanki, on the west by Unnao, on the south by Rae Bareilly and on the north by Sitapur and Hardoi, Lucknow is situated on the north-west bank of the Gomti River. Hindi is the main language of the city and Urdu is also widely spoken.

B. Ed.

The full name of B.Ed. is Bachelor of Education. This is a professional teacher training course.

Mobile-Learning

When mobile device is used for teaching-learning or study-teaching then this is called mobile learning or m-learning. M-learning means the use of mobile by the learner for teaching and learning. The main characteristics of M-learning are access to unlimited learning material and subject matter through mobile devices.

“Mobile learning is a type of learning model that allows learners to access learning content anywhere and anytime using mobile technologies and the Internet.” - (Lan & C, 2010)

Awareness

Awareness means to be alert. A person who is aware of new activities and changes taking place in society and technology is called aware.

Objectives of study :

To study the awareness of B.Ed trainees towards mobile learning-

1. To study the awareness of mobile learning of male trainees studying in B.Ed course in government and non-government colleges.
2. To study the awareness of mobile learning among female trainees studying in B.Ed course in government and non-government colleges.
3. To study the awareness of mobile learning of all trainees studying in B.Ed course in government and non-government colleges.

Hypotheses :

The presented research study focuses on the following hypotheses-

1. There is no significant difference in the awareness of mobile learning among male trainees studying in B.Ed course in government and non-government colleges.
2. There is no significant difference in the awareness of mobile learning among female trainees studying B.Ed course in government and non-government colleges.
3. There is no significant difference in the awareness of mobile learning among the all trainees studying in B.Ed course in government and non-government colleges.

Delimitation of the study :

The limitations of the present study are as follows

1. The presented research study is limited to the trainees studying in B.Ed course in Lucknow district.
2. The presented research study is limited to government and non-government colleges running B.Ed course.
3. 160 trainees studying in B.Ed course have been selected for the presented research study.
4. Trainees studying in the second semester of B.Ed course have been selected for the present research study.

Summary of literature review and identified research gaps :

The existing and comprehensive literature review provided insight into the current state of study of trainees' awareness of mobile learning. This was useful in highlighting some of the key characteristics of mobile learning and proved useful in analyzing the future scope of the study. Compared to the rapid growth of mobile technologies, awareness of mobile learning the rate is slow. Research work conducted in colleges in the past has only included the learner's or student's perspective regarding mobile learning, ignoring the teacher's perspective. However, it is very important to understand it from the teacher's perspective, as teachers are the originators of mobile learning platforms. Past research trends also show that there has been an increased interest among researchers in exploring the awareness of mobile learning, yet its pace is slow in the education sector. This may be due to limited digital competency of teachers, lack of adoption of digital education, and concerns regarding security and privacy. The success of mobile learning depends on how teachers and students understand mobile learning. There are three major stakeholders of mobile learning: teachers, students and university administration and each of them plays a different role in the mobile learning environment. Therefore, their perceptions towards mobile learning will also differ. Thus, it is necessary to incorporate acceptance factors from all three stakeholders. University administration should pay attention to the needs and perceptions of teachers and students regarding mobile learning to enable its successful implementation. However, none of the studies conducted so far have been comprehensive enough to include all three stakeholders in its scope.

Taking guidance from the researcher's own experiences and interactions with higher education teachers and students, it was found that several important factors have been overlooked when considering teachers' and students' perceptions. Factors such as security, privacy, authority and constructive beliefs regarding student learning have never been explored from the teachers' perspective. Similarly, the role of parents as an important antecedent of acceptance has also been overlooked. Acceptance is governed by various factors which may be personal, social or environmental or a combination of the three. Therefore, it is important to conduct a comprehensive study of acceptance to maximize the success of any technology implementation. Therefore, the objective of this study is to clarify the trainees' awareness of mobile learning through mini-research. The literature review also revealed a lack of standardized scales to measure trainees' awareness of mobile learning. In this study, I have used a self-made questionnaire to study the awareness of mobile learning of B.Ed trainees. Which can be used in future studies.

Research methodology :

The nature of the study is descriptive. Under descriptive research, more emphasis and importance is given to the study of present events, facts and relationships and it is found out. What is their present form? Therefore, in the presented research, survey method has been used under descriptive research.

Study variables :

Independent variables – Trainees, Government, Non-Government.

Dependent Variable – Mobile Awareness.

Population

The total number of objects or people with which research is concerned is called population. All those units which come under the field of study are collectively called population. In the presented research, B.Ed trainees studying in government and non-government teachers training colleges of Lucknow district are the population of the presented research study.

Sample

Sample is that small part of the population which is selected by the researcher for actual study.

"A specimen is a miniature of its entire group"- P.V. Yug

Sampling Method

In the presented study, 'random selection' method has been used at the level of teachers training college. In this method, units are selected from the population in such a way that each unit has equal probability of selection. One person's choice does not interfere with another person's choice

Sampling structure

For the proposed research study, 5 government and 5 non-government teachers training colleges of Lucknow district have been included. 80 female and 80 male trainees have been randomly selected from among the trainees studying in B.Ed. course of Teachers Training Colleges. Thus a total of 160 trainees have been selected for the present research.

Statistical techniques used

The researcher has used T-test to test the hypotheses of his small research, the statistical methods used are as follows-

Mean

It is also called arithmetic average which represents the entire scores/marks distribution. In the presented mini-research, mean value has been used for hypothesis testing. Which is calculated by the following formula-

$$M = \frac{\sum X}{N}$$

Where-

M = Mean

\sum = Total sum

X = Score

$\sum X$ = Total (Sum of Scores)

Standard Deviation :

Standard deviation is a tool which can be used only to measure the spread of a particular score distribution. It is the most commonly used coefficient for standard deviation. The square root of the average of the squares of deviations of all the scores taken from their mean is called standard deviation. Its value is always positive. The formula to find standard deviation is as follows.-

Formula –

$$S.D. = \frac{\sqrt{\sum d^2}}{N}$$

S.D. = Standard deviation

Σ = Total sum

Σd^2 = The square of the deviation of each score from the mean of its score distribution and the total sum of the squares of each deviation.

N = number of different scores of the score distribution

Standard Error Deviation :

Standard Error Deviation (SED) test is used to determine the significance of the standard deviation of two samples. After this test it becomes known how valid the test is. This is known from the following formula-

$$SE_D = \sqrt{\frac{\sigma_1^2}{N_1}} + \sqrt{\frac{\sigma_2^2}{N_2}}$$

Where-

SE_D = Standard error deviation

σ_1^2 = Square of standard deviation of the first sample.

σ_2^2 = Square of standard deviation of the second sample.

N_1 = Number of different scores of the score distribution of the first sample.

N_2 = Number of different scores of the score distribution of the second sample.

T- test (t)

$$\text{Formula} - t = \frac{M_1 - M_2}{SD \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$$

M_1 = Mean of first trial

M_2 = Mean of second trial

SD = Standard deviation

N_1 = Total number of first group

N_2 = Total number of second group

Degrees of freedom

Formula – df = ($N_1 - 1$) + ($N_2 - 1$)

df = Degrees of freedom

N_1 = Total number of first group

N_2 = Total number of second group

Analysis and interpretation of data :

In the previous chapter, the researcher has discussed about the research methods and in this chapter, the researcher has tried to focus on the topic of data analysis and their interpretation and interpretation. In the presented thesis, the data has been organized, analyzed and interpreted on the basis of objectives and hypotheses. The data have been arranged with the help of mean and standard deviation distribution table. A short method of finding the mean and standard deviation has been used so that appropriate conclusions can be reached in a short time. In the present study, the mobile learning of B.Ed trainees of Lucknow district Awareness towards learning has been studied with the help of t-test and finally meaning has been made on the basis of hypotheses.

Objective-1

To study the awareness of mobile learning of male trainees studying in B.Ed course of government and non-government colleges.

Null hypothesis First

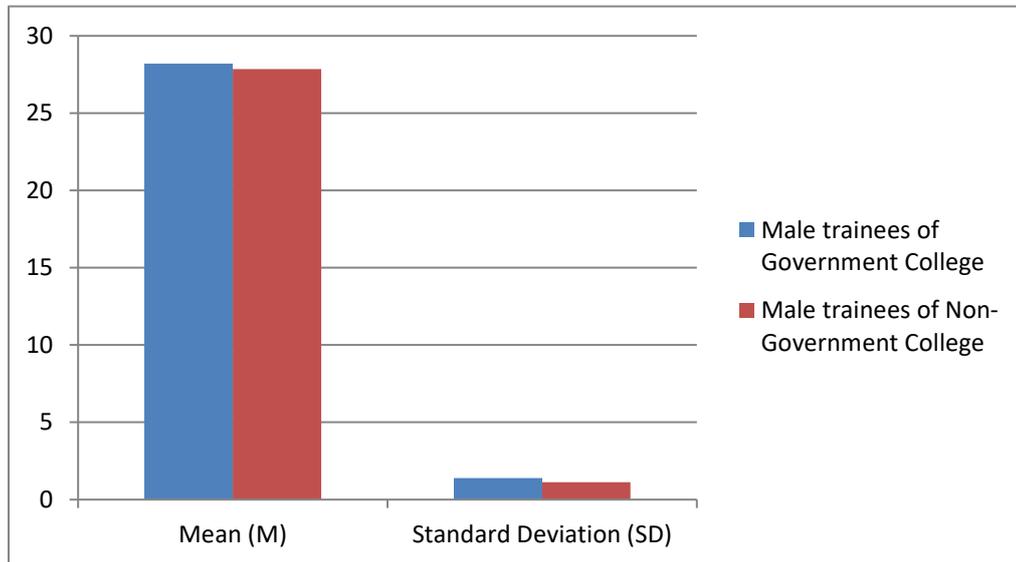
There is no significant difference in the awareness of mobile learning among the male trainees studying in B.Ed course in government and non-government colleges.

Table Number-1

Group	Number (N)	Mean (M)	Standard Deviation (SD)	T Value		Level of Significance
				Table value	Calculated value	

Male trainees of Government College	40	28.2	1.40	1.990	0.6189	0.05 Rejected
Male trainees of Non-Government College	40	27.85	1.13			

Graph number-1



Mean and standard deviation of male trainees studying in government and non-government colleges

It is clear from the above table No.- 1 that the mean of government male trainees is 28.2 and standard deviation is 1.40. Similarly, the mean of non-government male trainees is 27.85 and standard deviation is 1.13. The calculated value of t for both groups is 0.6189 which is less than the tabular value of 1.990 at 0.05 significance level, hence it is not significant at 0.05 significance level.

Therefore, the null hypothesis is that there is no significant difference in the awareness of mobile learning of male trainees studying in B.Ed course in government and non-government colleges, is accepted.

Objective

To study the awareness towards mobile learning of female trainees studying in B.Ed course of government and non-government colleges.

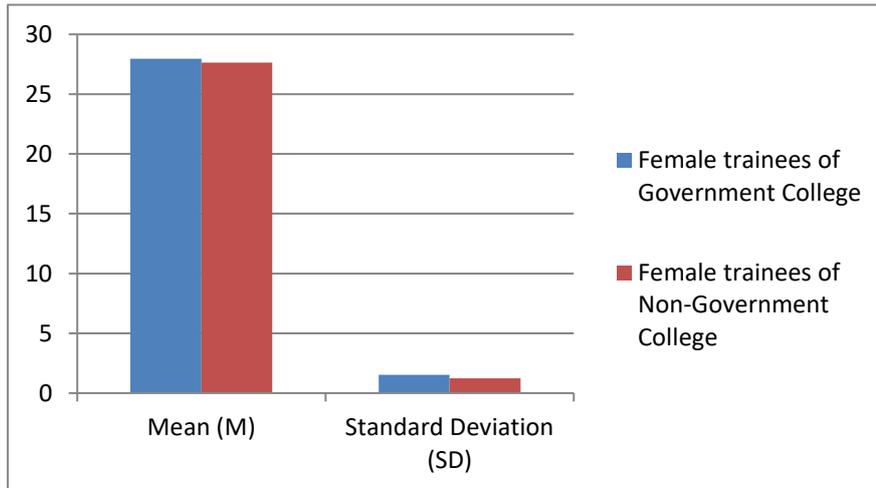
Null Hypothesis Second

There is no significant difference in the awareness of mobile learning of female trainees studying in B.Ed course in government and non-government colleges.

Table No-2

Group	Number (N)	Mean (M)	Standard Deviation (SD)	T Value		Level of Significance
				Table value	Calculated value	
Female trainees of Government College	40	27.95	1.532	1.990	0.4846	0.05 Rejected
Female trainees of Non-Government College	40	27.65	1.236			

Graph number-2



Mean and standard deviation of female trainees studying in government and non-government colleges

It is clear from the above table No.- 2 that the mean of government female trainees is 27.95 And the standard deviation is 1.532. Similarly, the mean of non-government female trainees is 27.65 and standard deviation is 1.236. The calculated t value for both groups is 0.4846 which is less than the t table value of 1.990 at 0.05 significance level, hence it is not significant at 0.05 significance level.

Therefore, the null hypothesis that there is no significant difference in the awareness of mobile learning of female trainees studying in B.Ed course in government and non-government colleges, is accepted.

Objective

To study the awareness towards mobile learning of all trainees studying in B.Ed course of government and non-government colleges.

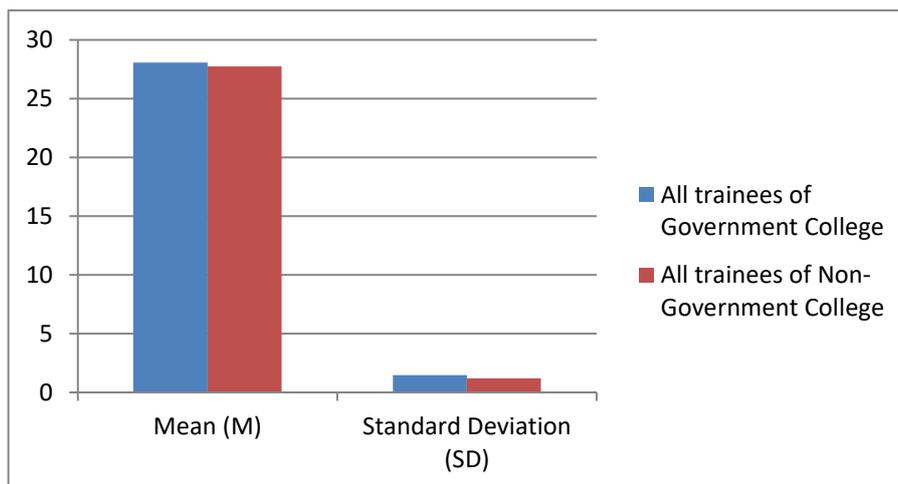
Null Hypothesis Third

There is no significant difference in the awareness of mobile learning of all trainees studying in B.Ed course in government and non-government colleges.

Table No-3

Group	Number (N)	Mean (M)	Standard Deviation (SD)	T Value		Level of Significance
				Table value	Calculated value	
All trainees of Government College	80	28.075	1.4728	1.984	0.7723	0.05 Rejected
All trainees of Non-Government College	80	28.075	1.1885			

Graph number-3



Mean and standard deviation of all trainees studying in government and non-government colleges

It is clear from the above table No.- 3 that the mean of government all trainees is 28.075 and standard deviation is 1.4728. Similarly, the mean of non-government all trainees is 27.75 and standard deviation is 1.1885. The calculated t value for both groups is 0.7723 which is less than the t table value of 1.984 at 0.05 significance level, hence it is not significant at 0.05 significance level.

Therefore, the null hypothesis is that there is no significant difference in the awareness of mobile learning of all trainees studying in B.Ed course in government and non-government colleges, is accepted.

Conclusion and Explanation

Present research work, to study the awareness of mobile learning of B.Ed. trainees of Lucknow district, after administering self-made questionnaire instruments on a randomly selected sample from the study population, the results of the study were obtained by statistical analysis of the data. After observing these results, the following conclusions have been obtained-

1. From the test and result of the first hypothesis, it has been concluded that there is no significant difference in the awareness of mobile learning among the students studying in B.Ed course of government and non-government colleges. Therefore, in conclusion, it can be said that similarity has been found in the awareness of mobile learning among the male trainees studying in B.Ed course in government and non-government colleges.
2. From the test and result of the second hypothesis, it has been concluded that there is no significant difference in the awareness of mobile learning among the student teachers studying in B.Ed course of government and non-government colleges. Therefore, in conclusion, it can be said that similarity has been found in the awareness of mobile learning among the student teachers studying in B.Ed. course of government and non-government colleges.
3. From the test and result of the third hypothesis, it has been concluded that there is no significant difference in the awareness of mobile learning of the trainees studying in government and non-government B.Ed courses. Therefore, in conclusion, it can be said that similarity has been found in the awareness of mobile learning among the trainees studying in B.Ed courses of government and non-government colleges.

Educational Implications

Based on the guidelines for the presented research management and the findings obtained within the limitations of the study, the researcher finds this study useful from the educational point of view in the following ways:

1. Based on the findings of a small research study, male trainees and can be made aware of mobile learning.
2. Mobile learning is an overly simplistic approach for the present generation. Teachers and policy makers should adopt a positive approach on this.
3. The mobile learning approach is creative in nature. It is meaningful in increasing the creativity of trainees, hence it is necessary that activities related to mobile learning should be included in the curriculum of future of trainees.
4. Portability is a special feature of mobile devices which is highly useful for learning and teaching, hence mobile should provide skills to use it in a multifunctional manner in teaching.

Suggestions for future research

Through the presented mini-research, the researcher has tried to study the awareness of mobile learning of B.Ed trainees of Lucknow district on a very small scale. As we can say that no work can be given the status of perfection, because every work or thought gets affected according to time and circumstances. There are new changes in any work's creation or originality with time. Any research should not be considered final and complete. Therefore, there are still huge possibilities or points in the presented research area on which research work can be done in the near future. Whose details are as follows-

1. A comparative study can be done on the awareness of mobile learning of B.Ed trainees studying in regular B.Ed course and distance B.Ed course.
2. Apart from Lucknow district, this research work can be done in other districts of Uttar Pradesh.
3. The criteria can be made wider.
4. The presented research is limited to mobile devices only. In future research, other devices like laptop, tablet and iPad etc. can be included.
5. Study of trainees studying in B.Ed colleges located in rural and urban areas. Can be done in future research.
6. Awareness towards mobile learning can be studied at higher secondary level.
7. Critical and experimental studies can be done on mobile learning awareness.
8. The attitudes of parents and teachers towards mobile learning can be studied.
9. This subject can also be chosen for Ph.D research study.
10. Other variables can also be included in this

Suggestions for research achievements

The awareness about mobile-learning among the trainees studying in B.Ed course in Lucknow district is relatively low. Following are the necessary suggestions to make the trainees aware about mobile-learning:

1. Instructor teachers should rehearse the plans made for mobile learning in the college.
2. Programs related to awareness about mobile-learning should be organized for the trainers at the university level and the trainers should make the B.Ed trainees aware at the college level.
3. Teacher trainers should be encouraged to enroll in MOOCS and SWAYAM PRBHA courses.
4. Information about online lecture series and channels available by subject experts should be given to gain additional knowledge.
5. Mobile education related activities and competitions should be conducted from time to time. Lectures available on MOOCS and SWAMPBHA channel should be made bilingual.
6. A server room should be constructed in every college for the use of mobile learning.
7. The state and Indian government should ban websites that promote misleading and obscenity.
8. Sports – Students and parents should be encouraged for mobile learning by adopting the principle of education through sports.
9. Teacher trainers should be provided with the skills to use mobile phones in various ways in the classroom.

BIBLIOGRAPHY :

1. Das, Anup Kumar (2011) On the emergence of open educational resources and lifelong learning in India. Its impact Library High Tech News, 28(5), 10-15
2. Aggarwal, L. P. (2007) Modern Educational Research Leading Publishers and Distributors, New Delhi
3. Singh, D. and Z. A. Bakker (2006) Mobile Learning in the Wireless Classroom
4. Bruns, A. (2007) Beyond the gap: Reconfiguring education for the user-led age Paper presented at ICE3: Ideas in cyberspace education: the digital divide
<http://snurb.info/>
5. Cheong, C., and Schuler, C. (2010) Learning: Is there an app for it? Examining young children's use and learning with mobile devices and apps New York: Joan Gage Cooney Center at Sesame Workshop
<http://pbskids>
6. Cook, J., Bradley, C., Lance, J., Smith, C., and Haynes, R. (2007) Generating learning contexts with mobile devices. In Pachler (ed.), Mobile learning: towards a research agenda (55–74) London: WLE Centre, LOE
7. Cook, J., Pachler, N., and Bachmeyer, B. (2011) Ubiquitous mobility with mobile phones: A cultural ecology for mobile learning. E-Learning and Digital Media, 8(3), 181-196.
<http://dx.doi.org/10.2304/elea.2011.8.3.181>
8. Okai-Ugbaje, S. Ard Jejuska, K. And Imran, A. (2022) A Mobile Learning Framework for Higher Education in Resource Constrained Environments Education and Information Technology, 1-23
9. Kim Voice, J. (2020) Reconceptualizing and repositioning the role of mobile learning in youth sustainable development. Information Technology, 26(4), 711-727.
10. Kumar, R. Sampath (2019) Mobile Learning Awareness among B.Ed. Students, Infocera Research VOL 8 Issue 12, 2019
<http://infokara.com>
11. Kumar, G. Praveen and Basimlairaja, M. (2019) Mobile Learning Importance among New Generation
<https://www.researchgate.net/publication/332269385>
12. Shukri, Naji Aljaza and Razak, Abdul Yaqoob (2011) Students' Awareness and Requirements. Of Mobile Learning Service In Higher Education Environment
<https://www.researchgate.net/publication/258341923>