



STUDY OF USAGE OF MOBILE LEARNING AMONG THE PRE-SERVICE TEACHERS OF RANGAREDDY DISTRICT

Mr. Sayam Deepathi

Assistant Professor, Malla Reddy College of Teacher Education (M.Ed), Hyderabad

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ABSTRACT

Mobile learning allows educational institutions to expand their educational services beyond the boundaries of their classrooms right into the reading rooms of their learners. The present investigation is taken up with aim to assess the usage of mobile learning by pre-service teachers in Ranga Reddy district and to assess the usage of mobile learning by pre-service teachers with respect to their gender, management and methodology. This investigation is employed by descriptive survey method on sample size of 200 drawn through purposive method of sampling. A researcher developed tool was employed to gather data to study. This tool consists of 15 statements, where respondents are instructed to opt with one or all options method of responding. Data analysis is done by using simple descriptive statistics and analyzed in two sections whereas Section-A deals with analysis of data (overall) and Section-B deals with analysis of data with respect to their gender, management and methodology. The major findings include, most of the pre-service teachers are using chrome app (90%) on their mobile tools and for academic purpose they are using what's app (87%), for presentation MS Power point (88.5%) for taking pictures (70%) for making videos (60%) doing assignments (56%) and also using for personal use (70.5%). They are using their university website occasionally to check the result (66%) and for exam syllabus (60.5%).

KEYWORDS: Mobile Devices, Mobile Learning, Digital Learning, and Pre-service teacher

INTRODUCTION

"Technology can become the "wings" that will allow the educational world to fly farther and faster than ever before—if we will allow it."

Mobile Learning, often shortened as M-learning, is the concept of gaining education on various available contexts by the usage of social media interactions and online content from using portable electronic media. The advantage with this technology is that it doubles up as a convenient form of distance education and also a time managing tool, as students have the option to avail the education at a time of the day as per their liking. When we say M-learning technologies, it is generally a blanket term which also includes other hand-held devices like

- MP3 Players
- Mobile Phones
- Smartphones
- Tablets and
- Phablets (a tablet which can also operate as a calling device)

The feature that M-learning focuses the most is on providing the learners a flexibility of time and place. The content must be made available for access according to the ease and convenience of the learner. To achieve this, many mobile tools have been created to engage and assist learners in finding new learning materials and sources. M-learning is the most convenient form of online educational platform today, simply because content can be accessed from any place on demand.

APPROACHES OF MOBILE LEARNING

Mobile learning has different approaches. They are:

- Class room
- Class management
- Distance learning
- Podcasting
- Learning work



- Lifelong Learning
- Self –Learning

TYPES OF MOBILE LEARNING

- Apps based learning
- Augmented reality based learning
- Experienced based learning
- Content delivery based learning
- Game based learning
- Social learning

REVIEW OF RELATED LITERATURE

In some other researches it is found that the pre-service teachers were confident that the use of mobile devices will create significant climate change in the area of teaching (Aobrefuna, C. & Offorma, G.C. 2014). The pre-service teacher educators were reflected positively on the effectiveness of mobile learning applications in teaching area (Osuji 2017). 87% of the variance in pre-service teachers' intention to adopt mobile learning practices and their roles in pre-service teacher training are important to develop effective contents (OzlemBaydas & Rabia vilmaz.M 2016). Particularly video lessons are more effective in the field of learning using mobile learning (Hemabala J. & Suresh, E.S.M. 2013).

METHODOLOGY

In the present investigation “**Descriptive Survey Method**” is adopted to investigate into intended area of Research.

OBJECTIVES

1. To evaluate the usage of mobile learning by pre-service teachers in Ranga Reddy district.

RESEARCH QUESTIONS

1. How are the pre-service teachers using their mobile device for everyday studying purpose?
2. How are the pre-service teachers using mobile devices during lesson preparation?
3. How often pre-service teachers are using their mobile devices in a day?
4. How often pre-service teachers visiting their university website?

VARIABLES

Dependent variable	Independent variable
Mobile learning	Pre-Service Teachers

SAMPLE

A sample of 200 pre-primary school teachers were taken as sample by using Purposive sampling technique.

TOOL

The present study tool is a kind of questionnaire consist of 15 statements and respondents are asked to opt one or all options that are applicable to the participants.

STATISTICAL TECHNIQUES USED

Descriptive and inferential statistics are used.

DATA ANALYSIS & FINDINGS**1. USAGE OF MOBILE LEARNING AMONG PRE-SERVICE TEACHERS (OVERALL)**

Objective-1: To assess the usage of Mobile learning among pre-service teachers of Ranga Reddy district.

1. USAGE OF MOBILE DEVICE FOR EVERYDAY STUDY PURPOSE

Research Question-1: How are the pre-service teachers using their mobile device for everyday studying purpose?

**Table.1****“Showing frequencies and percentages on usage of mobile devices by pre-service teachers for every day studying purpose”**

Responses	During lessons	Between lessons	For independent studying	For peer discussion	On projects only	I don't use my mobile device for studying purposes
Frequency	48	27	128	39	77	6
Percentage	24%	13.5%	64%	19.5%	38.5%	3%

Interpretation

From the above table 1, It is observed that 24% of pre-service teachers are using their mobiles during lessons every day whereas 13.5% are using in between lessons, 64% are using it for independent study, 19.5 % are using for their peer discussions and 38.5 % pre-services teachers are using for their projects whereas only 3 % of them are not using mobile devices for studying purpose. Therefore, most of the pre-service teachers are using their mobile device for independent studying followed in projects and in between lessons.

2. USAGE OF MOBILE DEVICES DURING LESSONS**Research question2:** How are the pre-service teachers are using mobile devices during lesson preparation?**Table.2****“Showing frequencies and percentages on usage of mobile device by pre-service teachers during lessons”**

Responses	I don't use my mobile device in lesson	Only for school/learning purpose	Mostly for school/learning purposes	Only for non-school/learning purposes	Mostly for non-school/learning purposes	An even mixture of learning and personal use
Frequency	11	25	64	9	12	141
Percentage	5.5 %	12.5%	32%	4.5%	6%	70.5%

Interpretation

From the above table 2, It is inferred that 5.5% if the pre-service teachers are not using their mobile device in lessons. Whereas 12.5% of them are using only for school purpose 32% of them are using mostly for learning purpose 4.5% of them are using for non-school purposes 6 % of them are using for non-school purpose/learning purposes and 70.5% of them are using for even mixture of learning and personal .Therefore, 70.5% of the pre-service teachers are using their mobile device for an even mixture of learning and personal use.

3. USAGE OF MOBILE OF AN AVERAGE ON A GIVEN DAY**Research question 3:** How often pre-service teachers are using their mobile devices in a day?**Table. 3****“Showing frequencies and percentages on usage of mobile device often on average by pre-service teachers on a given day”**

Response	0-1 hr.	1-2 r.	2-3 hr.	3-4 hr.	5 & above hrs.
Frequency	27	44	56	46	27
Percentage	13.5%	22%	28%	23%	13.5%

Interpretation: From the above table 3, It is observed that 13.5 % of pre -service teachers are using their mobile device often on average for 0-1 hour on any given day where as 22% of them are using it for 1-2 hours, 28% are using it for 2-3 hours, 23% of them are using for 3-4 hours, 13.5% are using mobile device for 5 and above hours in any given day. Therefore, Most of the pre-service teachers are using their mobile device for 2-3hrs in a given day followed by 1-2hrs and 3-4hrs.

4. VISITING OF UNIVERSITY WEBSITE OFTEN BY PRE-SERVICE TEACHERS**Research question 4:** How often pre-service teachers visiting their university website?

**Table.4**

“Showing frequencies and percentages on visiting the university website often by pre-service teachers on their mobile device”

Response	Every day	Every week	A Few times a week	Occasionally	Never seen
(Frequency)	9	13	36	127	15
Percentage	4.5%	6.5%	18%	63.5%	7.5%

Interpretation

From the above table 4, It is noticed that 4.5% of pre-services teachers are often visiting their university website everyday where as 6.5% of them are visiting it every week, 18 % of them are visiting few times a week 63.5% of them are visiting it occasionally and 7.5% of pre-service teachers never seen their university website in their mobile devices. Therefore, most of the pre-service teachers are visiting their university website occasionally followed by few times a week.

5. USAGE OF FEATURES OF UNIVERSITY WEBSITE ON MOBILE DEVICE

Research question: For what purpose pre-service teachers are using university website on their mobile device?

Table.5

“Showing frequencies and percentages on the usage of features on university website over mobile devices by pre-service teachers”

Response	I Don't use	Results	Academic calendar	Exam syllabus	Events/occasions
Frequency	8	132	56	121	19
Percentage	4%	66%	28%	60.5%	9.5%

Interpretation:

From the above table 5, It is observed that 4% of pre-service teachers are not using any feature on university website over their mobile device where as 66% of them are using it for checking the results,28% of them are using it for academic calendar, 60.5% of them are using it for checking the exam syllabus and 9.5% of the are using their mobile device on university website for events/occasion. Therefore, most of the pre-service teachers are using the results feature in their university website followed by exams syllabus and academic calendar.

6. USAGE OF MOBILE APPLICATION FOR ACADEMIC PURPOSE

Research question: Which mobile application are they using on their mobile device for academic purpose?

Item 6: Which mobile browser/application do you use on your mobile device for your academics?

Table .6

“Showing frequencies and percentages on the usage of mobile applications on their mobile devices for academics by pre-service teachers”

Response	Don't know /default browser	Chrome	Safari	UC browser	Firefox
frequency	6	180	8	31	16
Percentage	3%	90%	4%	15.5%	8%

Interpretation

From the above table 6, It is inferred that 3% of the pre-service teachers are not using any default application on their mobile device for academics where as 90% of them are using chrome, 4% of them are using safari app 15.5% of them are using UC browser and 8% of them are using Firefox application in their mobile device for academics. Therefore ,most of the pre-service teachers are using chrome application in their mobile device for academics .

7. USAGE OF MOBILE DEVICE TO FIND AND ENROLL TO COURSE AREAS

Research question7 : Do pre-service teachers are able in finding and enrolling to course areas without difficulty on their mobile device ?

**Table.7**

“Showing frequencies and percentages on finding and enrolling to course areas without difficulty on their mobile device by pre-service teachers”.

Responses	Strongly agree	Slightly agree	Unsure/don't know	Slightly disagree	Strongly disagree
frequency	39	109	22	18	12
Percentage	19.5%	54.5%	11%	9%	6%

Interpretation

From the above table 7, It is noticed that 19.5 % of pre-service teachers are agreed strongly in finding and enrolling to course areas without any difficulty on their mobile device where as 54.5 % of them agreed slightly, 11 % of them are unsure, 9 % of them are disagreed slightly and 6 % of them are strongly disagreed in finding and enrolling course areas without any difficulty on mobile device. Therefore, most of the pre-service teachers agreed slightly in finding and enrolling to course areas in their mobile devices.

8. USAGE OF DISCUSSION BOARDS WITH OUT ANY DIFFICULTY

Research question 8: How far pre-service teachers utilizing discussion boards on their mobile devices without any difficulty?

Table.8

“Showing frequencies and percentages on utilizing of discussion boards on their mobile device by pre-service teachers without any difficulty”

Response	Strongly agree	Slightly agree	Unsure/don't know	Slightly disagree	Strongly disagree
(frequency)	27	88	55	21	9
Percentage	13.5%	44%	27.5%	10.5%	4.5%

Interpretation:

Form the above table 8, it is observed that 13.5% of the pre-service teachers are agreed strongly in utilizing discussion boards without difficulty on their mobile device where as 44% of them are agreed slightly, 27.5% of them are unsure, 10.5% of them are disagreed slightly and 4.5% of them are disagreed strongly in utilization of discussions boards on their mobile device. Therefore, most of the pre-service teachers agreed slightly in utilizing discussion boards on their mobile device.

9. SEARCHING AND FINDING INFORMATION IN PARTICULAR WEBSITE

Research question 9: Does pre-service teachers are able in finding and searching information in particular website on their mobile device?

Item 9: I am able to search for and find information in particular website/source on my mobile device.

Table .9

“Showing frequencies and percentages on searching and finding information in particular website by pre-service teachers on their mobile device”

Response	Strongly agree	Slightly agree	Unsure/don't know	Slightly disagree	Strongly disagree
Frequency	119	51	17	10	3
Percentage	59.5%	25.5%	8.5%	2%	1.5%

Interpretations:

From the above table 9, It is inferred that 59.5% of pre-service teachers are agreed strongly in searching and finding information in website on their mobile device where as 25.5% of them are agreed slightly, 8.5% of them are unsure, 2% of them are disagreed slightly and 1.5% of them are agreed strongly in searching and finding information in particular website. Therefore, most of the pre-service teachers agreed strongly in searching and finding the information on their mobile device.



10. USAGE OF MOBILE DEVICE FOR LEARNING PURPOSE

Research question 10: What are the other mobile tools using by pre-service teachers on their mobile device for learning purpose?

Table .10

“Showing frequencies and percentages on usage of other tools by pre-service teachers for learning purpose”

Response	One-drive	Word	Excel	Power point	Google drive	What's app	Outlook
Frequency	13	62	53	101	136	126	11
Percentage	6.5%	31%	26.5%	50.5%	68%	63%	5.5%

Interpretation

From the above table 10, it is observed that 6.5% of the pre service teachers are using one drive on their mobile devices for learning purpose whereas 31% are using word, 26.5% are using excel, 50.5% of them are using powerpoint, 68% are using googledrive, 63% of them are using what's app and 5.5% are using outlook for learning purpose on their mobile device. Therefore, most of the pre-service teachers are using google drive for learning purpose followed by what's app and Power point .

CONCLUSION

Education system particularly from past decade period is massively influenced by technology . It is simply not confined to only some part of education but also almost all spheres of domain education including admission ,administration, regulation, curriculum designing ,technology led instructions ,assessments, feedback, reporting etc. Earlier the concept of educational technology was only filled up with computers but from past 3-4 years a revolutionary upgradation is sought in mobile technology in terms of 2G to 3G to 4G applications and unlimited data access given by the network service companies like Jio and other network companies .This innovation made easy that usage of mobile phones with internet accessibility. The present study is witnessing that most of the pre-service teachers are using their mobile devices for their academic purposes which makes their learning easy ,viable and flexible .They are using different featured application in order to come across their academic accomplishments or expectations.

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