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LEVEL OF USE OF MOBILE LEARNING AMONG SECONDARY LEVEL STUDENTS IN WEST BENGAL

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Abstract:

Mobile learning (m-learning) has emerged as an important educational approach due to the rapid advancement of mobile technologies and internet accessibility. The present study investigated the level of mobile learning use among secondary-level students in West Bengal and examined their views regarding mobile learning. A descriptive survey method was adopted for the study. A sample of 120 students from Classes IX and X was selected through purposive sampling. Data were collected using a structured questionnaire. The findings revealed that 80.6% of students demonstrated a moderate level of mobile learning use, while 18.8% showed a high level of use and only 0.4% exhibited a low level. The study further found that smartphone ownership and internet accessibility significantly influenced students' engagement with mobile learning. The results indicate that mobile learning has become an effective supplementary learning tool among secondary students. The study recommends improving digital infrastructure, reducing internet costs, and promoting awareness regarding effective mobile learning practices.

Keywords: Mobile Learning, Secondary Students, Smartphone, Internet Accessibility, Educational Technology, West Bengal.

1. Introduction:

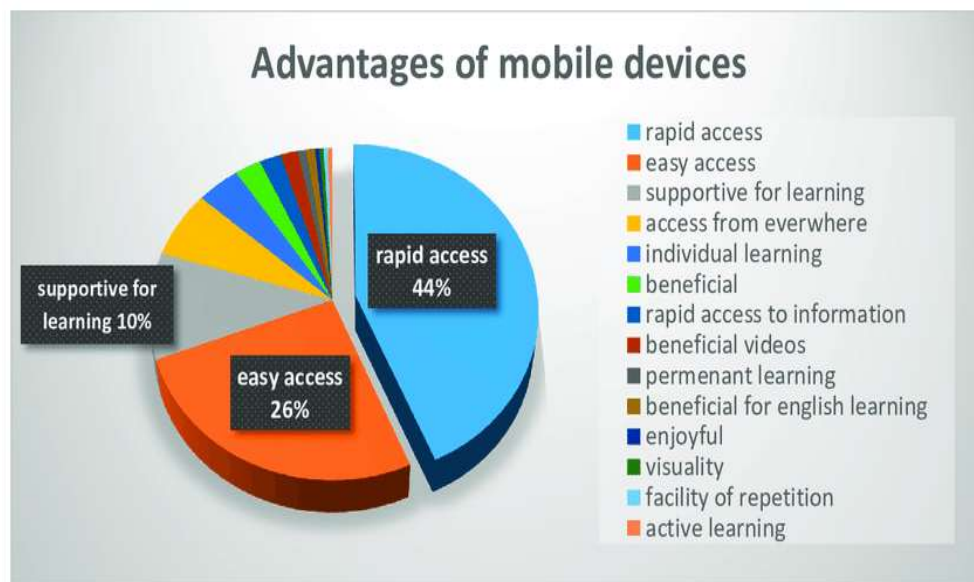
The integration of mobile technologies into education has transformed the traditional learning environment. Mobile learning (m-learning) refers to learning facilitated through portable digital devices such as smartphones, tablets, and laptops, enabling learners to access educational content anytime and anywhere. The widespread availability of mobile devices and internet connectivity has significantly expanded opportunities for flexible and self-directed learning.

The COVID-19 pandemic accelerated the adoption of mobile learning worldwide, making digital platforms an essential medium for educational continuity. Mobile learning allows students to

engage with educational resources beyond classroom boundaries and promotes collaborative, personalized, and lifelong learning experiences.

According to Kukulska-Hulme (2005), mobile learning is associated with learner mobility and enables educational engagement without restrictions of location. Traxler (2005) defined mobile learning as educational provision where the dominant technologies are handheld devices. Sönmez (2018) emphasized that mobile learning facilitates learning independent of time and place.

In India, especially in West Bengal, increasing smartphone penetration and internet availability have created new opportunities for mobile-based education. Understanding the extent to which students utilize mobile learning is therefore essential for educational planning and policy formulation.



2. Significance of the Study:

The present study is significant for the following reasons:

1. It provides empirical evidence regarding the level of mobile learning use among secondary students.
2. It helps educators understand students' perceptions and experiences regarding mobile learning.
3. The findings may assist policymakers in designing technology-integrated educational strategies.
4. The study contributes to the growing body of literature on digital learning in the Indian educational context.
5. It highlights the role of smartphone ownership and internet access in promoting educational equity.

3. Review of Related Literature:

Kukulska-Hulme (2005)

Kukulska-Hulme emphasized that mobile learning enables learners to engage in educational

activities regardless of physical location. The study highlighted flexibility and learner autonomy as key features of mobile learning.

Traxler (2009)

Traxler described mobile learning as a transformative educational approach that supports learning beyond formal classroom settings. He argued that mobile technologies facilitate continuous and context-aware learning experiences.

Bharati (2003)

Bharati found that technological support systems enhance user satisfaction and information accessibility. The study suggested that digital tools can positively influence learning outcomes when effectively utilized.

Crompton and Burke (2018)

Through a systematic review of mobile learning research, Crompton and Burke found that mobile technologies improve student engagement, collaboration, and academic performance. Their review highlighted the increasing importance of mobile learning across educational levels.

Bansal and Joshi (2020)

The researchers reported that students appreciated mobile learning because of its instant feedback mechanisms and opportunities for peer interaction. Mobile learning was found to promote independent learning among students.

Bhatt and Patel (2020)

The study revealed that cultural and social factors significantly influence students' attitudes toward mobile learning, particularly in rural and semi-urban educational settings.

4. Objectives of the Study:

1. To measure the level of mobile learning use among secondary-level students.
2. To examine students' views regarding mobile learning.

5. Methodology:

5.1 Research Method:

The study employed the descriptive survey method.

5.2 Population:

The population consisted of secondary-level students studying in Classes IX and X in West Bengal.

5.3 Sample:

Table 1.*A sample of 120 students was selected.*

Class	Male	Female	Total
Class IX	24	22	46
Class X	40	34	74
Total	64	56	120

5.4 Tool Used:

A structured Mobile Learning Questionnaire was used to collect data regarding students' mobile learning practices and perceptions.

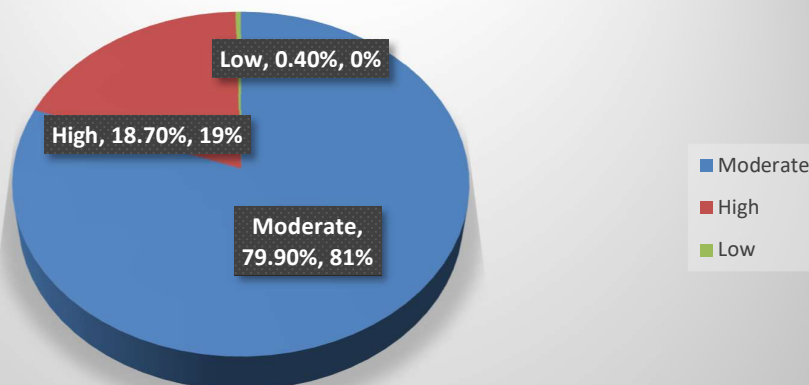
Statistical Techniques

The collected data were analyzed using:

- Frequency
- Percentage
- Descriptive statistics

6. Analysis and Results:**Table 2.:***Overall Level of Mobile Learning Use*

Level of Mobile Learning	Frequency	Percentage (%)
Moderate	86	80.6
High	31	18.8
Low	3	0.4
Total	120	100

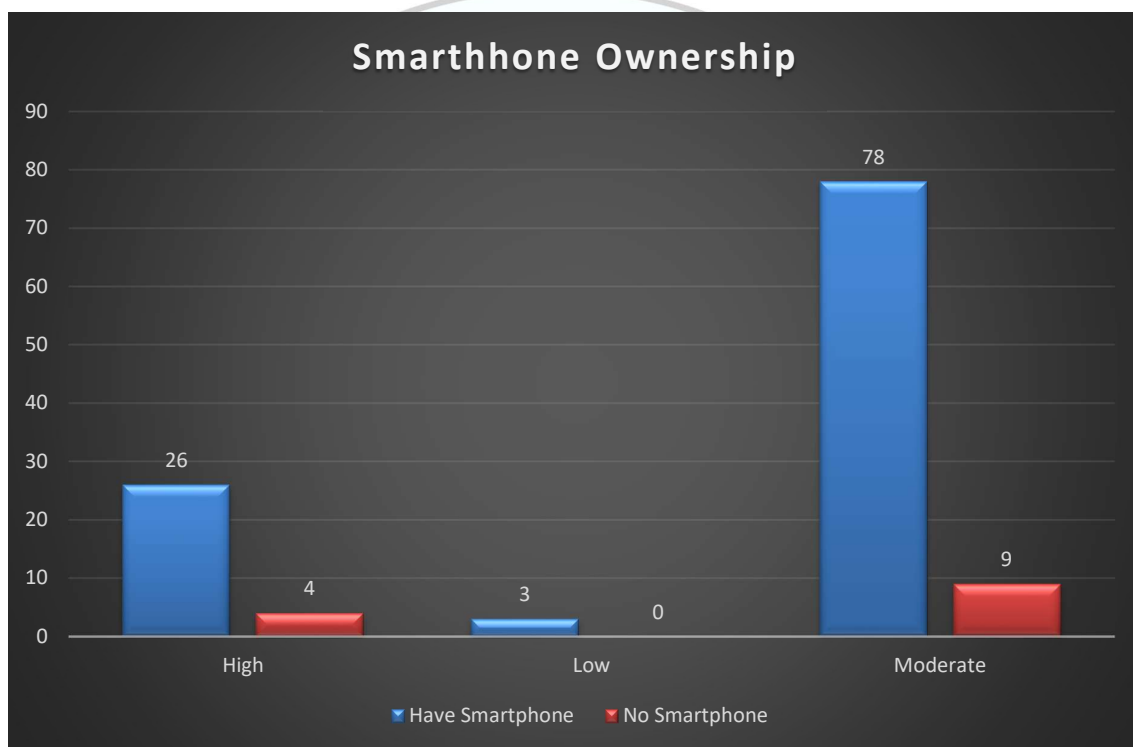
Overall Uses M-Learning (%)

Interpretation:

The data indicate that a large majority (80.6%) of secondary students exhibit a moderate level of mobile learning use. Nearly one-fifth (18.8%) demonstrate high engagement with mobile learning, whereas only a negligible proportion (0.4%) show low utilization.

Table 3.:*Smartphone Ownership and Mobile Learning*

Smartphone Ownership	High	Moderate	Low
Have Smartphone	26	78	3
No Smartphone	4	9	0

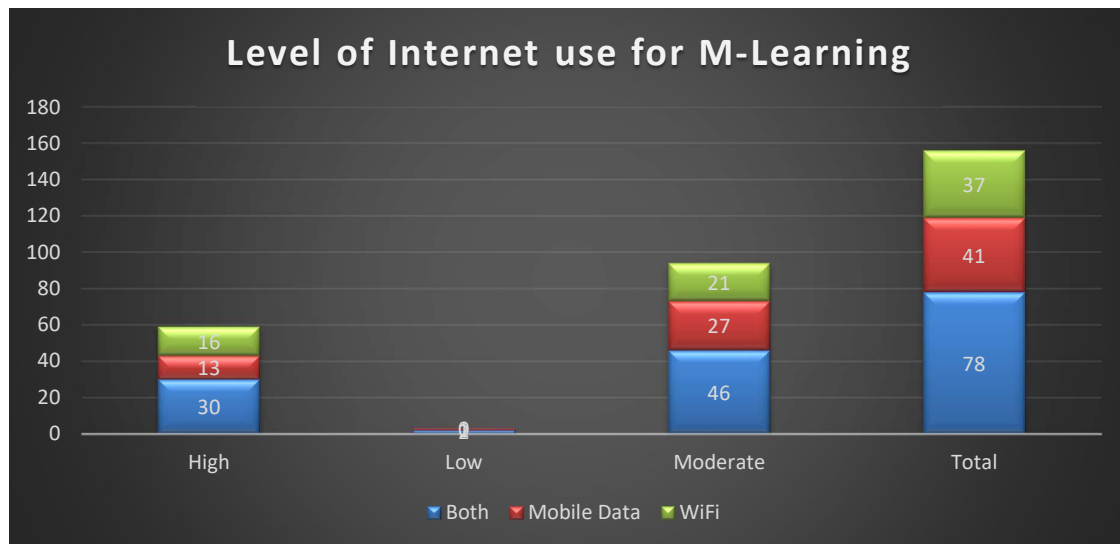
**Interpretation:**

Students possessing smartphones demonstrate substantially higher engagement in mobile learning activities than those without smartphones, indicating the importance of device availability.

Table 4.:*Internet Access and Mobile Learning*

Internet Type	High	Moderate	Low	Total
Mobile Data	13	27	1	41

Internet Type	High	Moderate	Low	Total
Wi-Fi	16	21	0	37
Both	30	46	2	78



Interpretation:

Students with access to both mobile data and Wi-Fi exhibit greater participation in mobile learning activities. Reliable internet connectivity appears to be a crucial factor influencing mobile learning adoption.

7. Discussion:

The findings reveal that mobile learning has become an important educational resource among secondary-level students in West Bengal. The predominance of moderate mobile learning use suggests that students regularly utilize mobile devices for educational purposes, although intensive use remains limited to a smaller group.

The results align with the findings of Crompton and Burke (2018), who reported positive educational outcomes associated with mobile learning. Similarly, Traxler (2009) emphasized the role of mobile technologies in facilitating flexible and continuous learning.

The study further demonstrates that smartphone ownership and internet accessibility significantly affect students' participation in mobile learning. Students with greater technological access exhibit higher engagement levels, highlighting the continuing digital divide among learners.

These findings suggest that educational institutions and policymakers should focus on improving digital infrastructure and promoting equitable access to mobile technologies.

8. Conclusion:

The study examined the level of mobile learning use among secondary-level students in West Bengal and explored their perceptions regarding mobile learning. The findings indicate that mobile

learning has become an integral component of students' educational experiences. Most students demonstrated a moderate level of mobile learning use, while a substantial proportion exhibited high engagement.

Smartphone ownership and internet connectivity were found to be significant factors influencing mobile learning participation. Mobile learning offers flexibility, accessibility, and opportunities for self-directed learning beyond traditional classroom settings.

The study concludes that mobile learning has considerable potential to enhance educational outcomes among secondary students. Efforts should be made to improve technological access and digital literacy to maximize the benefits of mobile learning.

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