Mobile Learning: An Approach to Improve the Quantity of Educational Attainment in Conflict Hit Areas Like J&K

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ABSTRACT
The days are gone when mobile was considered a big distraction in the study. We can make best use of mobile in achieving educational attributes by improving both quantity and quality of education and this approach is simply called mobile learning. This paper presents an outlook of making best use of mobile learning to increase the educational attainment, especially in conflict hit areas, where strikes, curfew and processions, demonstrations become the hurdle in the normal working hours in the educational system. Here we have taken an example of Jammu and Kashmir, where the security climate is vulnerable from last more than thirty years and peace is a major concern at present. In this situation a fear among the student community to go schools has risen to a level, which ultimately affects the educational system badly. In most of the cases, the syllabus is not completed in the schools due to shortage of effective class hours. To tackle this situation, the mobile learning could be the best remedial measure to address this issue.

1. Introduction
Education nowadays is not limited to physical boundaries of the school and new age learners can learn anytime anywhere redefining teaching learning pedagogies. Time has gone when mobile phones were considered as a distraction for teaching and learning in school and their use was banned in some institutions. Mobile phones have eventually come up as new aid in learning, giving way to new technique of learning called mobile learning. Mobile learning has changed the method, design, pedagogy of learning and reformed it to large extent resulting into a new innovative method of learning where learning is fun[1].

The mobile learning is an emerging trend in teaching learning which makes use of mobile devices like smart phones, PDA, iPods, tablets etc. Mobile devices being small in size are highly portable with almost all features of a state-of-the-art personal computer system and thereby making anytime access possible. This technique of learning with the aid of technology is an extension
of e-learning\textsuperscript{[2]}. It is seen as new teaching learning methodology and differs from e-learning as hardware and software used is different from e-learning. It can be considered as subset of e-learning as both of them use similar context and medium for learning, but e-learning uses broader spectrum of electronic devices for teaching learning. Mobile learning like e-learning provides the freedom of space and time to learners and promotes learner directed learning with greater flexibility and portability. As mobile devices are highly portable and hence mobile learning provides learner’s unlimited access to education anytime from anywhere.

\textbf{2. The Latest Statistics Indicates}

The mobile phones are easily available and already in use by large population all across the globe and in particular in India around 90%. The latest trend indicates that its usage is expected to rise in nearby future. A number of smart phone users are to almost double from 404 million in 2017 to 829 million in 2022 as given in CISCO report\textsuperscript{[3]}. In quartet-1 of 2018 India became a global leader in mobile app downloads; Smart phones becoming affordable is reaching out the masses. Mobile technology makes use of radio spectrum and there is no need for roads, wires, cables, etc. making it hassle free, easy to implement without need of new equipment or devices. It will make of already existing widespread mobile infrastructure and therefore has little or none additional requirements for successful implementation of mobile learning. The high speed internet is already available in India and the digital India campaign has made interconnectivity to masses possible so live streaming of videos can be used to teach students very easily.

\textbf{2.1 Motivation to mobile learning: an overview}

Mobile apps can be put to use by teachers and learners, for learning as well as assessment purpose. Mobile learning is intuitive and easy to use and requires minimum effort to train teachers involved in the process of learning. It can be used as new innovative methodology of teaching for informal as well as formal education or it can be used as alternate or supplementary learning technique in blended models of e-learning to increase quality of education \textsuperscript{[4]}.  

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{features_of_mobile_learning.png}
\caption{Features of mobile learning}
\end{figure}

Mobile learning like e-learning is economic, easy, motivational, learner directed, student centered learning. The Fig. 1 depicts the various features of the mobile learning. In mobile learning communication can be synchronous as well as asynchronous in the forms of sms or emails etc. feedback from students can be instant, student to student communication can be around the clock and from any location. Use of mobile learning technique is language independent, user friendly, inexpensive and economic, the mobile technology used is lightweight and spontaneous\textsuperscript{[5]}. It will result in increase
in educational outcome of schools and can provide access to global resource content available. It can be used as teaching technique for distance education to provide anytime education to learners enrolled in distance mode. Students with disabilities who find it inadvertently difficult to participate in schools and institutions can engage themselves in formal as well as informal learning with the use of mobile learning [6]. As mobile learning is not bound to fix routine classroom timings part time students, housewives etc can benefit themselves from the technique by participating in part time courses with the aid of mobile learning providing them excellent opportunity for learning [7].

Being free from physical limits or boundaries it can be used in remote locations anytime or the school located in areas where road connectivity is poor and reach ability is challenge for teachers to deliver lectures physically in schools. It may take hours to reach out to these locations which are geographically remote. Some areas might be difficult to reach because the schools may be located on hilly areas, areas around nallahs or rivers etc in such places mobile learning can be used as supplementary learning technique to support or enrich existing strength of teachers, which may not be sufficient enough to ensure good quality education to students.

Schools situated in rural areas or schools lacking infrastructure can improve their quality of education by use of e-learning. It will reduce cultural and communication barriers between students and teachers.

There are a large number of schools in our country where ICT is still a dream and schools which lack computer and internet facilities where mobile learning can be used as an easy and cheap means to enhance quality of education as it is less expensive than broadband connections and doesn’t require set up laptops or desktop computers.

Most of the resources available in libraries are outdated and not updated.

Lack of electricity is still a concern and there are a number of schools in the country where there is no electricity and mobile learning can easily be used instead of e-learning in such schools.

Mobile learning environment is independent of weather and can be used as alternate teaching, learning technique in extreme weather conditions like in hot, rainy or cold regions of the world where weather conditions interfere with the normal functioning of the schools, can be used as alternate learning, teaching methods in politically disturbed or vulnerable locations where schools remain closed for a long time due to strikes, curfews, protests etc. The Fig. 2. shows the need of mobile learning in case of situations which hampers the school days.
3. The Present Scenario of Education in J&K

Education is the fundamental right of every citizen and acts as an important factor in the socioeconomic growth of the individual and the country. The literacy rate of Jammu and Kashmir is 68.7 percent in comparison to national literacy rate of 79.31% (as per Census Commissioner, India 2011). Catastrophic effect on education since last three decades has devastating results getting more and more implicit. Education is in a sorry state in Jammu and Kashmir being conflict zone. Education has suffered significant losses because of civil unrest and militarization of the area. Violence has deteriorating effect on education in terms of quantity as well as quality. The unrest results in the infrastructural losses as well, resulting in student and teacher absenteeism. In J&K especially Kashmir region and border areas of Jammu division Schools falling into sensitive zones remain closed for prolonged durations. According to a UNICEF report of 2014 it is observed that approximately 57 million children of primary school age did not attend school in 2011 and more than 13 million of those children are living in countries directly or indirectly affected by armed conflicts (UNICEF Report 2015).

There have been four wars between India and Pakistan 1947-48, 1965, 1971 & 1999 resulting in continuous tension across the Indo-Pak border which affects schools located in border areas. In 2018 heavy cross border shelling led to closure of schools in Indian Villages of Jammu, Samba, Rajouri, Poonch and Kathua.

In February 2019 heavy cross border shelling and resulting war like situation took a long toll on schools as schools remained closed for more than 20 days, exams were rescheduled and all schools falling in a 2km radius of border area remained closed for many days. There is low level and continuous conflict in border areas, resulting in the closure of schools and teacher student absenteeism.

In Kashmir, prolonged shut downs, hartals, curfews, encounters, blasts, processions, demonstrations and overall unrest has resulted into the irregularity of the schedules in classes as well as examinations. Constant interruptions in schedules and timetables of educational institutions result in disturbed and irregular routine. Going to school means taking an unsafe journey to places vulnerable to violence, explosions cross firing and encounters preventing teachers as well as students to get there in terms of danger. There are frequent days off and students get accustomed to absenteeism and feel uncomfortable in attending schools as their routine gets disturbed off and on. Parents send their children to school less often because of the fear in their minds for the reason of extreme violence in nearby areas of schools. The situation often gets unpredictable and volatile resulting in the forced displacement of people from place to another. The irregularity has given rise to anxiety and mental health issues in students who are not able to cope up with the irregular schedule of learning and examination.

Examinations get postponed and there is always a sense of uncertainty prevailing with classes as well as examinations. Unrest results in Working days getting decreased, reduced student attendance in the educational institutions, teacher absenteeism because of persistent security threat in the region. Fair numbers of working days are lost to shutdowns and curfews every month.

This also results into disinterest of students in studying as the environment is
not conducive to education. Days in and days out, the school environment gets affected directly or indirectly. A huge number of school infrastructures have been destroyed either accidentally or intentionally and in many cases the school buildings get damaged if trapped under the gunfire between the security personnel and the militants. Recently in 2016 a local militant Burhan Ahmad Wani was killed and this led to a big unrest initially in the south Kashmir and later on it spread out in whole J&K. The five month long hartal/strike was observed in Kashmir and the schools were totally closed. More than 30 school buildings were devastated during this period and it was next to impossible to go to attend the school especially in those affected areas. Apart from closure of schools due to turmoil, the most portion of J&K falls under winter zone and almost three months of December, January and February remains already closed in view of winter vacations and during this period schools/collages cannot be kept open due to harsh weather conditions nor such a facility is available to mitigate the cold.[8]

Students can’t enjoy curricular as well as co-curricular activities in the schools/collages thus fail to acquire their mental and social development skills necessary for individual growth as well as economic independence.

Unending cycle of violence results in the continuous compromise in quality of education and thus has resulted into the collapsed education system deplored in terms of all parameters. Students missing their classes claim that even after passing classes through mass promotion or curtailment of the syllabus in the examination claim that the most portions of the syllabus are not known to them or are not well understood by them. Curtailment of syllabus results in removal of essential topics from the curriculum and thereby results in the weaker concept formation and weaker foundation of the subject. Teachers try to cover more and more syllabus within limited working days, resulting in frustration of students as well as teachers as there is less assimilation and understanding of topics by students in stressful situations.

Violence in schools, protests by school children, stone pelting incidents by students outside schools lead to closure of schools. Amid curfews, strikes schools remain closed and these drawbacks are exacerbated by mass promotion, curtailment of prescribed syllabus, lenient evaluation, relaxation in exams, copying etc.[9].

In 2016 10th and 12th class examinations only 40 to 50 percent of total curriculum was considered for examinations and 1st to 9th classes had to be considered for mass promotion. University and college semesters were tapered to 3 months, in colleges 130 days of working days were lost to unrest resulting in stress to students as well as parents. Skill based courses suffer most disruption in the unrest as these courses need continuous effort on the part of teachers and learners, for acquisition and upgradation of skills resulting in irreparable losses to learners. This has adverse effect in formation of the workforce of the state and thus hampering the economic growth of the state and thus country.

In the year 2016 schooling for only four months was conducted in Kashmir resulting in irreparable loss of education to students of the valley which will affect the future prospects of students.

Education can be used as a tool in managing J&K crisis as education plays a pivotal role in imparting peace education. The uprising and alienation among the youth can be addressed by properly channelizing their faculties towards education. Learning
can imbibe their interest and energy and thus resulting in stability and peace.

4. Mobile Learning: One of the Effective Approaches of Learning

Being independent of political scenario mobile learning can be used as an alternate learning, teaching technique in areas like J&K where situation is volatile. We can connect with students at their homes using mobile learning applications and that too without the need of any special infrastructure or devices. Mobile phones are easily available in every home and easy to use. Student’s progress can be assessed by teachers regularly using quizzes and assignments. Grading will be purely performance based and personalized instantaneous assignments can be made available 24/7.[8] The motivation among the teachers and the students need to be made comprehensive to inculcate the mobile learning approach a comfortable tool for teaching, learning processes. The effective supervision can be structured by teachers to promote the mobile learning without wasting time on mobile for other unnecessary activities. The open source software applications like Google classroom, etc. can be used effectively in these conditions. We can make use of other digital learning platforms like national programme on technology enhanced learning (NPTEL), Spoken Tutorials, study web of active learning for young aspiring minds programme (SWAYAM) and massive open online course (MOOC) etc. in cohesion with mobile learning.

4.1 Concerns of mobile learning:
- Internet connectivity and battery power
- Screen size and key size
- Compatibility issues like multiple standards, formats and absence of single universal interface
- Limited Memory
- Eye safety issues due to prolonged use
- Frequent changes in models, technologies
- Distraction on the part of students
- Data privacy and security of content
- Gives advantage to learners from a technical background over non-technical learners
- Cost and accessibility problems
- Resistance to change
- Less control over students
- Social concerns in implementation

5. Conclusion

In this paper the problems arisen in the conflict prone regions due to one or the other reason and their ultimate effect on the education system in terms of sharp fall in the number of effective school days have been described and taken the reference of J&K. which in turn leads one of the major challenge of completing the syllabus in haste and preparing for the examination and subsequently appearing in competitive examinations, where there is no compromise at the cost of quality of education. The shaken mental agony of students may take steps towards the things which are not acceptable in a civilized society. To address this issue of completing the syllabus on time and overall attainment of prescribed curriculum can be best executed by mobile learning. Although there are certain concerns, but under proper supervision, mentoring and healthy guidance, a workable balance can be made on the effective use of mobile for effective learning.

References

[1] M. I. Yousuf, “Effectiveness of mobile learning in distance education,” *Turkish Online Journal of Distance Education*, vol. 8, no. 4, 2014.
[2] M. Sarrab, L. Elgamel and H. Aldabbas “Mobile learning (M-learning) and ed-
ucational environment,” *International Journal of Parallel Emergent and Distributed Systems*, vol. 3, no. 4, pp. 31–38, 2013.

[3] VNI Complete Forecast Highlights, 2018, [Online]. Available: https://www.cisco.com/c/dam/m/en_us/solutions/service-provider/vni-forecast-highlights/pdf/India_Device_Growth_Traffic Profiles.pdf, [Accessed: 21 April 2019]

[4] M. M. Hassan and T. Mirza, “Curriculum complexity based model of blended learning,” *International Journal of Research in Advent Technology*, vol. 7, no. 2, 2019.

[5] T. H. Brown and L. S. Mbati, “Mobile learning: Moving past the myths and embracing the opportunities,” *International Review of Research in Open and Distributed Learning*, vol. 16, no. 2, pp. 115–135, 2015.

[6] Y. Mehdipour and H. Zerehkafi, “Mobile learning for education: Benefits and challenges,” *International Journal of Computational Engineering Research*, vol. 3, no. 6, pp. 93–101, 2013.

[7] A. Sönmez, L. Göçmez, D. Uygun and M. Ataizi, “A review of current Studies of mobile learning,” *Journal of Educational Technology and Online Learning*, vol. 1, no. 1, pp. 13–27, 2018.

[8] A. Hassan, “Impact of the conflict situation on Education in Kashmir (A sociological Study),” *Globe Ethics in Higher Education*, vol. 1, no. 5, pp. 121–134, 2012.

[9] H. Shah, “School education in jammu and kashmir: Issues and concerns,” *An International Journal of Education and Applied Social Science*, vol. 9, no. 1, pp. 107–113, 2018.
