

# Study and Identification of ADHAYYAN Framework in CBSE Schools of India and UAE

Aniket Srivastava, Parul Verma, AtulPati Tripath

**Abstract—** Digital Learning has become the key rationale behind any student learning process success today. M-learning (market is still untouched and niche. Digital pedagogy based content has bridged the demand and supply gap in M-learning market, through shifting interactive board & projector to hand held device model, which is conceptualized as a personalized learning strategy. Primarily due to the exponential growth of ICT tools in India(8) and UAE, the ICT tools has made the balance between e-learning and M-learning solutions to more Students. Integration and synergy between E-learning and M-learning model cover many schools of India and UAE. Tier I by M-learning and Tier II/ Tier III by E-learning model. Making of the affordable pricing system for both ICT Solutions makes this more acceptable to schools towards both spaces. This paper study provides a detailed view of digital pedagogy foundation concept, integration of e-learning to M-learning, unique digital pedagogy, innovative. The Information and Communication Technology (ICT) sector has exponential growth in the last two decade. India and UAE are now consider as a global leader in ICT industry by its low operational cost, availability of high intelligence pool and remote delivery model. ICT can be divided into two categories; one is Information Technology, while other is Communication Technology. It boasts of a rapidly growing global IT market. The dramatic boom of the IT sector in India and UAE has played an important role in transforming the country education system with the identification of Adhayan Framework for informal education setup.

**Key words:** ICT, E-learning, M-learning, Digital pedagogy

## I. INTRODUCTION

In the recent past, there has been a rise within the trend to integrate technology into education in a trial to boost and improve orthodox teaching methodology. A good deal of analysis has already been done to prove the utility of e-learning and m-learning(1) in each secondary and better education environment. Many countries together with how-ever not restricted to US and UK, they have already en-forced e-learning(4) systems in K-12 instructional establishments. Following the trend, countries in CBSE(3) schools of India(8) and UAE moving towards e-learning Associate in M-learning(1) as an initiative to address the newest technology and pedagogy trends of the developed nations. The intention of this study is to spot the challenges and problems in implementation of digital pedagogy driven content for e-learning during a K-12 education environment and explores the advantages ensuing if this method is enforced with success from schools perspective. In this

**Revised Manuscript Received on 10 January 2019.**

**Aniket Srivastava**, Research Scholar, Amity Institute of institute of Information Technology, Amity University, Uttar Pradesh, Lucknow Campus, Lucknow, India

**Dr. Parul Verma**, Asst. Professor, Amity Institute of institute of Information Technology, Amity University, Uttar Pradesh, Lucknow Campus, Lucknow, India

**Dr. AtulPati Tripathi**, Lead Facilitator (ICT Info Tool-Kit for Education) UNESCO Asia- Pacific Region New Delhi, India

study, many problems prevailing during a school for the implementation of m-learning are known and expected advantages when the roaring implementation of the system area unit being mentioned through empirical proof and discussion with the school's administration, teachers and information technology (IT) employees.

## II. STUDY OBJECTIVES

The present study explains the digital pedagogy(5) design with identification of ADHAYYAN frame-work for informal education setup. Digital solutions the key ingredient for the success of ICT enabled Knowledge . Following objectives of the study is out-lined:

1. How they come up digital pedagogy driven solutions?
2. What factors influence them to choose e-learning and M-learning platforms ?
3. How an innovative unique pedagogy based system opted in teaching learning process in India and UAE?
4. What strategy (based on adhayan framework)in expanding for the Integration of ICT tools ?
5. What are the challenges?

### 3. Digital pedagogy Driven hand held Solutions focus areas

- Imparting knowledge more effectively
- Engaging digital natives
- Improving student scores
- Motivating them to learn
- Positively complementing current textbook teaching methods

Through this educational Programme, the CBSE(3) affiliated school will be particularly situated in India to exploit a standout amongst the most cutting-edge intuitive instructive learning innovations and to help with recognizing how innovation can be best adjusted to educational systems. This Program will position the school, as a pioneer in the 21st century instruction. (8)

### 4. Focal points: -

- Utilising a typical innovation stage
- Enhancing the part of instructors and educators
- Empowering the learning network to team up and develop
- Building information and abilities which will advance learning and scholarly

freedom

- Aiding learning with bleeding edge innovation apparatuses and arrangements
- Improving the way toward learning and procurement of information
- Delivering educational modules and apparatuses that em-power the learning network to amplify their insight and aptitudes

### 5. Identification of ADHAYYAN Framework

Adhayan framework provides an effective guideline to implement digital pedagogy(5) driven mobile learning(6) .which is designed to cater to the needs of digital natives(9) of every level. It includes mapped curriculum, case-studies, BBC videos, interactive games, and stories from every corner of the world, activities, worksheets, and practice plus assessment session. It enables teachers to create lesson plans and assess children while they learn, i.e. formative assessment as to reduce their burden. Content showcases meaningful progression of every subject to empower the teachers. It offers a platform to share ideas and concepts through a unique feature called 'Forum'.

### 6. Adhayan M-learning Framework

Adaptive :- adaptiveness , region specific , class specific ,age specific and learning context specific is the need of an hour .moreover there is a possibility of adaptive learning instead of adaptive teaching.

Differentiated :- Differentiated instruction for the digital natives(9)(Parkinson ).Teachers of cbse schools specially in UAE making differentiated lesson plans as per the KHDA guidelines .Every in terms of instructional teaching lesson planning depends on the type of learner. It can be visual ,auditory or Kinaesthetic learner.

Human oriented: Informal Education for well being in terms of digital citizenship can actually transfer the awareness for the educational society.

Your Device :Hand held device like mobile is very common and it give chance to any where anytime any place access to every learner.ICT tools for m-learning(1) is the core shift from CBT or E-learning.

Your Learning:Any digital Native carrying hand held device have multiple resource for learning specially for informal setup.

Agile :Alternative teaching method is one of the pillar of digital pedagogy as there are various OER available for imparting informal science education.(2)

N-Intelligence Capturing: There is a possibility to have the multiple access for the same.

### 7. ADHAYYAN Approach

• Adhayan approach, blend conventional showing utilizing standard course books is "mixed" with training that utilizations types of innovation, particularly programming and an intelligent white-board. The intuitive whiteboard empowers educators and understudies to separately and by and large endeavor exercises in an intelligent way. It additionally gives devices to guideline and practice. As we move promote into the new thousand years, it turns out to be evident that the 21st Century educating is altogether different from those of the twentieth Century instructing. In the 21st Century educating, educators are facilitators of

understudy learning and designers of gainful classroom situations in which understudies can build up the essential aptitudes.

- The 21st Century classroom is understudy focused, not educator focused. Instructors never again work as teachers yet as facilitators of learning.
- The understudies learn by doing, and the educator goes about as a facilitator, Students figure out how to utilize the request technique and to work together with their associates.
- Students never again consider each subject in dis-engagement. Rather, they take a shot at interdisciplinary undertakings that utilization data and abilities from an assortment of subjects and address various basic scholarly measures.
- Textbooks are never again the significant well-spring of data. Understudies utilize numerous sources, including innovation, to discover and accumulate the data they require. In this new classroom, adaptable understudy groupings, in view of individual needs, is the standard.
- The educator still uses entire gathering guideline, however it is never again the essential instructional technique utilized. Educators evaluate understudy instructional needs and learning styles and afterward draw on an assortment of instructional and learning techniques to address the issues of the considerable number of understudies in the classroom.
- Teachers realize that they should draw in their understudies in learning and give powerful guideline utilizing an assortment of instructional strategies and in addition innovation. To do this, educators stay up to date with what is going on in the field. As long lasting students, they are dynamic members in their own learning. They search out proficient advancement that causes them to enhance both understudy learning and their own execution.

### 8. The Adhayan Framework Positioning

- Adhayan Framework is a ground breaking technology enabled education solution using world leading K-12 content.
- Adhayan Framework is designed to meet the dynamic needs of the teachers and students in today's schools.
- Adhayan Framework is based on the most up-to-date educational research and leading global educational practices.
- Adhayan Framework helps make teaching more Engaging, Effective and Efficient while meeting CBSE(3)and the NCF requirements.
- With AdhayanFramework vision is to constantly deliver improvements in education and learning.

It is designed to accommodate the individual needs of each student in any grade and at any level of understanding. New concepts and skills are introduced in a systematic and coherent way, allowing students to connect ideas, collaborate and demonstrate and apply the understanding of these.

### 9. Adhayan Pedagogical Approach

Learning and development teams around the world are



implementing engaging digital learning content that ensures efficient skill development and timely information update.

1. A progressive Instructional approach
2. Multimedia Management
3. Mastery Of Concept
4. Problem Solving Narration
5. Interactive Learning
6. Dynamic Modeling

#### *10. Teachers interventions for implementing Adhayan Framework*

1. The ideal digital pedagogy(5) driven content type needs to be rapidly produced.

2. The ideal M-learning(1) content type is straight to the point.

Given the lack of time for learning methods need to correspond with the needs of the learner by delivering short, straight to the point information presented in an engaging way.

3. The ideal m-learning(1) content type needs to be engaging. Courses, good storytelling and visual distribution of information engage and help the learner memorize the events faster.

For that matter, agile and adaptive learning is useful.

#### *11. Inclusions*

##### *A) E-learning*

An advanced classroom arrangement gives a rich arrangement of intelligent K-12 educational modules based on innovation items and administrations in every single branch of knowledge. In view of current instructive research and built up instructive practices, it utilizes the most recent and simple to utilize mechanical structure for an advancing showing learning condition. The arrangement displays an all encompassing instructive program with advanced and print materials, understudy following and report creating offices, proficient improvement administrations and specialized upkeep arrangements.

##### *B) M-learning*

Hand held device with various app is an intuitive arrangement which draws in understudies with learning material through multi-tactile exercises and reduces an instructor's weight. Understudies can see hear and collaborate with different ideas whenever, anyplace. Its substance takes into account CBSE(3) and different sheets, incorporates rehearse material with tests to survey the trouble looked by understudies in adapting any idea. It empowers instructors to complete evaluations effectively and rapidly, alongside examination on understudies' execution.

#### *12. Actualizing Digital learning answer for CBSE educational programs and its assessment frame-work:*

The point of m-figuring out how to execute tablets in schoolroom was to actualize this as a supporting framework to not supplant the ordinary educating approach. There square measure assortment of points of interest of abuse tablets for e-learning(4). The normal edges that m-learning(1) wanted to actualize tablets in schoolroom for e-adapting square measure as takes after:

#### *14. Learning through Informal Education*

Educator will utilize tablets for one to 1 intuitive exercises with the researchers by having a quick overview, test or online science and scientific reenactments making this a legitimate choice to convey the information in a way that is a great deal of getting a charge out of and direct to know for the researchers. Shows while conveying appears, teachers will give understudies the coveted information electronically. Understudies will then take notes inside the assortment of intelligent explanations and feature notes to raised perceive the subject and review them later.

#### *15. Challenges for Adhayan implementation*

The problems and challenges known were being categorized in different segments as mentioned below:-

##### *(A) Social Problems*

The foremost vital challenge in executing m-learning(4) or implementation for education is that big chunk of (UI) square measure developed in English. Though majority of Gulf countries and India(8) locals speaks English and most of them are India(8) teachers. Creating a mindset to adopt and include digital learning solution in their traditional teaching learning process or in choc and talk method was an initial challenge for first phase of implementation.

##### *(B) Digital pedagogy Problems*

Therefore one in all the most important problems was implementing the digital pedagogy(5) in the classroom for digital natives(9). Many teachers are digital immigrants(10) and adopting the E-learning and M-learning with Digital pedagogy driven Adhayan framework and incorporate in their daily lesson plan was little difficult in first three months of Digital solutions in their daily teaching learning transaction. Later most of the teachers opted and implemented very well in their ICT enabled Classrooms.

##### *(C) Technological Problems*

The fundamental issue in executing for e-learning(4) in an extremely schoolroom setting is that the usage of a dependable, property and expandable remote system foundation. The past foundation of the school true blue exclusively wired local space arrange (LAN). anyway in order to actualize tablets and server based Digital Setup in address rooms, there was a craving of a remote LAN consequently on get the specific have the advantage of this ICT Solutions. The School-had to rent a committed group of innovation experts insinuate with in organize style and execution to setup wireless lan. Another test was to make consistence and administration strategy for battery charging and upkeep of IWB and Tablets. Understudies will be conveying their ebooks in their tablets, the school needed to make sure that every one the understudies get their tablets totally charged before getting in schoolroom because of having no charge in tablets is that the same factor as though understudy had left his course book gathering.



## Study and Identification of ADHAYYAN Framework in CBSE Schools of India and UAE

### 16. Scope and improvements for teachers implementing adhayan framework

- To identify an innovative edtech tools and how to engage digital natives.
- To understand blended learning model in the present scenario.
- To explore medium as much as possible, to cater more learners.
- To integrate both traditional and modern teaching platforms.
- To maximize the free study time for the learners.
- To evolve new ideas for engaging and enabling Learners.

### 17. Key Learning Points/Take-away

1. Recognition of teachers who can implement adhayan framework for their digital learning transactions.
2. Blended Learning model
3. Technology of education instead of technology in education.

## III. CONCLUSION

“Joy of learning and giving “This is all about to say for an innovative idea generation, incubation and incorporation of learning through understanding and implementing ADHAYYAN framework. Only a risk taker will be a beginner, which stands proved in Edtech product in CBSE(3) affiliated schools of india and UAE. The emergence of knowledge portals was ringing for ICT interventions .The present learning environment is having all digital learning aid at his/her place ‘from searching digital pedagogy(5) based tools. There is a saying ’’Schools are everywhere’’, so im-plementation of adhayan framework is very vast. Captioning of all types of digital learning aids has given teacher using ICT enabled classroom a wide recognition and learning growth.

## REFERENCES

1. Ally, M. (Ed.). (2009). Mobile learning: Transforming the delivery of education and training. Athabasca University Press.
2. Arimoto, M. M., Barbosa, E. F., &Barroca, L. (2015, October). An agile learning design method for open educa-tionalresources.In Frontiers in Education Conference (FIE), 2015 IEEE (pp. 1-9). IEEE
3. Bindu, C. N. (2017). Attitude towards, and Awareness of Using ICT in Classrooms: A Case of Expatriate Indian Teachers in UAE. Journal of Education and Practice, 8(1), 10-17.
4. Bhuasiri, W., Xaymoungkhoun, O., Zo, H., Rho, J. J., &Ciganek, A. P. (2012). Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. Computers & Education, 58(2), 843-855.
5. Howell, J. (2012). Teaching with ICT: Digital pedagogies for collaboration and creativity. Oxford University Press.
6. Jones, A. C., Scanlon, E., & Clough, G. (2013). Mobile learning: Two case studies of supporting inquiry .learning in informal and semiformal settings. Computers & Education, 61, 21-32.
7. Kearney, M., Schuck, S., Burden, K., &Aubusson, P. (2012). Viewing mobile learning from a pedagogical per-spective.Research in learning technology, 20(1), n1.
8. Mallik, U. (2009). National policies and practices on ICT in education: India. CrossNational Information and Com-munication Technology Policies and Practices in Educa-tion:(Revised Second Edition), 18(16), 295.
9. Prensky, M. (2001). Digital natives, digital immigrants part 1. On the horizon, 9(5), 1-6.
10. Senjov-Makohon, N. (2004, January). How do Digital Immigrant Teachers (DITs) learn ICT for the Information Age?. In AARE (Australian Association of Research in Ed-ucation) Conference, Doing the Public Good: Positioning Education Research, Melbourne, Australia.

11. Tomlinson, C. A., &McTighe, J. (2006). Integrating differentiated instruction & understanding by design: Connecting content and kids. ASCD.
12. Web links:-
  - a)www.negt.gov.in
  - b)www.cbse.nic.in
  - c)www.ncert.nic.in
  - d)www.khda.gov.ae./en
  - e)www.mhrd.gov.in