# Learning Framework using ICT in Educational Technology

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**Abstract-**The purpose of this paper is to present the modern Computer-Smartphone based Information, Communication and Technology (ICT) in education. How useful for education to extends the capabilities of learners and therefore the instructor to place their idea more clearly and properly to the learner. ICT technology offers innovative techniques within the learning system. The expansion of those communication and Computer-Smartphone systems, their simple use, the supremacy and multiplicity of data transfer allow instructors and learners to possess access to a world beyond the classroom. It's the potential to rework the character and process of the training setting and foresee a replacement learning culture. Knowledge, diversity and any time support for learner and instructor is became ICT environment. ICT exposes opportunities for learners to access, extend, transform and share ideas and knowledge in multi-modal communication styles and format. It helps the learner to share learning resources and spaces, promote learner centered and collaborative learning principles and enhance critical thinking, ingenious thinking and problem solving skills. Knowledge is currently being improved by ICT, which consists of a combination of teaching methodologies and Computer-Smartphone based tools. This way, an effective and efficient improvement plan to enhance the efficient use of ICT resources in learning and to meet an adequate level of quality was established.

Keywords: ICT, Smartphone, Knowledge, Communication, learner and instructor, efficient , multiplicity

## Introduction:

In the current digital day and age, it's imperative that institutes integrate ICT and be attuned to the fashionable needs and requirement of scholars. The utilization of ICT in learning not only leads to the cognitive, social and emotional development of a learners, but also features a major motivational influence on his/her learning capabilities. it's proven that students harness positive feelings towards education and learning once they use computers to finish tasks, encouraging and motivating them to find out. This way, learner gain a myriad of enriching learning experiences. ICT

requires Internet, computer based infrastructure and also satellite support and therefore the process of installation is dear. Moreover, teachers got to be efficiently trained to know ICT and the way they will utilize its numerous benefits best to successfully impart knowledge to the scholars.

The concept of SMART Schools attracted the attention of many schools and higher educational institutions such as colleges, universities where the emphasis was not only on Information Technology in Schools, but also on the use of skills and values that will be ultimately beneficial to all. Information and Communication Technology seeks to holistically change the educational environment of the country by an aggressive campaign to introduce ICT-enabled education in India, by assuring network access to remote corners, development of quality e-content, as well as empowering student-community by providing low-cost tablet PCs. The Indian telecom industry is one among the fastest growing within the world.

Students' and pupils' views on DT (Digital Technology) [1]-
The benefits identified by students and pupils are listed below:

. DT enables fast, quick access to large volumes of data .

. Learning are often more interesting and interesting with the utilization of DT

. DT can enable a sense of greater independent learning.

. Digital storage of information is convenient.

. Competence and confidence in the use of DT was considered a valuable life skill.

. Using DT can make it easier to become distracted from the topic/task of interest due to ease of access to large volumes of information, social media apps and students using their personal devices in class. Concerns were also raised about internet safety, inappropriate content, privacy, and targeted advertising.

The evolution of the application of ICT in educational institutions has been complex and it has undergone several paths, depending on particularities of each context. Thus factors like educational level and intention, accessibility to technology, digital fluency of teachers and students, and many others can be considered candidates to explain the level and nature of ICT adoption. Therefore it is paramount to learn the path

for effective ICT usage, in alignment with the educational objectives and strategies of the school [2].

Our aim is to review the ways into which many higher-education institutions have undertaken the challenge of ICT adoption and its application to the educational process, in order to shed light about the different factors that influence the choice and availability of ICT usage. For that, we undertook a qualitative study.

## Literature Review

The use of ICT to support educational purpose has evolved enormously in the past decades varying significantly in the scope and orientation of the ICT implementation effort.

Education technology is defined by Wendler, Stumpf-Wollersheim, and Welper as [3] "… the use of any technology to facilitate learning and to improve the performance of students in higher education".

The advent of the Internet and Web technologies, as well as virtual reality, provided benefits of greater potential, and open a great number of possibilities never imagined before, like higher-end learning, problem resolution, creativity, and the development of integrated skills. In a similar manner, the use of online education was promoted greatly. Modern education systems are largely based on information-based environments, which in turn use emerging information technologies to solve pedagogical problems [4].

ICT usage Perspectives

ICT usage Perspectives From the referenced works , we defined two main axis: the first one was ICT infrastructure, governance, management; the second one referred to the pedagogical or educational resources.

It is important to recognize, however, that there are positions that state that technology trends, such as bring-your-own-device (BYOD), will be able to overcome access and skills limitations [5].

Pedagogical Axis

Along with the availability of ICT, other factors are deemed crucial for a successful integration of technology in education, related mainly to the attitudes of people.

Some believe that the sole level of digital literacy has a direct effect on self-regulated learning by the students [6]. Such new outcomes in behavior cannot be ignored, and should be capitalized.

To approach this issue we identified key component that are of vital importance, such as learners, instructors, curriculum design,

and digital educational resources. From these components, perhaps the most important is the formation of skills in the faculty to apply technology creatively.

In the current information society, people need to access knowledge via ICT to stay pace with the newest developments. In such a scenario, education, which always plays a critical role in any economic and social growth of a rustic, becomes even more important [7].

The four Rationales for Introducing ICT in Education.

**Rationale Basis**

| Social | Perceived role that technology now plays in society and the need for familiarizing students with technology |
|---|---|
| Vocational | Preparing students for jobs that require skills in technology. |
| Catalytic | Utility of technology to improve performance and effectiveness in teaching, management and many other social activities. |
| Pedagogical | To utilize technology in enhancing learning, flexibility and efficiency in curriculum delivery. |

Source: [8] Cross and Adam (2007)

The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audiocassettes and CD ROMs are utilized in education for various purposes [9].

Today ICTs – including laptops wirelessly connected to the web, personal digital assistants, low cost video cameras, and cell phones became affordable, accessible, and integrated in large sections of the society throughout the world.

It can restructure organizations, promote collaboration, improve the transparency and responsiveness of governmental agencies, non-governmental agencies, make education widely available, To draft impactful ICT education policies.

A learners are currently using smartphones as the preferred method of communication, therefore, it would be more advantageous to utilize these smartphones in teaching and learning process for share the

knowledge. If these were utilized within the teaching of the curriculum, it might allow teachers to explore a wider sort of teaching methodologies and provides the scholars access to current information, as there would be easier access to video on various topics and instructors could more reading utilize the concept of posting a quiz on WhatsApp group, Google Forms, or other form of assessment on the internet. Smartphone–powerful, portable communication (PPC) tool. They carry a spread of features within a little , often light weight frame [5].

Distance learning, online learning is additionally enabled through the web. Students can learn online and also ask experts online. The internet provides major information in texts, audios, videos and graphics which may be accessed by the individual [10].

## Conclusion:

The increasing use of information and communication technologies (ICTs), namely that of the Web has brought changes to teaching and learning at all levels of education systems leading to quality enhancements. Traditional forms of teaching and learning are increasingly being converted to online and virtual environments as well as a pedagogical architecture. There are endless possibilities with the integration of ICT in education system. The use of ICT education not only improves classroom teaching learning process, but also provides the facility of e-learning or distance education. Proper use of ICTs in education can create interest in students. The teaching community is in a position to succeed in remote areas and learners are ready to access qualitative learning environment from anywhere and at anytime. Both are required to interact in several environments and subjects, to share knowledge. It is important that teachers or trainers should be made to adopt technology in their teaching styles to supply pedagogical and academic gains to the learners. Successful implementation of ICT to steer change is more about influence and empowering teachers and supporting them in their engagement with students in learning instead of acquiring computer skills and obtaining software and equipment. ICT enabled education will ultimately lead to the comprehensive Education System.

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