



Department of Computer Science
Sri Yerramilli Narayanamurthy College (Autonomous)

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Paper Presentation in
National Seminar
ON

Digitalization – Issues and Challenges

Under RUSA 2.0 Scheme

Organized by

Dept. of Management Studies and IQAC

Sri Y.N.College(A), Narsapur

Date: 14-11-2019

A Report On
Paper Presentation in
National Seminar
ON
Digitalization – Issues and Challenges
Under RUSA 2.0 Scheme

Smt. G.Sowjanya, Lecturer in Computer Science and Smt B.Kabitha Rani, Lecturer in Commerce, Sri YN College presented a paper on “Digitalization in Education” under RUSA 2.0 scheme organized by Dept. of Management Studies and IQAC, Sri Y.N.College(A), Narsapur on 14-11-2019.



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Certificate of Participation

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Sri Y.N. College, Narasapuram. has participated and

Presented a paper entitled Digitalisation in Education.

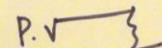
in the NATIONAL SEMINAR ON "DIGITALISATION- ISSUES & CHALLENGES"

UNDER RUSA - 2.0 SCHEME

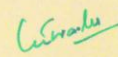
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Digitalisation - Issues and Challenges

K.Venkateswarlu
R.Pardha Saradhi
P.Venkata Subba Rao
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Chapter-29

Digitization in Education

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Abstract: With the advent of Innovation and Technology it has been predominant in almost all sectors in India with each undergoing a huge change in past years. Technology made everything faster and easier, leaving no option for various sectors of the economy but to adapt the change to become obsolete. Digitization is the integration of digital technologies into everyday life by the digitization of everything that can be digitized. Digitalization in Education refers to the use of computers, mobile devices, internet, software applications and other types of technology to teach students. Few examples of digitalization are test-taking, e-books, edutainment and online universities. There is a huge scope to take education to the remote parts of the country for enhancement. Teachers do face the digital learning challenges. Most of the teachers will be willing to make their classroom a digital learning environment. However few teachers do express about the time when technology let them down.

Key Words: Digital education, Digital literacy, Digital citizenship.

Introduction:

An evaluation of the digitalization of education must look at what education itself aims to achieve. This enables us to consider how education is being shaped by digitalization, and to identify the risk that it misses a vital element. One way to uplift the quality of education is through digitization. Digital Education is as complex and relevant as other “digital fields”. Digitization is the trending term, describing the 21st century in the most precise manner as possible. We are in the era where unprecedented ideas are unfolding in our education industry and creating the advancement that can’t be matched by lagging behind in terms of technology.

- **Encourages self-study:** Digitization allows for personalized learning because students can use their choice of digital devices. The academic potential, strengths and weaknesses and learning pace of every student can be catered to. It also opens up communication channels, allowing students

to get more attention as well as enabling them to track their coursework progress and identify areas of improvement.

- **Access to Higher Education:** Digitalization opens up higher education to people who wouldn't be able to afford or access it otherwise, such as people living in remote locations. Similarly, digitalization, through online learning makes it possible for students to access their sessions when they want and learn at their own pace.
- **Improves understanding:** Virtual Reality tools and videos can be used to help students use e-learning platforms on multiple mobile devices to interact directly with study material. For educators to it is a boon, as Augmented Reality can help teachers and trainers in explaining and performing tasks.

The new phase of learning has begun and involves various advanced techniques like:

- **Online courses:** Want to learn a new language or maybe to get trained in some specific course, but have no time to cover the distance? Online courses are developed by experts who have unmatched proficiency in their specific field and can give you the experience of real-time learning by designing their own online course.
- **Online exams:** Digitization gave way to the online exam, making the examination process convenient for both teachers and students.
- **Digital textbooks:** Also prevalent with other names like e-textbooks and e-texts, digital textbooks provide an interactive interface in which the students have access to multimedia content such as videos, interactive presentations, and hyperlinks.
- **Animation:** This is a captivating approach in which students learn in a better manner. By offering a visual representation of the topic, students grasp the concept in a more understandable manner. Even the toughest topics can be presented in a simplified way with the help of animation.

Educators will use technology and promote its use by their students, but they must also equip their students to deploy it in support of their own, human emancipation. People should be able to stand apart from technology, as well as to immerse themselves within it. Ultimately, this is what makes us human. To model this kind of citizenship, "real-life" engagement should permeate the "teacher-student-knowledge-technology pedagogical tetrahedron". Teachers are at the front line of digitalization. Their role is crucial in helping students to develop healthy digital lives. The important issues of digital lifestyles, digital competence and digital literacy should not be left to one side as students lock away their smart phones at the start of the day.

Increasing the geographic reach of touch-screen technology-aided kindergarten and software because intelligence technology providing extra whose knowledge **Digital Literacy**

Digital literacy compose clear Digital literacy upon the skills literacy is separate thinking skills, online environment by digital technology + critical thinking being a digital they utilize technology is the ability to digital forms.

The factors for d

- Technology
- Authorship
- Representation
- Online social

Digital Citizenship

Digital Citizenship education or participation in "Education" to engagement and their online citizenship education in digital environment

Increasing speed and availability of internet access can reduce many of the geographic constraints that disadvantage poor students. The evolution of touch-screen technology has enabled very young children to engage in technology-aided instruction. Prior to tablets, it was difficult for pre-school, kindergarten and even early primary grade students to work with educational software because it required use of a mouse or keyboard. Advances in artificial intelligence technology now allow teachers to differentiate instruction, providing extra support and developmentally-appropriate material to students whose knowledge and skill is far below or above grade level norms.

Digital Literacy:

Digital literacy refers to an individual's ability to find, evaluate and compose clear information through mediums on various digital platforms. Digital literacy does not replace traditional forms of literacy, instead building upon the skills that form the foundation of traditional forms of literacy. Digital literacy is separate from computer literacy. Digital literacy requires critical thinking skills, an awareness of necessary standards of behavior expected in online environment and an understanding of the shared social issues created by digital technologies. In other words digital literacy is digital tool knowledge + critical thinking + social engagement. Digital literacy is a component of being a digital citizen. Digital citizen is a person who is responsible for how they utilize technology to interact with the world around them. Digital literacy is the ability to interpret and design nuanced communication across fluid digital forms.

The factors for digital literacy are

- Technological skills and access
- Authorship rules
- Representation rules
- Online social responsibility

Digital Citizenship Education:

Digital Citizenship Education is the empowerment of children through education or the acquisition of competences for learning and active participation in digital society. Schools are introducing "Digital Citizenship Education" to encourage young people to develop their online proficiency, engagement and creativity as well as an awareness of the legal implications of their online activity. Digital citizenship represents a new dimension of citizenship education that focuses on teaching students to work, live and share in digital environments in a positive way.

Smart equipments for teaching and learning methods:

Power Podium: Power Podium adds power to your classroom. The basic application of this device is to help teachers deliver subject lectures conveniently. Power Podium is an integrated Public Addressing Podium. It has built-in amplifier, microphone, speakers and LED light that enables presenters or teachers to deliver presentations or lectures successfully.

Digital Podium: The infrastructure of a smart classroom completes with the advanced digital podium. As the name specifies technology and the podium means a lecture stand. The amalgamation of both can transform the learning into mind-boggling yet interesting session. It consists of a Touch monitor, Visual Presenter/Document Camera/ Visualiser, Public Addressing(PA) System, Uninterrupted Power Supply.

Smart Tables: The sturdier cousin to the smart board, smart tables are re-orienting information for all ages. Smart tables take information off the wall and put it on tables. Smart table focus their innovation on making the display sturdier than their wall-mounted cousins and supporting more simultaneous interactions.

Smart Board: Smart boards operate just like a white board, allowing a person to write on them with real or digital markers. Smart boards then surpass their simple white board ancestors by recording what is written or turning a digital marker line into a tangible visual element.

Interactive White Board: In the dynamic world of digitization where technology is all pervasive, interactive white board remains the latest innovation in Indian education. Run with technology, White board is an advanced teaching device that allows a teacher to interact with students through effective audios and visuals.

Visual Presenter: Visualizer simplifies the learning process by reducing the distance of words through interesting images. Visual Presenter is a modern way of presenting the content with visual display for classrooms, video conferencing, science laboratory, and so on.

Projectors: Projectors on their surface are a simple technology that has been around for decades. Historically used to project lecture notes or multimedia presentations, these classroom cornerstones can do so much more.

Smart phone video projects: Smart phones have many uses in the digital learning and making video projects. There are programs that help to edit and produce the work in a more professional way that is easy to learn.

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Digitalisation –Issues and Challenges

Digital Textbooks: Digital textbooks are becoming more crucial as some schools are cutting back on expensive physical textbooks. Digital textbooks were simply the old textbooks in digital form. Digital versions are starting to look more like online databases or programs than their paper predecessors.

Cameras: Cameras are present in almost every classrooms. These are installed in laptops, tablets or desktops used by students. Programs like Skype in the classroom offer a wide range of educational experiences that can be accessed through these cameras.

Few common digital learning challenges:

Changes resisted by School community: In education few are resistance to change as it is hard to accept the change in teaching as they are used to use the same tools throughout their teaching career. So it is important to provide the community with required information and hands on knowledge on the tools that are implemented in the classroom.

Lack of IT support: As the technology is improving it is necessary to increase the IT department with experts to handle the added responsibility.

Continuous change in Technology: The same tools can never be used forever, rather plan for the budget in place for upgrading the technology as the technology keeps changing.

Lack of quality content: With the huge amount of digital content, it is difficult to collect high quality materials. This brings a burden to the School administrator and teachers as they need to do a collective work with the school librarian to develop the content.

High costs: Schools should be prepared with grants to implement technology as digital resources are quite expensive.

Security Issues: As there are lot of security issues online, schools should invest on security. Teachers and students must be taught the basics and internet safety.

Lack of training for teachers: Teachers are busy enough, so it can be difficult for them to add one more thing to their schedules. In order to make digital learning environment successful, teachers must be trained on how to use various digital tools.

Not a substitute for human interaction: Even as human being to use virtual assistants more regularly, they are still no replacement for human interaction. Teachers should not sleep aside and let the digital tools take over.

Instead, teachers should use digital resources as supplemental and complementary tools for the classroom.

Conclusion: Digitization has changed the education system without diminishing the old time classroom learning. Neither do we want something so priceless to turn into dust. The best part about the digitization of education in the 21st century is that it is combined with the aspects of both; classroom learning and online learning methods. Walking hand in hand both act as a support system to each other, which gives a stronghold to our modern students. Digitization in education has also proved to be the right method for saving resources. Online examination platforms have restricted the frivolous usage of paper, directly confining the cutting down of trees. This way the digitization of education industry proves to be a boon to our society.

References:

1. <https://www.thetechadvocate.org/how-to-overcome-10-digital-learning-challenges/>
2. <https://www.coe.int/en/web/digital-citizenship-education/digital-citizenship-and-digital-citizenship-education>
3. <https://www.globalcitizen.org/en/content/8-high-tech-gadgets-that-are-making-classrooms-smart/>
<https://elearningindustry.com/digitization-of-education-21st-century>
4. <https://rossieronline.usc.edu/blog/teacher-digital-literacy/>
5. <http://www.smartclassroomindia.com/>

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Keywords: ICT In

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Digitalization comfortable work a powerhouse of soft citizens is still comp

About the Editors

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ISSUES & CHALLENGES**

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ABSTRACTS

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the 21st century where technology knows no bounds. This is the phase of radical development where technology is taking over every niche and corner. Smartphone's, laptops, and tablets are no more unknown words. During this phase the education system is evolving for the sake of betterment, as this generations students are not born to be confined by the limits of simple learning; their curiosity is vast and cannot be catered with educational systems that were designed earlier. Our old educational system lacks the capability to stand a chance in the 21st century.

DIGITIZATION IN EDUCATION

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ABSTRACT

With the advent of Innovation and Technology it has been predominant in almost all sectors in India with each undergoing a huge change in past years. "Technology can become the 'wings' that will allow the educational world to fly farther and faster than ever before; if we will allow it." says Jenny Arledge. Technology made everything faster and easier, leaving no option for various sectors of the economy but to adapt the change to become obsolete.

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Key Words: Digital education, Digital literacy, Digital citizenship.

DIGITALIZATION OF EDUCATION

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ABSTRACT

Digitalization in education refers to the use of desktop computers, mobile devices, the Internet, software applications, and other types of digital technology to teach students of all ages. We are running into the 21st century where technology knows no bounds. The modern society wants to know the