DIGITALISATION AND LEARNING IN TEACHER EDUCATION DURING COVID-19

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ABSTRACT

While the end of 2019, the Corona Virus Disease-2019 (COVID-19) is rapidly spreading worldwide, causing many deaths, several countries have initiated several strategies to contain this virus, including school and Institute closures. All the educational campuses locked down, including nursery schools to universities without reachable fortune panacea. Teacher education aims to develop prospective teachers through training in teaching skills and concepts of the schooling process. There are several methods and techniques employed to develop teachers through pre-service. Presently we follow the effective curriculum designed by experts from Delhi SCERT for two years D. El. Ed programme. In the present article, the authors envision integrating Digitalisation into the existing Elementary teacher education programme. The various modalities in which this integration can be brought in are discussed in this thematic paper. The governments, institutions, bodies involved in policymaking, execution, and assessment have been found to have a hard time without proper perspectives. Now it is time, think out of the box to curb the contextual educational issues massively by evolving with ultimate platforms. The existing face-to-face teaching-learning transaction in the four classroom walls and evaluated in the traditional brick and mortar system gradually lose hope and never fits current scenarios. Using familiar web tools such as WhatsApp, YouTube, Facebook, Telegram, Gmail, and others could be effectively integrated into smartphones, tabs, and other communication devices like laptops and desktop. Digitalisation is the need of the hour in the present context of the COVID outbreak. Digitalisation is the application of computer and mobile gadgets through online platforms to facilitate meaningful learning among learners.

KEYWORDS: COVID-19, Digitalization, Learning, D.El.Ed

INTRODUCTION

The lockdown announced by India's government before the Delhi SCERT D.El.Ed.'s academic calendar was approaching to end in almost Twenty days. The ICT practical assignment did not cover by the author as an instructor and left without completing the syllabus of D.El.Ed I Year. During the initial days of the lockdown period, the author underwent academic activities through our Institute WhatsApp / Telegram application mode by voice chatting, massaging, posting pdf, word files, links of various PPTs' and videos related to D.El. Ed course. However, it did not satisfy both the teacher and students about the content and what they learned. Later the Government of Delhi instructed all the state universities and Institutes to complete the syllabus by online mode of instruction. This incited the author to undertake multiple web-based online formats of instructions for D.El.Ed. Trainee-teachers. The synchronous and asynchronous modes, Learning Management Softwares (LMS), and web-based instructional software offered opportunities to present an ICT practical assignment Instructor. Hence, the instructor understood various notions mentioned by surfing the internet and practised the features to attain proficiency in some tools.

Technology has become a way of life, and learning through ICT is becoming part of best practice learning and teaching worldwide. Accordingly, new teaching methods have been introduced, and today we witness one of the most versatile gifts of science, known as the "Smart classroom."With the latest technology in the smart classroom, e.g., the smart classroom is not merely about technology-its about what technology can do for students and teachers to make learning more profound, more immediate, and powerful.

Digitalisation, a new term, is derived from this online virtual classroom wherein the teachers and students connect only in the online environment through the internet. Earlier online learning was encouraged in distance education. However, now there is a need to integrate Digitalisation in primary stream education as a part of the curriculum. There is no doubt

that the actual classroom situation and teacher cannot be replaced entirely by virtual learning. Some aspects of learning, like imparting values, teacher behaviour, developing communication, developing teaching skills, cannot be done effectively online. However, a part of the curriculum can be encouraged online. Any educational institution and its functionaries aim to motivate the students throughout their academics. This can be done online when the chance of physical classroom disappears due to natural calamities. Thus Digitalization cannot replace actual learning but can be an alternative form during the time and need arises.

EMERGING PEDAGOGICAL TRENDS

Indicated in these developments are some common trends or factors:

1. A move to opening up learning, making it more flexible and accessible. The classroom with information delivered through teaching is no longer the unique centre of learning.

2. An increased sharing of power between the teacher and the student. This is manifest as a changing instructional role, towards more support and a focus on developing and negotiation over content and methods, and supporting student autonomy. On the student side, this can emphasise supporting each other through new social media, discussion groups, even online study groups but with guidance, peer assessment, support, and content experts and feedback from learning.

PREPAREDNESS FOR DIGITALISATION

There is a notion that online internet-based virtual media is always poisonous. This has to be changed by preparing the administrators, teacher educators, and student teachers by giving training on the safe and appropriate use of online platforms for the educative purpose to bring meaningful learning in a virtual environment.

FOR ADMINISTRATORS

The impact that the online environment and virtual teaching creates has to be explored positively by the administrators. Every system has its own merits and demerits, but new technologies like Digitalization must be initiated as they need the hour.

FOR TEACHER EDUCATORS

There is a need to impart training to teacher educators to use online resources effectively. The various possibilities and modalities of the operation of online platforms to perform online teaching to facilitate audience (student teachers) interaction etc.…has to be given in training. Appropriate attitude and technical know-how must be developed among the teacher educators to use such technology in the teaching-learning process.

FOR STUDENT TEACHERS

Today's learners live in a knowledge revolution in human development. The use of the internet is inevitable. Student teachers have to be given appropriate use of the internet for a useful purpose. Today's youngsters are most using it in social networking for recreation purposes. This has to be changed to the use of the online environment for educational purposes. Thereby they can be oriented towards the use of the internet in a healthy way. Thus by preparing them, the objectives of education can be achieved in a remote virtual environment.

SYNCHRONOUS LEARNING

Synchronous Learning is a real-time learning model where students engage in virtual learning web-based, online wall simultaneously. Although learning co-occurs, learners do not have to be there in person or even in the exact location. Examples of synchronous is Live webinars, virtual classrooms, video conferencing, instant massaging. Apps and software are YouTube Live, Facebook, Live; Google meets, Zoom, Cisco Webex, Got To Meetings, Skype, WhatsApp, etc.

ASYNCHRONOUS LEARNING

As long as learners have access to the internet, asynchronous learners have the freedom to complete course materials whenever they choose and from any location. Video conferencing is not an asynchronous mode of learning wherein face-to-face interactions, video and audio do not occur. Examples of asynchronous learning include E-mail, Online forums, discussion boards, Blogs, Recorded video lessons, Online courses. The Apps and Softwares come under this category: Arogya Setu, Swayam, Google Translate, Gmail, Google Drive, Slideshare, DIKSHA, NPTEL, and Aadhar, etc.,

PREPARATION STAGE – DESIGN OF SYNCHRONOUS MODE

Instructortructor earlier attended a few workshops of MOOCS, SWAYAM, and e-content development programs, attended webinars and online paper presentations, and, in turn, leveraged the knowledge and skills about online facilitation in the field of online education. Then explored the educational software and mobile apps useful for synchronous and asynchronous teaching-learning web-based online learninInstructortructor contacted the experts and some faculty members about the functionality, accessibility, and security features of online video conferencing software and mobile applications. Our students were asked in the WhatsApp / Telegram group to download and install Video Conferencing Apps, Google Meet, Zoom, Webex, etcInstructortructor designed and developed some e-content materials-videos and Ppt on the title "The ICT assignments during Covid-19 pandemic Times" and also accessed links of the Open Educational Resources (OERs). The content transaction sessions of five hours each, one and a half hour duration through video conferencing software and apps mentioned under the table. This synchronous mode of learning its own merits; before the delivery, it is required to review the instruction, enlighten the main concepts, manage and incite the interactive group session, and share tools requiring a readiness to avoid more time adjust the flexibility of time duration.

CHALLENGES

The host faced a connectivity problem when using a laptop but accessed comfortably with an android mobile phone. It occurred because of the poor network and connectivity problems from the side of the service provider. Once the host cancelled the session and postponed it due to network issues. The participant students' video appeared, disappearing, and hampered the audio; very few students left the session in the middle, even though some initially did not know few operational features of video conferencing apps through their mobiles. After obtaining the instructor and peer groupmates' information, they rectified obstacles on the other side of 50 admitted students for the D.El.Ed   First year in our Institute, only 40 students were actively participating. Till now there ten students are not reached the contenInstructortructor dealt over the online. Few are economically deprived, some have mobile but did not recharge, and lapsed network connectivity, and some have individual accessibility. Operational and functional problemInstructortructor would solve the problems that are reachable to him. Are all subject teachers hosting the online video conferencing classes? The answer is no!. 30-40% of the teachers serving in the conventional education system are unfit, not digitally literate, to host online classes. The respective administrative bodies immediately initiate specific steps to solve such burning problems.

The theory involves class lecturing, discussion, presentations by teacher educators by interacting with student teachers of first and second years in their respective subjects. This actual classroom interaction can be done online. Teacher educators can present through their web camera or share their screen; Screen sharing can be blackboard. Students can listen and raise their doubts through chats or voice. The classroom materials can be shared in the form of word/PowerPoint/pdf files. The link to web resources can be shared with students. Apart from these, videos/audios/animations can be shared with student teachers.

INTEGRATION OF DIGITALIZATION IN PRACTICAL COMPONENTS

There is a big question on how effective such integration will be. However, a simulation can be given for practical components. Like for instance, while teaching on concepts related to mini teaching, teacher educators can do a demonstration, and it can be shared with student teachers. This could give some know-how about mini teaching. Actual practice in a social setting cannot be replaced entirely by Digitalization.

INTEGRATION OF DIGITALIZATION IN ASSESSMENT

Assessment can be done effectively only for the theoretical components by keeping online tests, assignment submissions etc. As teacher education is mainly concerned with developing teacher behaviour and attitudes, which involves a social setting, assessment in the practical component is not feasible.

There are several avenues for the integration of Digitalization into teacher education. It requires some expertise on teacher educators and student teachers to enter traditional teaching into online education. Presently this online education is done in a fragmented way to some degree. A proper Digital Pedagogy is required due to the need to develop, disseminate, train, and monitor Digitalisation initiatives among Institutes of education in an integrated way.

- Sharing Knowledge: Smart classroom teachers are expected to share knowledge, personal experiences, language, and culture that help them grow and develop for the technological era.

·   Sharing Ability

·   Meditation:

RESOURCES FOR ONLINE LEARNING

Some widely used resources for online teaching and learning are Google classrooms, Coursera, MOOCs, moodle, Prezi, swam central, shogun online junction, NREOE, DIKSHA, e- pathshala, National Academic depository (NAD), National Digital Library of India, Virtual labs, Talk to Teacher, Spoken Tutorial, Digital Library Inflibnet, E-Kalpa, pedagogy project, LMS, OER, MOOCs, Virtual Learning Environment, Aakash Educational portal, OSS for Math Edu, etc.

ADVANTAGES OF DIGITALISATION

Digitalisation has many advantages over traditional learning. There is scope for multimedia employed in it. The content can be presented dynamically using audio, video, text, animations, real-life experiences, simulations, etc. There is scope for self-paced learning and a learner-centred approach. With the online environment, the question of time and place is ruled out. It is cost-effective and uses green technology.

DISADVANTAGES OF DIGITALISATION

All skills, efficient skills, cannot be learned and mastered through Digitalization. It requires self-management skills on the part of the learners, which is usually more minor in the students. E-learning encourages social isolation, which cannot be used to develop teaching skills and other competencies requiring behavioural outcomes.

CONCLUSION

Knowledge is defined as "information and understanding about a subject which a person has or which all people have." the notion "knowledge society" emerged toward the end of the knowledge is defined as "information and understanding about a subject which a person has or which all people have." the notion "knowledge society" emerged toward the end of the knowledge-based society refers to the type of society that is needed to compete and political dynamics of the modern world and succeed in the changing economy. It refers to societies that are well educated and rely on their citizens' knowledge to drive the innovation, dynamism of that society's entrepreneurship and economy, with the innovation of internet penetration, mobile communication, every knowledge-seeking growing community. Students, Institutes, universities, and the growing Indian community are knowledge seekers. They want to acquire new pedagogy knowledge, work with innovations in every field.

Fortunately, the present generation is digitally driven, a savvy society with their accessories by embedding online web to synchronise organised and synchronised activity in their daily routine activities. This web-based virtual digital wall seems ultimate and alternative to the four walls' natural learning ecosystem. With the boom in computer technologies and the internet, the online environment has rapidly increased. Today several platforms provide scope for the virtual classroom, which is both open source and easily accessible.

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