ROLE OF THE TECHNOLOGY ON HIGHER EDUCATION: AN ASSESSMENT OF ONLINE TEACHING THROUGH TECHNOLOGY

B.Ravi Kumar, Ph.D Research Scholar,,Dept. of Political Science & Public Admn.,S.K.University, Anantapur., **Email:**venkatalakshmi4290@gmail.com

Abstract
As it can be seen worldwide, the COVID-19 pandemic has caused a significant interruption in all the domains of human lives. Likewise, the educational sector also encountered many challenges by the institutional closure from schools to universities, and traditional education shifted to the online paradigm. The scenario of this technological transition affected the education of about half of the student population globally. Thereby, the situation raises the importance of technology integration in education, and teachers are required to update their competencies to endow quality education and make changes to their curriculum and instruction accordingly. Regarding the application of information communication and technology (ICT) in education, however, instructors and learners are familiar with the traditional technological teaching aids, such as Smart boards and PowerPoint; still, their practical employability is required in the teaching practices. Besides, this provisional period raised the necessity, especially for the teachers, to gain competency in applying ICT in their teaching practices. Meanwhile, the application of ICT in higher education has remained a major subject of concern for decades at the global level.

INTRODUCTION
Many studies have highlighted that the application of ICT in the classroom setting has become a critical factor for meeting the needs of the learner in the knowledge society. Besides, the successful integration of ICT can make the learning process more exciting and keep learners motivated, which are considered as the significant predictors of their academic performance. In this paper we dissect the role of technology in mitigating some of the adverse effect of the covid -19 pandemic within higher education.

ROLE OF TECHNOLOGY
Technology has the potential to revolutionize the traditional teaching and learning process. It can eliminate the barriers to education imposed by space and time and dramatically expand access to lifelong learning. Students no longer have to meet in the same place at the some time to learn together from an instructor technologies help teachers to prepare their students to face the real world. It enables students to access up-to-date information in a quicker and easier way classroom technology has transformed teachers into encourages, advisers and coaches. Educational technology rebers to the use of tools, technologies, processes, procedures, resources, and strategies to improve learning experiences in a vaniely of selting, such as formal learning, lifelong learning, learnity to demand, workplace learning and just-in-time.

Methodology
This study was enriched by a desktop research methodology which reviewed literature of learning management systems available during the Covid 19 era. 24 journals papers about learning management systems were reviewed. The five elements of transformational learning theory: the disorienting dilemma, critical reflection, discourse, meaning making and perspective transformation guided this study to understand the radical shift of the worldview of learning that was caused by Covid-19 pandemic. Data was analysed to find out how the five elements of transformational learning theory could enhance or impede learning.

Findings
The findings reveal how the transformational learning theory can be used in transforming institutions of higher learning to transform to the new normal that have been induced by the Covid -19 pandemic. The many changes imposed on us by the COVID-19 pandemic are shifts in how educational content is delivered, with a migration away from the traditional in-classroom experience to more technology-based virtual learning experiences.

Relevant strategy

To make digital transformation a success, analysis revealed the importance of HEIs having a relevant and workable digital transformation strategy which is aligned to the institution's vision, mission and goals. The strategy should be led by a coordinator who, in addition to technical knowledge, is also aware of the wider business, human relations, societal, political, and managerial implications of the institution's digital agenda.

Prof Waller warns HEIs to be wary of "one-size-fits-all" approaches promoted by some technology suppliers. Not only do HEIs differ from each other, departments and even teams within an institution may vary. Prof Waller's research suggests that the most successful strategies are based on customisation. In addition, they require monitoring, evaluation, and for organisations to be able to pivot when necessary.

MASSIVE OPEN ONLINE CLASSES

Massive Open Online Classes are defined as special types of online courses that are openly available to an unlimited number of participants for free. MOOCs usually run at a grant scale allowing a limitless number of students to participate without them paying anything or being restricted somehow (Porter 2015). Such courses can be of any form emulating the traditional courses and can include some kind of assessment which can sometimes result in some form of accreditation (Li and Baker 2018). These courses can be run by institutions like universities or schools or any other institutions who will provide both the teaching and learning support using online platforms. While this technological innovation is a recent phenomenon, it promises to be the new order in the new normal to come. Considering such conditions as the increasing student enrollment, overcrowded lecture rooms, the need for continuous training and retraining, the advent of lifelong learning among other things, MOOCs promises to be the one of the most ideal offerings to subdue some of these challenges affecting higher education. As costs associated with higher education continue to increase, MOOCs are emerging as a cheaper and more accessible model for attaining higher qualifications (Kromydas 2017b; Li and Baker 2018). As the COVID-19 pandemic continues to bite, mass physical interactions among humans have been restricted. This ultimately limit the potential of higher education as training opportunities are hindered. Considering that humans need to continuously assimilate new knowledge MOOCS promises a brighter future for higher education.

E-Learning

Another technological innovation that that many Higher Education institutions are experimenting on is Electronic Learning (E-Learning). Also known as online learning, eLearning is an approach that emulate the traditional lecture delivery model. However, interactions and associations are facilitated by the internet. Zhu and Mugenyi (2015) defined eLearning as learning facilitated online through network technologies. The impetus of online learning is that it is a cost-effective solution that delimits learning boundaries. eLearning also provides flexibility and accessibility of education more so in uncertain environments (Cloete 2017). This means that learning can occur ubiquitously facilitated with technological gadgets like smartphones and computers and internet connectivity. The COVID-19 pandemic forced HEIs to close their does leaving HEIs with two choice, either to waste an academic year or to sought for other means to instruct and assess their students. Migration to eLearning emerged as the ideal choice among many institutions.

Data driven decision making

Traditionally, university students often encounter numerous challenges i.e., financial challenges, conceptually challenging subjects, lack of academic support, curriculum overload, among others and all these have a negative impact on their performance. The data driven decision making (DDDM) entails the systematic gathering and organizing, analysing, examining and interpreting data to inform practice and policy. This is particularly important from two perspectives: it enables school management to make more informed decisions with regards to resources provision in areas of dire need as well as providing feedback to stakeholders (students, teachers and parents) about the learning outcomes of students (Bharara et al. 2018). We assert therefore that DDDM can be used to optimize learning for a better learning experience in learners. The proposition of using data to improve learning is seemingly simple: if students have access to their learning and academic data as well as teachers' anticipated outcomes, they can adjust their performance accordingly.

DIGITAL TRANSFORMATION FOR HIGHER EDUCATION POST COVID-19: The COVID-19 pandemic has forced Higher Education Institutions (HEIs) across the world to migrate to online

environments, with differing degrees of difficulty and success depends on HEIs' digital readiness which is in turn an outcome of their digital transformation strategic framework.

Higher Education Institutions (HEIs) are among those organisations who have been forced to reconfigure their activities as a result of the pandemic. Those who had already begun the process of digital transformation have found the transition easier than others. Based on new research, Prof Waller argues that the difference between HEIs' success or otherwise in moving online depends on their digital readiness and resilience, which in turn depends on their digital transformation strategy.

Digital transformation and HEIs

Despite universities' involvement in technology design and production as a subject discipline, Prof Waller finds that HEIs lag behind business in their uptake of digital technologies. The pandemic has accelerated their move to online teaching, and most HEIs have incorporated some elements of digital transformation into their current and planned processes, but far more could be done.

The pandemic has accelerated HEIs' move to online teaching.

Prof Waller explains: "The reality today is that digital transformation strategies in HEIs can be scaled to include internal operations, strategic imperatives, outreach, research and innovation, finance and employment engagement." He adds: "HEIs will need to implement a digital transformation strategy if they are to survive and compete in the brand new digital, post-COVID world."

The benefits of technology in education.

➢ Technology makes teaching easy
➢ Technology helps you track students progress
➢ Educational technology is good to the environment.
➢ Thanks to technology, students enjoy learning
➢ Technology makes distance learning more accessible than ever.

The Importance of Technology in Education

In this pandemic era of Covid-19, it would have never been possible for teachers to make students efficient learners at home if technology was not introduced. In addition, technology allows students to learn more effectively via online educational tools.

The vital roles of technology in education is that teachers can serve all study material so that students can better understand the topics and solve the problem easier via Edtech. Educational technology approaches modern classroom / Smart classes, which primarily focus on improvising the performance of every student.

Imperative Roles of Technology in Education

This article makes aware of the Important roles of technology in education for students as well as parents and teachers, have a glance –

• Promotes Effective Educational system
• Technology Helps Students Learn Much And Better
• Improvise better Communication and Collaboration

- Provide Teachers More Resources
- Learning At Own Pace
- More Opportunities For Online Project-Based Learning
- Personalized Learning Opportunities
- Efficient Problem Solving Stuff
- Better Understanding through Graphics
- Save Time And Money

Challenges of Educational Technology

In Online classes, teachers cannot monitor every student; this makes them lure them towards cheating. The latest Technology encourages the cheating process among students by sharing test sheets, copy-pasting each other answers, Google answers during the online class test.

Impact of Technology in Education

In today's world, we all are interlinked with technology everywhere in our daily lives. So why not use Technology in Education. Technology is the only tool that helps to improve the education system in different ways. From teachers to students, technology leaves a vast impact on education. Modern Education Technology makes education more flexible and perceptive. Various technology driven education tools have introduced free online resources, personalized learning materials, more engaging content, and a better understanding of visuals and opportunities for advanced learning. In class room lessons or activities on laptops or tablets allow students to read directors, process information and complete work at their own price. This also helps free up this teacher's time so they can give students who may need extra guidance or assistance the attention they require.

Negative Impacts of Technology in Education

- Depression and other mental health issues. A university of Michigan study found that face book used to a decrease in happiness and overall life satisfaction.
- Lack of sleep
- ADHD (Attention - Deficit/hyper activity disorder)
- Obesity
- Learning Barriers
- Decreased communication and intimacy
- Cyber bullying
- Loss of privacy

Positive impact of Technology in Education

- Better time management thanks to productivity apps
- Improve health thanks to easy access to fitness routine, biometric devices, and diet management software.
- Easier and cheaper communication with friends and family
- Increased job opportunities due to the introduction of remote working.

BENEFITS OF TECHNOLOGY IN THE EDUCATION

1. Technology makes teaching easy

Aren't you tired of giving theoretical explanations your students cannot understand? You simply cannot discover a way of presenting tough concepts that makes the concept clear for each and every student in the class. Technology has that power! Thanks to audio-visual presentations, your students will understand exactly how the knowledge is applied in practice. You can use projectors and computer presentations to deliver any type of lesson or instruction and improve the level of comprehension within the class.

2. Technology helps you track students' progress

You are no longer limited to a plain-old diary and notes about every student. That would only get you confused. Today, you can rely on platforms and tools that enable you to keep track of the individual achievements of your students. My Students Progress and the Teacher Cloud Progress Tracker are great online tools that enable you to do that, but your school can also develop personalized software that would serve that purpose.

3. Educational technology is good to the environment

Can you imagine the amount of paper and number of trees that would be saved if every school decided to introduce digital textbooks? Of course, that goal is far from realistic at this point, but you can make a change when you start from your own class. For example, you can instruct your students to take online tests and submit their papers and homework through email. You can also encourage them to use Readers to go through the literature you assign.

4. Thanks to technology, students enjoy learning

Students are addicted to Facebook, Pinterest, Instagram, Digg, and other websites from a very early age. The internet can distract them from the learning process, but you can also use their inclination to spend time online for a good purpose: Making learning enjoyable. Use touch-screen technology and online presentations to make the classes more interactive. You can also rely on technology when you want your students to take part in discussions. Set up a private Facebook group for your class and inspire constructive conversations!

5. Technology makes distance learning more accessible than ever

Without the wonders of the internet, people wouldn't be able to get access to any type of information at the very moment they think of it. Today, distance learning is one of the most trending learning methods. Virtual lessons are slowly taking the place of traditional lectures. Students can organize their time in a way that works for them, and they can easily gain the knowledge they are interested in. For example, let's say one of your students shows great interest in Astronomy, but the traditional curriculum does nothing to feed that hunger for knowledge. You can recommend him/her to take beginner's course at Coursera, Udemy, or any other online service that offers high-quality virtual lectures.

6. Students and teachers can access information at any time

This is possibly the most obvious benefit of technology. When old-school teachers were students, they had to spend hours in the library looking for the information they needed. Today, technology integration makes everything different and simpler. Students can easily access newspapers, scientific articles, studies, and any other type of content online. They can write better, deeper academic papers because they can support their arguments with more evidence. When you give a lecture the students don't understand, they can find simpler instructions and information with a single Google search.

7. Technology makes collaboration more effective

Think about the way collaboration looks like in a traditional classroom setting. You organize groups, assign the projects, and suddenly the class becomes a complete mess. Some students express their opinions too loudly and firmly, while others don't get an opportunity to be heard. Online tools and apps offer a unique setting for students to engage in a group project. They can do the work from home; the team is connected through the Internet and everyone is inspired by the focused environment.

Implications and Limitations

The findings of this study contribute to society in several ways. Regarding theoretically, this study has enriched the literature on the technological competencies of teachers during the COVID-19 transitory period and verified the reliability of the TPACK model in the context of Karachi, Pakistan. It can be further used for verification in other cities and countries. In terms of methodological contribution, the study provides tentative insight in evaluating the impact of the COVID-19 transitory period on teachers' digital competencies and their state of implementation in pedagogical practices. Regarding academics, this study provides a pragmatic direction to relevant educational authorities and policymakers for the improvement of online education by providing pertinent solutions and recommendations as per the situation. In addition, the future planning of professional development and training programs for the teachers can be based on the feedback provided by the faculty members. The study can further contribute to elevating e-learning outcomes and satisfaction during as well as post-pandemic phase.

CONCLUSION

Access to learning opportunities to day is unprecedented in scope thanks to technology opportunities for communication and collaboration have also been expanded by technology. Traditionally, classrooms have been relatively isolated and collaboration has been limited to other students in the same classroom or building. Technology helps, using projector and visual image is another use of technology seen every where, projector are being used in the top universities, colleges and schools use

to increase the motivation and learning power of students. The learning part becomes effective when it adjoins technology

REFERENCE:

[1]. Center for Digital Education 12 August 2020

[2]. https://www.govtech.com/education/k-12/Five-MajorShifts-Needed-Post-COVID-19-to-Transform-Education.html

[3]. Adhikari, Janak, Chris Scogings, Anuradha Mathrani, and Indu Sofat. 2017. "Evolving Digital Divides in Information Literacy and Learning Outcomes A BYOD Journey in a Secondary School." The International Journal of Information and Learning Technology 34(4):290–306.

[4]. Baker, William M., Edward J. Lusk, and Karyn L. Neuhauser. 2012. "On the Use of Cell Phones and Other Electronic Devices in the Classroom: Evidence From a Survey of Faculty and Students." Journal of Education for Business 87(5):275–89.

[5]. Chowdhury, Faieza. 2019. "Blended Learning: How to Flip the Classroom at HEIs in Bangladesh?" Journal of Research in Innovative Teaching & Learning ahead-of-p(aheadof-print).

[6]. Dhawan, Shivangi. 2020. "Online Learning: A Panacea in the Time of COVID-19 Crisis." Journal of Educational Technology Systems 49(1):5–22.

[7]. Hirooka, Yoshiki. 2020. "Covid-19." Journal of Medical Ultrasonics 47(2):339.

[8]. James, Jeffrey. 2005. "The Global Digital Divide in the Internet: Developed Countries Constructs and Third World Realities." Journal of Information Science 31(2):114–23.

[9]. Mohammadi, Hossein. 2015. "Investigating Users' Perspectives on e-Learning: An Integration of TAM and IS Success Model." Computers in Human Busersehavior 45:359–74.

[10]. Paton, Rachael M., Andrew E. Fluck, and Joel D. Scanlan. 2018. "Computers & Education Engagement and Retention in VET MOOCs and Online Courses : A Systematic Review of Literature from 2013 to 2017." Computers & Education 125(January):191–201.

[11]. Pokhrel, Sumitra and Roshan Chhetri. 2021. "A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning." Higher Education for the Future 8(1):133–41.

[12]. Schleicher, Andreas. 2020. The Impact of Covid-19 on Education Insights From Education at a Glance 2020.

[13]. Shah, Shalini, Sudhir Diwan, Lynn Kohan, David Rosenblum, Christopher Gharibo, Amol Soin, Adrian Sulindro, Quinn Nguyen, and David Provenzano. 2020. "The Technological Impact of COVID-19 on the Future of Education and Health Care Delivery." Pain Physician 23(4 Special Issue):S367–80.