

A Study on “Future-Ready Educators: Adaptability and Digital Competency in Higher Education as a need for Upskilling”

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Abstract

The rapid growth of digital technology and the transformation of higher education systems have increased the need for educators to become adaptable and digitally competent professionals. In the contemporary educational environment, faculty members are expected to integrate technology into teaching-learning processes, adopt innovative pedagogical practices, and continuously upgrade their professional skills to meet evolving academic and industry demands. The COVID-19 pandemic further accelerated the shift toward digital education and highlighted the importance of technological readiness among educators. The present study focuses on the concept of future-ready educators by examining the adaptability and digital competency of faculty members in higher education institutions. The research aims to analyze educators' readiness to adopt digital technologies, their ability to adapt to changing teaching methodologies, and the challenges they face in the process of digital transformation. The study also explores the significance of continuous upskilling, professional development, and institutional support in enhancing teaching effectiveness and workforce preparedness. The research is based on both primary and secondary data. Primary data is collected through questionnaires and surveys administered to faculty members, while secondary data is gathered from research articles, journals, books, and educational reports. The study adopts a descriptive and analytical research approach to interpret the findings. The expected outcome of the study indicates that adaptability and digital competency have become essential skills for educators in higher education. The findings are likely to reveal that faculty members who actively engage in continuous learning and technological upskilling are better prepared to handle modern educational challenges and contribute effectively to student development. The study concludes that educational institutions must promote faculty development programs, digital training

initiatives, and technology-enabled teaching practices to create a future-ready academic workforce capable of meeting the demands of a digitally evolving society.

Keywords: *Digitalization, Upskilling, Learning Ability, Adoptability*

Introduction

The rapid advancement of digital technology has significantly transformed the global education system. Higher education institutions are increasingly integrating digital tools, online platforms, artificial intelligence, and technology-enabled learning methods into teaching and learning processes. In this evolving academic environment, educators are expected not only to possess subject expertise but also to demonstrate adaptability, technological proficiency, and continuous learning capabilities. The concept of “future-ready educators” has emerged as a critical requirement in ensuring effective teaching practices and preparing students for a digitally driven world.

Adaptability refers to the ability of educators to adjust to changing technologies, innovative teaching methodologies, institutional reforms, and evolving student expectations. Digital competency, on the other hand, includes the knowledge and ability to effectively use digital technologies for communication, teaching, assessment, research, and professional development. Together, adaptability and digital competency have become essential skills for educators to remain relevant and effective in the modern higher education ecosystem.

The COVID-19 pandemic accelerated the digital transformation of education by compelling institutions and faculty members to rapidly adopt online teaching platforms, virtual classrooms, and digital learning management systems. This sudden transition highlighted the importance of technological readiness and exposed gaps in digital literacy among educators. While many faculty members successfully adapted to these changes through upskilling and innovation, others faced challenges related to technological barriers, lack of training, resistance to change, and inadequate institutional support.

In the present era, higher education institutions are expected to produce industry-ready graduates capable of functioning in technologically advanced and globally competitive environments. This objective can only be achieved when educators themselves are equipped with future-oriented skills such as adaptability, creativity, digital literacy, critical thinking, and lifelong learning abilities. Therefore, understanding the level of adaptability and digital competency among educators has become an important area of academic research.

The present study aims to examine the adaptability and digital competency of educators in higher education institutions. It seeks to analyze how faculty members perceive technological changes, their readiness to adopt innovative teaching practices, and the challenges they face in becoming future-ready educators. The study also intends to identify the importance of continuous upskilling and institutional support in building a digitally competent teaching workforce capable of meeting the demands of modern education systems.

Background of the Study

Digital Transformation has fundamentally changed the teaching-learning ecosystem. Technologies such as AI, Learning management Systems, Virtual Reality, Augmented Reality, adaptive learning platforms, and collaborative digital tools have become integral to higher education.

Despite increasing technology adoption educators demonstrate varying levels of digital competency. Some faculty members confidently integrate innovative teaching practices, whereas others struggle with technological adaptation due to limited training, inadequate institutional support, resistance to change, or lack of confidence.

International organizations emphasize digital competence as a core professional requirement. Consequently, higher education institutions are investing in faculty development initiatives, digital infrastructure, and technology-enhanced pedagogies. Understanding educators' adaptability and digital competency is therefore essential for designing effective professional development programmes and achieving sustainable educational transformation.

Background of the Study

The higher education sector has undergone major transformation due to rapid technological advancement, globalization, and digitalization. Traditional teaching methods are gradually being replaced by technology-enabled learning systems, online education platforms, virtual classrooms, and digital assessment tools. As a result, educators are required to continuously adapt to changing educational environments and develop digital competency to effectively perform their professional responsibilities.

The increasing dependence on digital technology, especially after the COVID-19 pandemic, has highlighted the importance of adaptability, technological readiness, and

continuous professional development among educators. Institutions now emphasize future-ready teaching practices that integrate innovation, flexibility, and digital literacy into education. COVID 19 not just imposed the technology as one of the major change in the education system but it also changed the perceptions of each teacher towards the education. It not just changed the implications only in the lower or secondary education but also changed the perceptions in the professional education. Most of the Post graduates were in a fix to get themselves upgraded in the respective lines of their lives.

A rare and spectacular changeover was seen in the teaching fraternity. Digital transformation has fundamentally changed the teaching-learning ecosystem. Technologies such as Artificial Intelligence, Learning Management Systems, Virtual Reality, Augmented Reality, adaptive learning platforms, and collaborative digital tools have become integral to higher education.

Despite increasing technology adoption, educators demonstrate varying levels of digital competency. Some faculty members confidently integrate innovative teaching practices, whereas others struggle with technological adaptation due to limited training, inadequate institutional support, resistance to change, or lack of confidence. International organizations emphasize digital competence as a core professional requirement. Understanding educators adaptability and digital competency is therefore essential for designing effective and professional education development programs at all levels of learning. This would achieve obtaining sustainable educational transformation.

Statement of the Problem

Despite the growing importance of digitalization in education, many educators continue to face difficulties in adapting to technological changes and digital teaching methodologies. Challenges such as lack of training, resistance to change, inadequate digital infrastructure, and insufficient technological knowledge affect teaching effectiveness and workforce readiness. Therefore, there is a need to study the adaptability and digital competency of educators in higher education institutions and identify the factors influencing their preparedness for future educational demands.

Many faculty members encounter challenges related to technological change, digital pedagogy, online assessment, artificial intelligence, and continuous professional development.

These challenges affect teaching effectiveness, student engagement, and institutional competitiveness.

This study investigates the extent to which educators' adaptability influences their digital competency and identifies the institutional factors that contribute to developing future-ready educators.

Objectives of the Study

1. To examine the level of adaptability among educators in higher education institutions, which is the need of the hour and there were resistance for change in the past.
2. To analyze the digital competency of faculty members in the teaching-learning process, as there are many new gen facilities in the industry with high level of research mindset.
3. To identify the challenges faced by educators in adapting to digital transformation.
4. To study the importance of upskilling and continuous learning in higher education.
5. To suggest measures for developing future-ready educators.

Scope of the Study

The study focuses on educators working in higher education institutions and examines their adaptability, digital competency, technological readiness, and professional development in the context of modern education systems.

Research Methodology

Nature of Research

Descriptive and analytical research.

Sources of Data

- **Primary Data:** Data collected through questionnaires, interviews, and surveys from faculty members.
- **Secondary Data:** Journals, research articles, books, educational reports, government publications, and online academic sources.

Sampling Technique

Convenience sampling or stratified sampling method.

Tools for Data Analysis

Percentage analysis, charts, graphs, correlation analysis, and statistical interpretation methods.

Significance of the Study

The study will help educational institutions, policymakers, and faculty development centers understand the importance of adaptability and digital competency in higher education. It will also provide insights into the need for continuous upskilling and technological training programs for educators.

Expected Outcomes of the Study

The study is expected to reveal that adaptability and digital competency are essential characteristics of future-ready educators. It is anticipated that educators with higher technological readiness and willingness to upskill will demonstrate greater teaching effectiveness, professional growth, and ability to meet the evolving demands of higher education.

Review of Literatures

- ✓ Exploring Teacher-Artist Partnership a model of CPD of supporting & enhancing Arts education in Ireland: A research Report. Dr.Ailbhe Kenny and Dr Dorothy Morrissey in their paper presented during December 2016 have made it very interesting about the upskilling and need for the upskilling. This was the publication of Exploring Teacher-Artist Partnership as a Model of Continuing Professional Development (CPD) for Supporting & Enhancing Arts Education in Ireland: A Research Report. The Government of France decided to introduce education and art as a combination, for which the teachers were also to be educated in the same line. Initially they faced some hitches, but the steps taken to implement the policy were excellent. In order to initiate the policy, the teachers were trained on phase base and later they were made to teach the students. It was also made sure that the teacher who is interested to upskill were only selected and they were trained in the area art and area of their choice. This resulted in better results at the end of the academics.
- ✓ Upskilling VET practitioners: technical currency or professional obsolescence? By Berwyn Clayton, Victoria University Regan Harding, TAFENSW-North Coast Institute Melinda

Toze, Queensland VET Development Centre Mark Harris, Queensland VET Development Centre. This is the attempt made by the Department of Vocational Education Training to train their own teachers to help them train students better. The author has worked on the current situation then, where the organization deliver around 1.15 million courses to their stake holders. The targeted stake holders of the organization are students and industry professionals. This research was taken only to ensure that the Government of Australia has suggested for the betterment of the educational quality and VET practitioners were asked to be more flexible in their approach. This attempt of the research brought about a drastic change in the quality teaching and industry development in all aspects. The out come of the study was that, this entails organizations getting the climate right, adopting a strategic approach to maintaining currency; encouraging collaborative learning; learning about practice, through practice, in practice and facilitating updating for the here and now. It also requires individuals to accept responsibility for maintaining vocational currency. To actively facilitate this, there is a need to bring updating to the fore in performance management discussions and to entrench the concept of continuous learning in every initial teacher education program. This is where we can learn from the professions.

- ✓ HOW UNIVERSITIES ARE TEACHING BIM: A REVIEW AND CASE STUDY FROM THE UK - Zulfikar A. Adamu Lecturer & Tony Thorpe, Professor in Construction IT in Architectural Technology School of Civil and Building Engineering, Loughborough University, UK Building Information Modules is the next area where the upskilling was tested. Generally, effective learning by students requires a combination of methods, including lectures, 'isolated drill and practice', cooperative learning, use of narrative videos as well as problem-based and guided self-study, according to Bransford, et al. (2000) who discussed the principles of 'how people learn'. Hence, learning BIM can be achieved via teacher-led instruction in traditional lectures and/or lab tutorials, problem-based projects/coursework and use of web-based tutorials for acquiring practical skills in BIM technologies. This was the logic followed by the author of this research. The out come of the study were 1. Plan, phase and priorities, 2. Create an ecosystem of BIM, 3. Identify learning outcomes and industry needs, 4. Get teaching and administrative support, 5. Develop student-centered learning methods, 6. Form university coalitions for multi-disciplinary learning.

- ✓ Taylor-made for Teachers: Deskillling through increased competencies by Dr.Rober Runte, Faculty of Education, & Dr.Mary Runte, Faculty Management, University of Lethbridge. The main highlight of this research is, When professional labour is analyzed within the framework of the upskilling/down skilling or deskillling literature, neither model appears to accurately capture what is actually happening to knowledge workers: that teachers are being deskilled in terms of knowledge production, autonomous control over the work process, etc., but simultaneously upskilled in terms of implementation techniques. Here the author concentrates only on the teachers, he tries to prove that upskilling and down skilling are very important aspects of life during 1993 as there were new technologies, which had to be accepted by the teachers to upgrade themselves. Author speaks about the upskilling upskilling tradition may also be criticized for its failure to acknowledge the segmented nature of the labour market. Further the author speaks about deskillling where he says that the removal of skills or responsibilities from a job category through the redesign of the work processes. The question then arises whether teachers are undergoing upskilling or deskillling, with the evidence open to contradictory interpretations. In the research author concludes saying that the teachers should upskill as and when needed and on the other hand to upskill they must de skill the outdated technology or learning/ knowledge they had acquired.
- ✓ Shifting Identity: new conditions and the transformation of practice – teaching within post-compulsory education by JAMES AVIS University of Wolverhampton, United Kingdom: The article explores the social and economic context of teaching within further education in England. It examines the lived experiences of lecturers working in the sector. It suggests that the attempt to explain these in terms of proletarianization or re-professionalism is limited, and argues instead that we are witnessing a transformation of teaching and learning. This transformation is informed by an understanding of the economic context in which the sector is placed together with an interpretation of the needs of learners within these new conditions. It is suggested that a social bloc has been formed of constituencies that share this understanding. The transformation of teaching and learning in the sector opens up new forms of practice and identities for lecturers. The challenge is to work on the good sense of these changes. This article examines a number of issues concerning the nature of teaching and learning in English post-compulsory education. However, the debates raised are similar to those found in other educational sectors and are also pertinent to societies who have experienced educational polices shaped by the new right. The paradox this article seeks to

unravel is concerned with the apparently progressive models of educational practice surrounding post-compulsory education and teachers experience of the conditions and pedagogic context in which they work. Education is placed within a particular economic and social context: one that emphasizes the globalization of economic relations. In such a context the development of human capital as a means of winning competitive advantage becomes paramount. Value added waged labour and the key role of education in this process becomes pivotal. Author concludes his article with an open ended note as to education is a field which has to ensure that society looks for language of right, social justice and inclusion become appropriated by a reformist capitalism. The educational task is to ensure that it does not disturb any of them.

- ✓ Upskilling India Building India's talent base to compete in the global economy, an article by team of researchers from IBM. New technologies, everchanging skills requirements and outdated curricula are challenging India's higher education system in its efforts to equip graduates with job-ready skills. To address these challenges, India's education leaders should consider providing students with requisite skills by partnering with industry, adopting new learning technologies and delivering experience-based, applied learning is the concept looked in this research. It was evident from the study that the higher education leaders and institutions need to evolve traditional educational models, address key challenges and industry and government partnership to keep up with today's ever-changing skills requirements. Study also reveals that there is huge gap in the skill required, when compared with the changing technology. The company emphasizes on the present population and industrial potential, it targets the present population, where we have a more youth base population where as maximum part of the world is moving towards the aging population. This positive position has taken maximum population towards the most looked upon situation that is industrialization and entrepreneurship. And India's economy and entrepreneurial community are becoming ever more vigorous. But India's ongoing growth and development is not assured. In our recent report on Indian entrepreneurship, 70 percent of India's venture capitalists surveyed indicated that startups are experiencing difficulties scaling due to challenges obtaining employees with the right skills. Of even greater concern is that, according to estimates from a recent employability survey, as many as 70-80 percent of India's engineering graduates are reported to be functionally unemployable. India's executives surveyed in our 2016 report on the Indian economy said that improved access to higher-quality skills will boost productivity and efficiency throughout the economy, and

54 percent were eager to better promote skills development. This would reflect on various other areas of skill development, as a result educational sectors should be more open for skill-based education. And this require skill development amongst the faculty who train the students. The study has reviled the critical skill areas. Ability to analyze problems and draw conclusion, Ability to collaborate effectively and work in a team, ability to communicate effectively in the business context, and willingness to be flexible, agile and adaptable to change. The study further says that the present Indian education system has failed to provided what students need, industry require and society is looking for. It also emphasizes on the rooms for improvements in transferring relevant knowledge to students, providing access to students from a broad range of background and preparing them to be entrepreneurs. With the changing environment it is also understood that the students do not acquire the basic skills which is job readiness. The researchers conclude saying, the present education system has to change as per the industrial requirement, majorly the contribution is expected from the academic leaders, next comes the senior educators, corporate recruiter and trainers and finally educational innovators.

- ✓ Teacher coaching to upskill teachers and support pasifika achievement: An exemplar Kellie Spee, Judy Oakden, Dr.Ruth Toumu'a, Pale Sauni and Clark Taugalu Wellington New Zealand. This paper is on providing personalized support teachers to help them to engage with and improve Pasifica students' academic success encourages and supports its teachers to self-reflect as a way to improve their practice and participation. In order to improve the results of the students, the top management and the teachers took a collective decision to share additional responsibilities to the teachers by the management. The teachers were further provided with support like teacher coach, Specialist classroom teacher, middle management, teachers appraisal system, professional learning groups, external professional development consultancy. The role of the teacher coach is to provide an 'intentional disturbance', and to provide a looking glass for teachers to help them reflect on their practice. By working in partnership with the teacher, the teacher coach supports them to articulate what they are doing and, more importantly, why they are doing things in a certain way. The result of the study was the senior management, and teachers were able to identify a number of key benefits from the college decision to introduce the teacher coaching process. The result of the research was very positive, proving that the trained teachers in various skills can train the students in a better manner resulting in better results.

Gaps in the Research

This study clearly establishes the importance of upskilling and digital competency among faculty members; however, several research gaps can still be identified. The reason for identifying these gaps is to better the understanding of research and to work more closely to have constructive analysis and outcome. Some of the gaps in this papers are:

- a. Lack of Focus on specific skill areas: The study broadly discusses upskilling and digitalization but does not identify which specific technical, digital or pedagogical skills are most required by faculty members in higher educational settings.
- b. Limited analysis of challenges in upskilling: While the study highlights the importance of digitalization, it does not deeply examine the barriers faced by teacher, such as lack of training opportunities, institutional support, financial constraints, resistance to change, or technological infrastructure issues.
- c. Lack of student perspectives: The research focuses only on faculty perceptions and does not include students' opinions regarding the effectiveness of digitally upskilled teachers and technology enabled teaching methods.
- d. No measurement of impact on teaching effectiveness: The study identifies positive attitudes towards upskilling but does not measure how digital competency actually improves teaching quality, student learning outcomes, academic performance or employability.
- e. Post-COVID transformation not deeply explored: Although COVID-19 is identified as a major reason for digital transformation, the long-term impact of pandemic driven upskilling on teaching practices and institutional development has not been comprehensively analysed.

Conclusion

In the era of digital transformation, educators must continuously adapt to technological advancements and innovative teaching methodologies. Future-ready educators are those who embrace lifelong learning, digital competency, and professional adaptability to effectively contribute to modern education systems. The study emphasizes the need for institutional support, faculty development programs, and continuous upskilling to build a competent and technology-driven educational workforce.

The rapid advancement of digital technologies has fundamentally transformed the landscape of higher education, reshaping the way knowledge is created, delivered, and

assessed. The integration of artificial intelligence (AI), learning management systems (LMS), virtual classrooms, cloud-based collaboration tools, data analytics, and digital learning resources has significantly enhanced teaching and learning practices. In this evolving educational environment, educators are no longer expected to function solely as subject experts but also as facilitators of learning, innovators, mentors, and technology-enabled professionals. To remain relevant and effective, educators must continuously adapt to emerging technologies, embrace innovative pedagogical approaches, and develop the skills necessary to engage digitally native learners. This ongoing transformation highlights the critical importance of adaptability and digital competency as essential attributes of future-ready educators.

Future-ready educators are characterized by their commitment to lifelong learning, professional growth, and the continuous enhancement of their digital capabilities. They actively seek opportunities to acquire new technological skills, integrate digital tools into their teaching practices, and respond proactively to the changing demands of the education sector. Beyond technical proficiency, these educators demonstrate flexibility, creativity, critical thinking, collaboration, and resilience in managing educational change. Their willingness to experiment with innovative instructional strategies, personalize learning experiences, and utilize technology to improve student engagement enables them to create dynamic, inclusive, and learner-centered classrooms. As digital transformation continues to accelerate, the ability to adapt quickly and effectively has become a defining characteristic of successful educators in higher education.

However, the development of future-ready educators cannot rely solely on individual efforts; it requires sustained institutional commitment and support. Higher education institutions play a pivotal role in fostering digital transformation by investing in modern technological infrastructure, providing regular faculty development programmes, organizing workshops and certification courses, and creating a culture that encourages innovation and continuous professional learning. Institutional policies that promote digital literacy, collaborative learning, and research-driven teaching practices significantly enhance educators' confidence and competence in integrating technology into education. Therefore, continuous upskilling, strategic faculty development initiatives, and strong organizational support are indispensable for building a competent, adaptable, and technology-driven educational workforce capable of meeting the evolving challenges and opportunities of twenty-first-century higher education.

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