Chapter 3
Revisiting Technological Approaches for E-Content Development and Deployment From COVID-19 Pre-Pandemic to Post-Pandemic Era:
A Qualitative Analysis From Experts' Perspectives

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ABSTRACT

Alongside pedagogy, application of appropriate technology is an important deter-minant for effective learning experience with any e-content or e-learning system. To understand the proper utilization of IT strategies for e-content development, the qualitative method of research has been used in this study by which content analysis has been done on the interviewed data, gathered from the IT professionals

and experts, with the help of Atlas.Ti software. As this study was conducted in the pre-pandemic era of Covid-19, the same kind of study has again been carried out to revisit and compare the changes, if any, in the technological approaches for e-content development and deployment in the post-pandemic era. The finding of the post-Covid study is also in line with the pre-Covid study wherein it was suggested how web technology can be deployed for e-content development. This chapter intends to spell out the pre-pandemic and post-pandemic technical framework and guidelines with step-by-step procedural implementation of technology for supporting the technology infused education.

INTRODUCTION

Due to the emergence of new media and digital devices along with their value-added fascinating applications, today's education and learning seems to be expanding beyond the walls of the classroom. This expansion from classroom to digital space has been more apparent in COVID-19 pandemic. Before the pandemic, all the higher educational institutes including the institutes of Open and Distance Learning (ODL), spread all over the world, had to try hard to open up education imparting in terms of awareness, reach, accessibility and technological infusion. But COVID crisis and its lockdown restrictions made it imperative to adopt all forms of open initiatives of teaching and learning delivered via different platforms of technology and e-learning applications such as e-content, MOOCs (Massive Open Online Courses) and OERs (Open Educational Resources), remote teaching, etc.

These online ways of learning were the only alternative and an urgent solution for maintaining the continuity of the learning process but this shift from face to face learning to online learning came with numerous challenges for students and academicians. Despite the challenges, the study of Mseleku (2020) found that there are also COVID-19 induced opportunities such as innovation and capacity development. These opportunities opened up the new ways for more technology adoptions in education imparting and its enhanced access (Alhwaiti, 2023). Now, post-COVID, this technology infused education has become the new normal (Adtani, et al., 2023). So, it can be deduced that using digital technology in delivering education was the compulsion of the academia world earlier during pandemic crises, has now become the choice which is also advocated by Himang et al. (2023).

However, according to UNESCO (2023) report, it is debatable whether technology has transformed education, as many claim. The application of digital technology varies by community and socioeconomic level, by teacher willingness and preparedness, by education level and by country income. Except in the most technologically advanced countries, computers and devices are not used in classrooms on a large

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