



A Comprehensive Review of Key Competencies for Educators in Advancing Distance Learning in Higher Education

Naik NR¹, Bhaskar J^{2*}


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¹ N Roopsing Naik, Professor, Library & Information Science and University Librarian, JNTUH Kukatpally, Hyderabad, India.

^{2*} J Bhaskar, Research Scholar, Department of Library Science, Bir Tikendrajit University, Manipur, India.

This literature review investigates the essential competencies that educators must possess to improve distance learning in higher education institutions. The analysis encompasses a range of research articles, pinpointing critical skills in pedagogy, technology, design, management, and communication. The results underscore the significance of these competencies in fostering an enhanced learning experience for students in an online setting. By acquiring and refining these skills, educators can adeptly manage the shift to distance learning and promote positive outcomes for students in higher education.

Keywords: distance learning, higher education, skills, covid-19

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1. Introduction

The enhancement of distance learning education on a global scale has emerged as a critical priority, significantly accelerated by the COVID-19 pandemic. Although the concept of digitalization has progressed and been embraced across various sectors in recent years, the pandemic has underscored the necessity for nearly all organizations to transition from in-person to virtual formats (Hizam et al., 2021). In response to the COVID-19 crisis, numerous countries worldwide suspended operations at schools, colleges, and universities to mitigate the spread of the virus. Research indicates that at the peak of these closures in early April 2020, approximately 1.6 billion students across 194 countries—over 90% of enrolled students—were impacted by the shutdown of educational institutions (UNESCO, 2020). This situation further emphasizes the need for educators to adapt their teaching methodologies from traditional approaches to those that are conducive to online instruction. A study by Li & Lalani (2020) corroborates this assertion, highlighting that the education sector underwent a comprehensive transformation in its teaching and learning processes, shifting entirely from physical classrooms to virtual environments.

A study conducted by the OECD in 2020 indicates that the effectiveness of online learning may be compromised by insufficient basic digital skills, leaving educators ill-prepared to swiftly adjust to the new circumstances. Educators are diligently working to address disparities in access, engagement, and the overall quality of online education. Conversely, previous research by Allen et al. in 2012 highlighted that educators often experience more apprehension than enthusiasm regarding the transition to online teaching. Nevertheless, the ongoing pandemic has underscored the necessity for adaptation, as many countries have implemented movement control orders that discourage in-person classes. An analysis by UNESCO in 2020 revealed that the peak of school closures occurred in early April 2020, affecting approximately 1.6 billion students across 194 countries, which represents over 90% of all enrolled students. Consequently, educators must enhance their skills in developing engaging and interactive virtual lessons, offering personalized support to students,

and cultivating a sense of connection and community within the online classroom. Additionally, concerns have been raised by a research center regarding the potential challenges posed by a lack of fundamental digital literacy among certain students and teachers, which may hinder their ability to adapt to the new educational environment.

Educators must remain informed about contemporary teaching methods, instructional skills, the application of innovative teaching strategies, and advancements in subject matter knowledge (Ibrahim et al., 2020). By equipping educators with these vital competencies, they can effectively deliver high-quality distance education to learners across the globe. Given the imminent transition from traditional classroom settings to virtual teaching and learning environments, it is clear that only those who are committed to enhancing their skills will achieve outstanding student outcomes and sustain student engagement in the learning process (Gray & Diloreto, 2016). This leads to the establishment of a research objective aimed at identifying the fundamental skills necessary for educators to provide students with an exceptional learning experience through distance education.

2. Data Collection and Analysis

A comprehensive literature review was conducted to examine the competencies of educators in online instruction. The search was confined to the relevant subject matter using web-based search engines. Publications that addressed the skills necessary for online teaching were identified through an examination of titles, abstracts, and author keywords. The search parameters were further refined to include only English-language journals and articles, ranging from the oldest to the most recent, in order to discern trends related to the deficiencies in skills among educators in online teaching. The search yielded results primarily consisting of journal articles, books, and theses. Key online databases such as Science Direct, Academic Search Complete, Google Scholar, Wiley Online Library, Business Source Complete, Emerald, ResearchGate, and Elsevier were employed. To gain a more profound understanding of various factors recognized by other scholars, fourteen foundational papers were selected that specifically addressed the competencies required for educators in online teaching (refer to Figure 1).

The methodology for the literature review in this qualitative study involves a systematic and meticulous approach to collecting, analyzing, and synthesizing relevant academic literature concerning the essential competencies needed by educators to provide an effective learning experience through distance education.

3. Findings and Discussion

The concept of distance learning has significantly evolved over the past year, particularly with the rapid expansion of the internet, which has accelerated this development (Sarkar & Das, 2020). Initially intended solely for lesson delivery, by the early 1920s, distance learning transformed from a one-way instructional method into a two-way interactive educational experience (Kentnor, 2015). Although online learning was established many years ago, its widespread adoption has been hindered by the accessibility and advancement of educational institutions. Previous studies have consistently underscored the necessity of specific knowledge and skills for effective online instruction, emphasizing that certain competencies are essential for teaching in a digital environment. Research conducted by Palloff & Pratt (2011) indicates that faculty members often receive minimal training and preparation for online education, as it has not been prioritized. Furthermore, an effective online educator must have a thorough understanding of both traditional and online learning environments, recognizing and utilizing the differences between them (Williamson & Redish, 2009). This expertise should be adeptly applied to design and facilitate online courses, thereby ensuring a smooth and impactful learning experience for students.

Instructors can enhance the effectiveness of online courses by adapting their instructional strategies, utilizing suitable technologies, and addressing the specific challenges and opportunities presented by online learning. It is a well-established fact that some educational institutions do not offer online courses. Nevertheless, the onset of the pandemic in mid-2019 compelled all educational institutions to transition to online teaching and learning (Wieland & Kollias, 2020). To align with the new standards of education, educators must embrace innovative approaches to engage students in online and remote instruction (Mazlan et al., 2021). This adaptation necessitates that educators develop the requisite online skills, as the importance of such competencies is indisputable.

Research has identified five essential skills for online teaching that educators should focus on: communication, technology, pedagogy, design, and management, as illustrated in Figure 1 (Salter and Hansen, 1999; Salmon, 2003; Smith, 2008; Compton, 2009; Dubins and Graham, 2009; Guasch et al., 2010; Abdous, 2011; Palloff and Pratt, 2011; Bigatel et al., 2012; Schmidt et al., 2013; Baran and Correia, 2014; COAT, 2014).

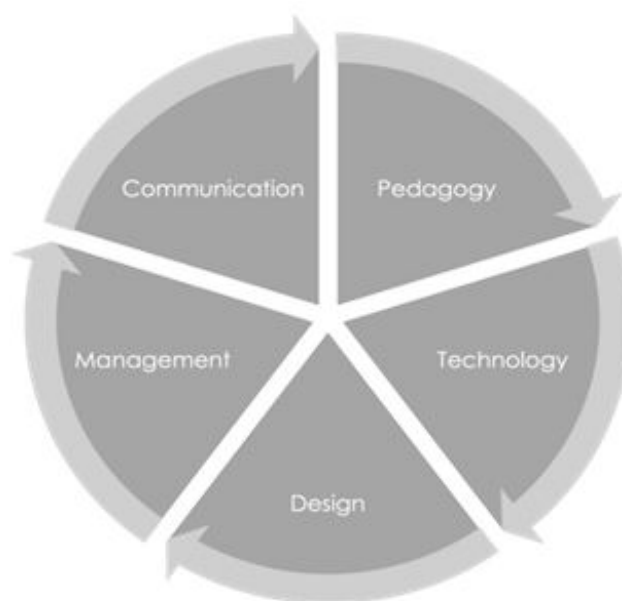


Figure 1: Skills for educators to enhance online teaching

The organization of competencies into distinct categories aims to enable a thorough analysis of the five primary categories that have garnered considerable attention in numerous studies. These categories have been identified as those that are most prominently featured in the existing literature. This suggests that a substantial number of research efforts have investigated and deliberated on the competencies associated with these categories, particularly in relation to the skills required for educators in distance learning, thereby underscoring their recognized significance within the realm of distance learning education.

Pedagogy

A comprehensive grasp of pedagogical skills is crucial for effective online teaching. Pedagogy can be defined as the development of lesson plans and their execution (Masnan & Hashmi, 2014). In simpler terms, it refers to the ways in which educators engage students and make learning enjoyable through various strategies and techniques.

Paloff & Pratt (2011) assert that online teaching presents a distinct methodology compared to traditional face-to-face instruction. This assertion highlights the necessity for educators to adapt conventional teaching practices to fit the online context and to utilize effective instructional strategies that encourage active participation.

The acquisition of pedagogical expertise enables educators to design stimulating learning experiences, encourage students to engage in critical analysis and problem-solving, and adapt their teaching methods to accommodate the diverse learning needs of students in an online environment. Nevertheless, a significant number of educators in higher education do not possess adequate training in pedagogy for online instruction (Gabriel & Kaulfield, 2008). This underscores the necessity for online educators to grasp the fundamental principles and strategies associated with online teaching.

Educators, as noted by Bawane and Spector (2009), are expected to assume a range of responsibilities and integrate various strengths and competencies. This entails fostering a sense of community and creating opportunities for peer interaction, which are essential for enhancing student engagement in online learning environments. Furthermore, research conducted by Pelz (2019) indicates that promoting self-assessment and reflection among learners is a highly effective strategy for sustainable education. Allowing students to take the lead in their work encourages collaboration with peers, while the opportunity to evaluate their own assignments using an answer key deepens their understanding and enables them to make necessary improvements for enhanced learning outcomes. Lastly, educators can employ additional pedagogical strategies, such as encouraging knowledge construction based on students' prior knowledge and life experiences, as suggested by Oliver (2001). Initiating a lesson or unit by activating students' existing knowledge on a subject helps them establish connections between what they already know and the new concepts being presented. By leveraging students' prior knowledge, teachers can strengthen their foundational understanding and facilitate meaningful learning experiences.

Technology

Proficiency in educational technology is essential for effective online instruction.

Instructors must utilize technology not only to enhance course materials but also to ensure a high-quality teaching and learning experience. It is imperative for educators to be well-versed in a variety of digital tools and platforms that facilitate content delivery, collaboration, assessment, and student engagement (Albrahim, 2020). A comprehensive understanding of the functionalities and capabilities of these digital resources is crucial for educators to successfully incorporate them into their teaching methodologies. By effectively utilizing these tools, educators can present content in an engaging manner, foster collaboration and interaction among students, accurately assess learning outcomes, and encourage active participation in the online learning environment. Furthermore, the development of online courses necessitates a command of technologies that many faculty members may not be accustomed to, and some may even find intimidating (Schmidt et al., 2013).

Instructors can significantly enhance student learning outcomes and engagement by effectively utilizing technology to create interactive learning experiences, facilitate online discussions, provide multimedia resources, and deliver timely feedback. Access to a diverse array of technological resources and tools, such as email, web browsers, learning management systems, and various communication applications, is crucial (Abdulrahman et al., 2020). Furthermore, it is vital to comprehend both the capabilities and limitations of these educational tools. Online classes are frequently conducted using platforms like Zoom and Google Meet, making proficiency in these technologies essential for maintaining uninterrupted class sessions and fostering synchronous interactions with students. However, it is important to note that the mere use of the Internet as a delivery mechanism does not dictate pedagogical practices; rather, educators must leverage technology to enhance the content of their courses (Simonson et al., 2019).

Design

Designing and developing online courses presents a significant challenge (Albrahim, 2020). It necessitates meticulous organization of content alongside the effective incorporation of technological tools and multimedia components to foster an engaging and interactive educational experience for learners.

An effective online educator must cultivate a cohesive online classroom experience, avoiding the inclusion of features that do not add value (Craddock & Gunzelman, 2013). This entails that the instructor should structure the online course in a manner that ensures all components, including content, activities, assessments, and communication, are well-integrated and interconnected. The online classroom ought to offer a structured and fluid learning environment, enabling students to navigate effortlessly and access all essential resources.

Paloff and Pratt (2011) emphasize that effective online course design is paramount in the realm of online education. A well-structured course is essential for fostering engaging and impactful learning experiences. Instructors must organize their courses logically, establishing clear learning objectives, appropriate content sequencing, and ensuring that assessments align with the intended outcomes. Courses that are thoughtfully designed integrate multimedia components, interactive activities, and avenues for student interaction, thereby enhancing learner engagement and motivation. Furthermore, leveraging feedback from previous students to inform the development of new courses, along with assessing course design quality through established quality assurance methods such as the Quality Matters Rubric (Eagleson & Pfander, 2014), allows for the continuous refinement of the teaching framework. This approach facilitates the incorporation of ongoing feedback, ensuring that the overall lesson management remains current and effective.

Management

Effective management skills are essential for fostering an organized and efficient online learning environment. Educators are required to set clear guidelines and expectations, oversee discussions and activities, and provide prompt support and feedback to students. As noted by Bawane and Spector (2009), the demonstration of leadership, management, mentoring, and coaching abilities, along with an understanding of administrative qualities and procedures, facilitates a seamless online educational experience. Proficient management skills contribute to a smooth instructional flow, ensure accountability, and address any technical or logistical issues that may occur during online teaching.

By adopting a research-based approach, educators can continuously enhance their teaching methodologies and contribute to the progress of the educational field. Furthermore, conducting research on classroom instruction and subsequently interpreting and integrating the findings (Craddock & Gunzelman, 2013) allows educators to acquire valuable insights into effective teaching strategies, student learning outcomes, and the various factors that impact classroom dynamics.

Interpreting research findings enables educators to assess their teaching methodologies critically, facilitating informed decision-making and the adaptation of instructional practices grounded in evidence-based insights. Furthermore, it is imperative to adhere to legal, ethical, and copyright standards (Muñoz Carril et al., 2013). Online educators are also required to prioritize ethical considerations by safeguarding student privacy, cultivating a safe and inclusive educational atmosphere, and upholding academic integrity. Moreover, compliance with copyright regulations is crucial for securing the necessary permissions to utilize copyrighted materials and for encouraging students to honor intellectual property rights. By actively addressing these legal, ethical, and copyright concerns, online educators can foster a secure and responsible learning environment for their students.

Communication

Effective communication skills are essential for lecturers, whether in online or in-person classes. Nonetheless, the approaches and mediums of communication differ significantly. Therefore, it is imperative that communication strategies are meticulously crafted (Craddock & Gunzelman, 2013). In the context of online education, proficient communication skills are particularly important as they enable the clear and succinct transmission of information to students. This assertion is further corroborated by research conducted by Abdous (2011), which highlights that a key communication strategy involves promoting and sustaining interactive discussions and the exchange of information. Online educators must articulate their ideas, instructions, and feedback in a manner that is easily comprehensible within a virtual setting. Robust communication skills are instrumental in establishing rapport, enhancing student engagement, and fostering a supportive learning environment in online classrooms.

Additionally, it is crucial to ensure the quality and precision of written communications, as well as to identify typographical and grammatical errors (Fuller & Yu, 2014). Online communication predominantly depends on written formats, including emails, discussion forum contributions, and feedback remarks.

Ensuring the quality and precision of written communications is vital for conveying information effectively and enhancing student understanding. Well-articulated messages enable students to follow instructions, accurately comprehend concepts, and participate in meaningful discussions. Furthermore, Munoz Carril et al. (2013) emphasize the significance of tone in facilitating effective communication within online classrooms. In contrast to in-person interactions, online communication does not provide nonverbal signals such as facial expressions, body language, or vocal tone. The absence of these cues can lead to misinterpretations of the intended tone. Consequently, online educators must be attentive to the tone expressed in their written communications to guarantee that their messages are understood as intended by the students.

4. Conclusion

In summary, the acquisition and ongoing enhancement of these competencies are essential for educators aiming to thrive in the field of online instruction. As technological advancements continue and online education becomes more widespread, it is imperative for educators to adopt these skills to effectively engage learners, develop vibrant learning environments, and nurture a sense of community and collaboration. By emphasizing the development of these competencies, educators can seize the opportunities presented by online teaching, ultimately leading to a transformative impact on education. According to the literature review, the skills necessary for online teaching include pedagogy, technology, design, management, and communication. Each of these skills plays a vital role in shaping the educational landscape and facilitating online instruction. Pedagogical knowledge is crucial for crafting engaging, learner-centered online experiences, while proficiency in technology allows for the effective utilization of digital tools and platforms.

Design skills are important for the organization and presentation of course materials, and management expertise ensures the smooth administration of courses. Effective communication is key to providing clear instructions, feedback, and interaction with students. The significance of these skills lies in their combined ability to create an optimal online learning experience, enhance student engagement, and support successful learning outcomes. By refining these competencies, educators can meet the challenges of online teaching, deliver impactful and meaningful learning experiences, and equip students for success in the digital era.

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