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Meeting the Digital Needs of Adult Learners: An ODL Educators' Competency Framework.

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Abstract

In the evolving landscape of education, Online Distance Learning (ODL) educators play a crucial role in effectively utilising digital and online platforms to enhance teaching and learning experiences, especially for adult learners. An educator's perspective and proficiency in digital teaching and learning are important. While digital literacy emphasises fundamental digital skills, digital competency encompasses knowledge, attitude, and abilities required for the proficient and creative use of digital tools in the educational context. This paper will investigate the transition from digital literacy to digital competency and introduce a comprehensive framework designed to meet the specific requirements of educators catering to adult learners within ODL institutions. The framework comprises four primary dimensions: technological knowledge, pedagogical integration, digital citizenship, and continuous professional development, essential for creating engaging and effective learning experiences for adult students. The framework recognises the relationship and integration of these components, highlighting the significance of a well-balanced approach to educator development, particularly catering to working adult learners. It highlights the need for training programmes, professional learning communities, and institutional support to facilitate the acquisition and application of digital competencies that cater to this unique demographic. The implications of this framework encompass educational institutions, policy developments, and initiatives aimed at equipping educators with the necessary skills and creating digital learning environments that effectively meet the educational requirements of adult learners. The implementation of a digital competency approach holds the potential to nurture innovation and pedagogical excellence within academic institutions, thus elevating the educational experiences of adult students in the digital era.

Keywords: Digital Literacy, Digital Competency, Adult Learners, Online Distance Learning (ODL), Conceptual Framework.

Introduction

Technology, especially education, has become increasingly important in today's quickly evolving digital world. The transition to a digital environment is a change beyond merely absorbing digital literacy and advancing digital proficiency. Educators are expected to be

skilled digital navigators in this fast-paced learning environment; they are no longer just passive consumers of technology. With virtual classrooms and online learning resources changing education, the traditional notion of a classroom has expanded outside its physical walls. The education paradigm has experienced a profound change that has redefined the duties and obligations of educators (Noroozi & Sahin, 2023). Educators' proficiency and perspective in utilising digital tools play pivotal roles in enhancing adult learners' educational journey. In essence, the educators' level of digital literacy directly impacts their ability to provide a meaningful and effective learning environment for adult learners in today's digital-centric educational landscape (Keshavarz & Ghoneim, 2021).

The transition to digital learning in Open Distance Learning (ODL) environments has heightened the demand for educators to advance from basic digital literacy to more comprehensive digital competencies. Many educators, however, lack the necessary training to fully engage with these digital tools, which poses significant challenges in effectively supporting adult learners. This highlights the urgent need for a structured competency framework to bridge these gaps and equip educators with the skills needed for successful ODL delivery (Ozdamar-Keskin et al., 2015; Maphosa & Bhebhe, 2019; Ismail et al., 2022).

As such, this research endeavours to explore the "Open Distance Learning (ODL) educator's digital competency framework" that reflects the critical importance of this paradigm change. This framework provides educators with a structured roadmap and the necessary tools to succeed in the modern educational environment. In addition to basic digital literacy, it includes advocating for digital citizenship, adjusting to new educational technologies, and integrating technology into pedagogical practises with ease. Through a careful consideration of these components and their harmonious integration, this framework advocates for a balanced approach to educator development, particularly attuned to the unique needs of working adult learners.

This study is driven by the growing need for digital competency in education, particularly within ODL institutions, where educators must adapt to rapidly evolving digital environments. The shift to online learning, accelerated by the COVID-19 pandemic, has highlighted the need for educators to develop advanced digital literacy and skills in pedagogical integration to effectively support adult learners. By proposing a tailored framework for ODL educators, this research contributes to the field by offering a structured approach to developing these digital competencies. Such a framework is essential, as studies have shown that educators' digital skills, guided by frameworks like DigCompEdu, play a critical role in enhancing online learning experiences and improving institutional readiness for digital teaching (Santos et al., 2021). Additionally, mentoring and support structures, such as those outlined in web-mentoring frameworks, are crucial for addressing the unique needs of ODL educators working with adult learners (Setlhodi, 2021). The findings of this study could significantly inform policy development and institutional strategies for educator training, ensuring that educators are equipped to foster engaging and effective digital learning environments.

Digital Transformation in Education

The journey from digital literacy to digital competency signifies a profound shift in the roles of educators, one that is intricately linked to the evolving demands of ODL. This transformation is reshaping the educational landscape, with digital technologies serving both

as a tool and an environment that offers fresh opportunities. In this context, the flexibility of learning at any given moment, the promotion of lifelong learning, and the ability to tailor personalised learning paths are becoming increasingly attainable, as highlighted by Gubanova (2021).

Given these dynamics, educators must possess proficiency in digital skills and be adept at seamlessly integrating technology into their lesson plans (Falloon, 2020). In addition, educators have an added responsibility – nurturing digital citizenship and instilling the values of responsible yet ethical digital conduct among their learners (Prasetiyo et al., 2023). Consequently, digital competency is rapidly becoming a prerequisite for improving learning outcomes and facilitating efficient instruction within this swiftly changing educational environment. This transition denotes change and heralds a fundamental transformation in education, signifying the critical importance of digital competency in the pursuit of effective teaching and learning in ODL.

Adult Learners in ODL

As Kara (2019) aptly points out, adult learners frequently grapple with the multifaceted challenge of time management, learning hurdles, and technical obstacles. This challenge spans a spectrum of issues, from balancing time between personal commitments and academic pursuits to grappling with inadequate or unsuitable learning materials. It also encompasses the dearth of ineffective technological and pedagogical support. However, Adult distance learners exhibit remarkable self-regulation and competence in online studies, as Lee (2019) affirmed.

In light of these dynamics, it becomes evident that crafting a dedicated learning framework tailored exclusively for ODL could yield more advantageous results compared to adhering to a one-size-fits-all design approach, as emphasised by Kara (2019). Such a customised approach allows a more nuanced response to adult learners' unique needs and preferences.

Furthermore, when educators proficient in digital tools take on the role of designing dynamic, engaging, and student-centred learning environments that cater to a diverse array of learning preferences and styles, it not only fosters a more personalised learning experience but also allows for the customisation of training to suit each student's specific needs and skill level, as observed by Barbour et al. (2020). In this way, the educational experience can be finely tuned to meet the distinct requirements of adult distance learners, addressing their time management challenges, learning needs, and technological competencies more effectively.

Digital Competency: A Multifaceted Skillset

Digital literacy, as defined, encompasses the foundational knowledge and skills essential for effectively engaging with digital technology and accessing digital information (Huvila, 2012). This entails the proficiency required for navigating digital devices, operating systems, software applications, and the Internet, thus forming the fundamental building blocks of digital aptitude.

On the other hand, digital competency takes the concept of digital literacy to a more expansive and dynamic level (Barboutidis & Stiakakis, 2023). It goes beyond the basic understanding of digital tools and involves a broader range of knowledge, skills, and attitudes. As outlined by Perifanou and Economides (2019), digital competence encompasses the ability to efficiently access, use, create, and share digital resources. It also involves effective communication and collaboration with others using digital technologies to achieve specific objectives.

Kapustin (2021) further extends the notion of digital competencies by introducing a comprehensive set of skills that span information technology, cognitive abilities, and socio-behavioural aptitude, all of which are indispensable in any digital environment. This implies that digital competence is not limited to merely using digital technology but also encompasses the capacity to employ it effectively and creatively across various contexts. In summary, digital competency builds upon digital literacy, containing a more profound and multifaceted set of abilities crucial in our increasingly digitalised world.

Digital Competency in ODL

The significance of teachers' digital skills and competencies in fostering lifelong learning and professional development, as highlighted by Fedorova (2021), is of the utmost importance in the contemporary educational landscape. These digital competencies empower educators and reinforce their indispensable role in navigating the ever-changing educational landscape. Smah (2023) highlights the potential for technology to address the challenges inherent to ODL systems in this context. Through the development of digital proficiency, it is possible to improve students' and educators' teaching and learning experiences. In addition, digital competence facilitates intercultural communication and global connectivity, allowing students to collaborate with peers from around the globe. According to Kharkivska (2020), this inclusivity extends to diverse learner demographics, including working adults and individuals with disabilities, fostering a more equitable educational environment.

Therefore, the collective argument supports the notion that a comprehensive framework comprising these essential components is essential for fostering the digital competency of ODL educators. The increasing prevalence of digital competence in our daily lives presents numerous new opportunities, risks, and difficulties. Educators with digital skills and competencies play a crucial role in shaping the future of education in this rapidly changing environment.

The following statements provide context and justification for the research questions (RQ) of this study:

RQ1: What is the current state of digital literacy and competency among Online Distance Learning (ODL) educators, especially those who serve adult learners?

RQ2: What are the specific digital literacy skills and competencies do Online Distance Learning (ODL) educators need to support adult learners in the digital education landscape effectively?

RQ3: How do the components and dimensions of the proposed ODL Educators' Competency Framework (technological knowledge, pedagogical integration, digital citizenship, and continuous professional development) interrelate?

Literature Review

The ODL Educators' Competency Framework

While existing literature addresses general digital literacy in education, few studies have specifically focused on developing a comprehensive competency framework for ODL educators working with adult learners. For instance, studies such as Alemdag et al. (2020) have emphasised the importance of aligning professional development with the unique needs of adult educators, enhancing their technological, pedagogical, and content knowledge (TPACK). Falloon (2020) also highlights the need for a broader, more holistic digital competency framework that extends beyond basic technical skills to include ethical and

pedagogical integration in diverse, digitally mediated learning environments. Furthermore, Melnychenko, (2020) discusses the significance of andragogical principles in continuous professional development, stressing lifelong learning for educators. This research aims to build on these foundations by developing a structured framework that addresses three critical areas: technological knowledge, pedagogical integration, and ongoing professional development, specifically tailored to meet the needs of ODL educators working with adult learners.

Educators today require a broader and more complex set of competencies than in the past, as the demands on the teaching profession continue evolving swiftly. As Redecker (2017) notes, the rapid evolution of digital learning necessitates that educators develop their digital competencies, particularly as digital devices become ubiquitous and the responsibility to guide students towards digital literacy grows. In ODL programmes, this is especially crucial, as educators must possess strong technical skills and understand how to integrate these tools into effective teaching practices.

To support this, educational institutions must provide comprehensive training opportunities, as Abdullah and Said (2022) advocated. Such training should bridge the gap between academically proficient professionals and the specific demands of ODL curricula. Moreover, as Atkins (2018) notes, educators require ongoing support to foster the digital literacy of their learners, a key competency in the 21st-century educational landscape.

To excel in this evolving environment, ODL educators must be proficient in digital technologies and 21st-century learning skills. This proficiency is crucial for effectively supporting students in real-world educational settings, as Sheffield (2018) emphasised. Furthermore, the role of continuous professional development cannot be overstated. Artacho (2020) underscores the importance of fostering innovative teaching methods, such as digital content creation, which enhances the learning experience. Similarly, Gimaletdinova (2022) illustrates how ongoing professional development ensures that educators stay updated with emerging technologies and pedagogical strategies, enabling them to design more effective online courses.

Both learners and educators need to continuously develop their digital skills, as stressed by Matúšová (2022). For this reason, higher educational institutions must prioritise comprehensive training programmes, as Galikhanov (2019) outlined, to ensure educators remain proficient in the latest teaching technologies and methodologies.

Finally, Anvi and Rotem (2019) present a conceptual framework for digital competence encompassing various interconnected literacies, such as digital ethics, technological literacy, information literacy, and social media literacy. In line with this, Milenkova and Manov (2019) highlight the importance of content creation, information processing, and internet safety. These competencies are essential for navigating the multifaceted digital education landscape, where developing comprehensive digital competence is a dynamic and interconnected process that benefits both educators and learners.

Technological Knowledge

A comprehensive exploration of the technological knowledge dimension underscores the pivotal role of proficiency in teaching and learning-related digital tools, particularly within the ODL field. Recognising the importance of procedural and functional content knowledge in the digital classroom environment, as stressed by Adegbenro (2019), is essential. This recognition entails a deep understanding and mastery of various teaching and learning-related digital tools, applications, and platforms, as highlighted by Grimus (2020).

Furthermore, the impact of technological knowledge on educator effectiveness cannot be overstated. Integrating digital tools into online education, including using digital learning management systems effectively, stands as a fundamental requirement, as Zubenschi (2021) underscores. Consider, for instance, Google Classroom, a powerful tool that not only streamlines technology usage for both instructors and students but also contributes to efficiency in time management, promotes environmental sustainability, bridges geographical gaps, fosters collaboration, and ensures the secure storage of documents, all of which Ong et al. (2020) elucidate.

It is worth noting, however, that emotional stability plays a critical role in an educator's ability to master computer skills for online learning. Overcoming IT phobia, or the fear of technology, is imperative, as it can significantly affect emotional stability, stemming from a lack of computer literacy and resistance to change, as per the insights of Tajudin et al. (2020). Another important factor influencing the acceptance of new technologies or innovations, such as the computer-mediated communication portal, is resistance to change or underutilisation by institutional staff members and their learners (Tetteh et al., 2018).

In the realm of ODL, online instructors or tutors serve as the linchpin for enhancing the online learning experiences of new students. Universities must prioritise ensuring that their online tutors possess proficiency with the online learning system and demonstrate high competency in online teaching and learning, as Tajudin et al. (2020) elucidate. Valuable insights can be gleaned from research into students' acceptance of applications like Canvas, enabling educators to monitor, intervene, and motivate students effectively. This, in turn, enhances their engagement with coursework at school and from the comfort of their homes, as Garcia et al. (2021) noted.

Moreover, the integration of new Learning Management Systems (LMS) or comparable technologies empowers students to generate innovative ideas while equipping them with essential technological skills and confidence, a point underscored by Garcia et al. (2021). This interconnected relationship between technological knowledge, proficiency in digital tools, and their impact on educator effectiveness reinforces the significance of embracing technology in the ever-evolving landscape of ODL.

Pedagogical integration

Puspitasari and Listyarini (2018) have highlighted the readiness of Indonesia Open University learners to engage in e-learning. However, support is needed to foster their self-directed learning skills. Additionally, some instructors lack an understanding of effectively utilising learning materials without actively seeking student input and feedback, as Villanueva (2018) observed.

At the core of digital competency lies pedagogical integration, a fundamental element. It involves strategically using digital tools and technologies to create dynamic and engaging learning environments that enhance students' educational experiences. This integration is firmly rooted in pedagogical principles, promoting active learning, collaboration, and critical thinking.

Pedagogical support and digitisation training, as advocated by Amhag (2019), are essential for shaping today's higher education educators. Such training equips educators with the competence to navigate the digital landscape effectively, thereby enhancing their teaching practices. Fuentes (2019) further underscores the importance of educators acquiring digital competence, focusing on their ability to create and utilise augmented reality resources, which can significantly enhance the overall learning experience.

Grimus (2020) emphasises that learners should not only be provided with specific solutions but should also be taught how to learn. In the 21st century, educators must assume the role of instructional designers, considering students' characteristics and requirements in diverse situations and integrating technology to deliver high-quality pedagogy, as highlighted by Ardiasih et al. (2021).

Delicano (2021) has brought attention to the often-neglected mental, emotional, and social aspects of learners in the design and implementation of online classes. Zulkifli et al. (2022) focuses on incorporating instructional models and learning styles to enhance student performance and the teaching and learning process in an ODL environment. Ismial (2021) suggests involving students as content providers, utilising their professional experiences to enrich the learning ecosystem and bridge the gap between theory and practice.

Hlalele (2018) discusses the need to integrate practical curriculum elements and ensure that ODL graduates possess a lasting understanding of theory in practice. Chakrabarty (2020) emphasises the significance of pedagogical integration and the efficient use of ICT in teacher education programs to modernise educational systems and enhance teaching-learning. Furthermore, Paskevicius and Irvine (2019) highlight the need for formal instruction in open and networked digital literacies within the curriculum. Some educators have taken the initiative to incorporate these competencies into their course outcomes.

As the educational landscape evolves, constant research and the adoption of new technologies and strategies become essential. Not only does this ensure the availability of cutting-edge technologies, but it also sustains and increases student enrolment rates over time. To provide a sustainable ODL university education, the acquisition, development, and adaptation of technology must remain a top priority for ODL institutions, as emphasised by Smah (2023).

In summary, pedagogical integration in ODL institutions involves combining instructional models with learning styles, engaging students as content contributors, integrating practical curriculum elements, and using ICT efficiently. This multifaceted approach contributes to a more enriched and effective learning experience.

Digital Citizenship

In contemporary education, the challenges facing schools and universities extend beyond the traditional choice of skills and knowledge to impart. A more complex dilemma lies in selecting context-sensitive or situation-driven learning methods to nurture future generations capable of upholding a nation's global competitiveness (Shuhidan et al., 2021).

Central to this evolving educational landscape is the concept of digital citizenship, as advocated by Heath (2018). It transcends geographical boundaries, emphasising active participation in the global online community. This notion underscores the importance of acquiring specific skills, such as media literacy and a strong sense of digital ethics. Simultaneously, it highlights the need for technology access and the creation of inclusive online environments.

Karsenti (2019) extends the definition of digital citizenship to encompass the exercise of rights and responsibilities within a democratic digital community, thus emphasising the ethical dimension. Al-Abdullatif's (2020) investigation reveals that while undergraduate students may possess limited knowledge, they engage in ethical behaviour, reflecting the practical aspect of digital citizenship.Choi (2016) delineates four key components of digital citizenship: ethics, media and information literacy, participation/engagement, and critical resistance, providing a comprehensive framework for understanding this concept. Meanwhile, Oxley

(2011) underscores the role of educators in guiding students towards responsible online behaviour.

Incorporating digital citizenship into the educational ecosystem involves considerations of digital well-being, as put forth by Nageswaran (2022). He argues for integrating digital well-being principles into the design of learning spaces and programs to create safer and more effective educational environments. Rapoport (2022) addresses the challenges posed by factors like insufficient sleep and excessive device use among students, suggesting that the digitalisation of education requires careful management.

As an exercise in digital citizenship, Thomas (2018) illustrates the practical application of these principles through a student project to aid peers struggling with substance abuse addiction. This project highlights the ethical aspects of digital citizenship and serves as an example of positive, community-oriented engagement. Themelis (2020) underscores the need for ethical frameworks and digital literacy education to promote responsible behaviour in the digital society. These components serve as the bedrock for a digitally responsible and moral citizenry. Rahayu (2022) focuses on enhancing student happiness and motivation in digital teaching and learning. This emphasis on emotional and psychological well-being is integral to ensuring a holistic approach to educational well-being.

Continuous Professional Development

Continuous Professional Development (CPD) plays a critical role in enhancing educators' digital competency. CPD serves as the conduit through which educators acquire new skills, adapt to emerging technologies, and refine their pedagogical approaches. However, addressing particular challenges in this journey towards digital competence is crucial.

A notable concern arises from the inability of professional development programs to equip educators with the skills and knowledge required for effective technology integration in their teaching, leading to resistance from some educators (Zhang, 2022). This resistance can hinder the seamless transition to digital learning environments, especially in light of global issues and the era of Industry Revolution 4.0.

Abdullah Hashim et al. (2019) shed light on the significant impact of teacher presence and learners' acceptance and utilisation of e-learning on academic achievement. It becomes evident that educators need to not only possess digital literacy but also demonstrate a willingness to embrace innovative practices and new ideas (Vaskov et al., 2021).

Digital tools, as demonstrated by Woottipong (2018), have the potential to enhance learners' comprehension and writing skills, further emphasising the importance of educators' digital competence. Enhancing academic staff capabilities through training and the modernisation of information technology is essential to effectively navigate the digital realm (Abdullah Hashim et al., 2019).

As we consider the future, it becomes apparent that the abilities relevant today may not align with the requirements of future career opportunities, and newly acquired skills risk rapid obsolescence. The potential implications of outdated skills underscore the need for lifelong learning to adapt to technological advancements and maintain a versatile skill set (Park, 2019).

During the COVID-19 pandemic, the educational landscape witnessed a seismic shift towards distance learning, amplifying the importance of digital learning materials. Universities that were already versed in providing distance learning displayed the capacity to serve a large number of students. However, this capacity is susceptible to fundamental changes and disruptions from integrating digital technology (Bunjongsiri & Pradidthaprecha, 2023). This

integration is reshaping established models and methodologies of distance learning, affecting teaching methods, content delivery, and the overall structure of educational programs.
Chan and Lyn (2023) research highlights the initial struggles of educators when transitioning abruptly during the COVID-19 pandemic, particularly for those accustomed to traditional teaching. However, these educators demonstrated adaptability and resilience in the face of change.

Balancing the Dimensions
The interconnectedness of the ODL Educators' Competency Framework's four main dimensions - Technological Knowledge, Pedagogical Integration, Digital Citizenship, and Continous Professional Development - forms a holistic approach to confronting the changing educational landscape. Comparing to existing research and frameworks, this framework emphasises the significance of continuous professional development (CPD) in fostering digital competence among educators, ensuring they remain equipped to navigate the challenges and opportunities of the digital era.
Digital Competency is crucial in the rapidly evolving educational landscape where educators must guide students toward digital literacy. Tailoring to adult learners must be motivated, learning takes place on various platforms since ODL students have greater flexibility. Consequently, instruction should be more individualised and differentiated. Adult learners are accountable for their education.
Sustaining Open and Distance Learning programs necessitates comprehensive training opportunities that align with specific ODL curricula. Furthermore, creating and utilising digital content and demonstrating proficiency in digital technologies are essential for effective teaching. Continuous Professional Development is critical for educators to stay updated with the latest competencies. This dimension emphasises the importance of digital literacy and the ability to embrace innovative practices.
The interconnectedness of these dimensions becomes evident as they collectively contribute to a well-balanced approach to educator development. Educators require a holistic skill set, combining digital competence, technological knowledge, pedagogical integration, and an understanding of digital citizenship. Addressing the unique needs of working adult learners involves offering flexible and tailored support to cater to their specific requirements. As the educational landscape evolves, it's crucial to ensure that educators are equipped to adapt to technological advancements and maintain a versatile skill set.
Table 1 A The ODL Educators' Competency Framework underscores the interconnectedness of four dimensions, emphasising the supportive mindset necessary for academics to attain an appropriate proficiency level for online teaching dedicated to working adult students. It guides a well-balanced approach to educator development while addressing the evolving needs of working adult learners in an increasingly digitalised educational landscape. The table is inspired by a study by Brown et al. (2021).

Table 1
A Suggested Odl Educator's Framework Describes the Proficiency of Digital Competencies

Level	Technological Knowledge	Pedagogical Integration	Digital Citizenship	Continuous Professional Development
Pre-proficient	• Limited or no experience with technology in education • Struggles with basic computer operations and software applications • May not be comfortable with online communication tools or learning management systems • Limited ability to integrate technology effectively into teaching and learning	• Limited knowledge of pedagogical principles and instructional strategies. • May rely heavily on traditional teaching methods and materials. • Struggles to adapt teaching strategies to an online or distance learning environment. • Limited awareness of student-centred approaches and active learning.	• Limited knowledge of pedagogical principles and instructional strategies. • May rely heavily on traditional teaching methods and materials. • Struggles to adapt teaching strategies to an online or distance learning environment. • Limited awareness of student-centred approaches and active learning.	• Limited engagement in professional development activities. • May not actively seek out opportunities for learning and growth. • Limited awareness of the importance of ongoing development. • Limited participation in conferences, workshops, or online courses related to ODL.
Proficient	• Basic competence with technology and common software tools • Can use email, web browsing, and basic word processing effectively • May be able to navigate a learning management system • Uses technology for administrative tasks and communication with students	• Possesses a fundamental comprehension of pedagogical principles. • Can effectively design and deliver online or distance learning courses, but may rely on established templates and methods. • Utilises fundamental instructional design and assessment techniques. • Beginning to implement active learning strategies and learner-centered strategies.	• Has a basic understanding of digital citizenship concepts. • Teaches students about responsible online behavior, privacy, and security. • Demonstrates good online etiquette and sets basic expectations for students. • Promotes respect for intellectual property and ethical use of digital resources.	• Engages in some professional development activities. • Attends workshops, webinars, and conferences related to ODL. • May participate in online courses or web-based learning communities. • Demonstrates a fundamental commitment to improving teaching and learning practices.
Advanced	• Comfortable and skilled with a wide range of educational technologies • Can integrate technology into lesson planning and instructional design • Proficient in using learning management systems and online collaboration tools • Actively explores and adopt new educational technologies to enhance teaching	• Demonstrates a strong grasp of pedagogical principles for online and distance education. • Develops and implements innovative course designs that engage and support learners. • Utilizes a variety of instructional strategies, assessment methods, and multimedia resources. • Actively seeks and adapts best practices in ODL pedagogy.	• Demonstrates a strong commitment to digital citizenship principles. • Teaches students about the broader issues of digital literacy, information literacy, and media literacy. • Encourages students to critically evaluate online information sources. • Promotes the ethical use of technology, respect for diverse perspectives, and responsible online communication.	• Actively seeks out and participates in a variety of professional development opportunities. • Regularly attends conferences, workshops, and training sessions. • Engages in ongoing self-directed learning, staying current with trends in ODL. • Takes on leadership roles within professional development activities and may contribute to program or institutional improvements.
Expert	• Exceptional expertise and innovation in the use of technology for education • Pioneers new approaches and methodologies in online and distance education • Mentors and trains other educators in effective technology integration • Engages in research and contributes to the field's knowledge and best practices.	• Pioneers new pedagogical approaches specific to ODL. • Integrates cutting-edge instructional design, multimedia, and technology. • Adapts to diverse student needs and backgrounds, fostering a highly inclusive learning environment. • Engages in scholarly research related to ODL pedagogy and contributes to the field's development.	• Serves as a model of exemplary digital citizenship in all online interactions. • Integrates digital citizenship principles into the curriculum and learning experiences. • Fosters a culture of digital responsibility and ethical use of technology within the learning community. • Engages in ongoing research and advocacy related to digital citizenship and ethical technology use.	• Highly committed to continuous professional development. • Serves as a mentor or coach for other educators, guiding their professional development. • Leads workshops, presents at conferences and contributes to the advancement of ODL through research or policy development. • Demonstrates a deep and current understanding of best practices in ODL and actively influences the field's development.

Note: Adapted from Journal of Open, Flexible and Distance Learning *25*(2), by Brown et al., 2021, p. 55–65

Research Methodology

Ideally, we will use an ODL institution as our case study, precisely one that caters to adult learners. The first phase of our research will involve conducting a survey aimed at ODL educators, with the primary objective of gathering data that reflects the current state of digital literacy and competency among these educators. This phase directly addresses our first research question.

Moving on to the second phase, we will conduct one-on-one interviews with ODL educators. This step is crucial for identifying prevalent trends and patterns and discerning notable gaps and demands in their digital skills. It helps provide a more detailed and qualitative perspective on digital literacy among ODL educators.

Finally, the third phase of our research will be dedicated to validating the proposed framework. To achieve this, we will solicit expert reviews and feedback from ODL educators via focus group discussions. The primary aim is to ensure that the framework is a comprehensive and accurate representation of the skills and competencies required by ODL educators to support adult learners effectively.

This structured approach systematically addresses each research question and ensures that the research is well-rounded, providing a holistic view of digital literacy and competency in the context of ODL for adult learners.

We will employ the Statistical Package for the Social Sciences (SPSS) to analyse digital literacy and competency survey data. SPSS is a fitting choice for conducting descriptive statistics, correlations, and inferential tests, allowing for a thorough quantitative analysis. Conversely, for the qualitative data extracted from interviews, we will utilise NVivo. This powerful tool is well-suited for coding, in-depth analysis, and extracting meaningful insights from interview transcripts. It aids in identifying trends and patterns within qualitative data, enriching the depth of our study.

Implications and Potential Impact

Based on the proposed framework, online educators is expected to engage in a structured self-assessment of their digital competencies and pursue targeted training to improve their skills. This approach promotes self-improvement and has broader implications, especially in the context of education policy development and the potential for fostering innovation and pedagogical excellence.

Educators can effectively implement innovative pedagogical practises when they possess a higher level of digital competency (Caena & Redecker, 2019). It enables them to recognise the underlying motivations for professional and personal development, to remain receptive to new information, to adapt quickly and effectively, to conduct research, and to develop innovative instructional strategies. Digital proficiency is the foundation of an educator's readiness for innovative pedagogical endeavours.

Nonetheless, it is essential to consider the extent to which access and inclusion are prioritised within existing digital competence frameworks. There are two distinct approaches worth exploring to address this concern and bridge digital divides:

First, digital competence frameworks can benefit from explicit and transparent delineation of the specific target populations they are intended to serve. In addition, it is crucial to recognise that some groups may require additional assistance to access the framework. This may necessitate the creation of a diverse array of activities that can be executed in a broader variety of devices. During these frameworks' design and implementation phases, involving various demographic groups actively is equally important.

Whether at the national level or across a professional sector, the proposed digital framework can continue to be the most effective means of enhancing digital competence. This inclusive approach is essential for equipping educators to teach students how to manage information critically, adhere to ethical and secure practises when using networks, and easily integrate technology into their professional routines. Despite the complexity of the adaptation process, more and more educational institutions are embracing the opportunities presented by digital age technology resources.

Conclusion

In conclusion, fostering digital competency among ODL educators empowers adult learners and equips educators with fundamental skills (Falloon, 2020). Digital competency encompasses technological skills and ethical citizenship to promote empowerment and independence. Digital competence entails the self-assured, critical and accountable use of and engagement with digital technologies for learning and for social participation.

Cultivating digital competence is an investment in the future of education that has the potential to transform the teaching and learning experience significantly (Mohamed Hashim et al., 2021). For these transformations to occur, digital competence frameworks must explicitly target various groups and recognise that some may require additional support. They should provide a range of activities compatible with various devices and involve diverse groups in the design and implementation phases. Comprehensive national or professional frameworks continue to be the most effective strategy for enhancing competence. There is room for additional research to make these findings applicable to additional communities.

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