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THE CHALLENGES FACED BY VETERAN TEACHERS DURING OPEN AND DISTANCE LEARNING

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ABSTRACT

The government enforced the Movement Control Order (MCO), resulting in the closure of all educational institutions. Despite the widespread availability of technological resources, veteran teachers, who have traditionally relied on physical classrooms, continued to favor this approach. This study aimed to delve into the challenges confronted by veteran teachers during open and distance learning (ODL), as well as their confidence and comfort levels in utilizing technology, and the necessity for ongoing professional development in the transition to digital education. A quantitative methodology was employed to conduct this research, involving the collection of data from a sample of 127 veteran teachers in Meru, Klang. The survey comprised

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Open and distance learning, Veteran teachers, Challenges using technology, Confidence and comfort, Professional development

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four sections, each featuring questions pertaining to the three primary factors influencing the utilization of technology by veteran teachers during ODL. These factors were assessed using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Surprisingly, contrary to expectations, veteran teachers who expressed a greater need for professional development did not necessarily exhibit lower confidence and comfort levels in using technology. This observation suggests that veteran educators recognized the necessity for additional training in technology integration while maintaining a certain level of confidence and comfort in their current technological capabilities. This study contributes to the existing research by highlighting the specific challenges and professional development needs of veteran teachers in the context of ODL, thereby advancing understanding in the field and providing insights for policymakers and educational institutions aiming to support veteran teachers in digital education transitions.

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1. Introduction

As technology continues to advance and increasingly relies on shared natural and intellectual resources, it becomes imperative, especially for future educators, to explore ways to create high-quality education for students worldwide and enhance educational outcomes comprehensively. However, the outbreak of COVID-19, an invisible ailment causing mild to moderate respiratory illnesses, has generated global anxiety, uncertainty, and confusion. According to Selvanathan et al. (2020), COVID-19 has had a devastating impact on various economic sectors, including education. Consequently, most education systems worldwide have shifted entirely to online learning, whether in synchronous or asynchronous formats.

The digital divide is evident among both students and teachers globally. This issue has gained public attention, primarily focusing on the digital divide among students, often neglecting the challenges faced by educators in practice (Awwad et al., 2022). Consequently, there is a need for research to uncover the challenges experienced by veteran teachers during open and distance learning (ODL), including their confidence and comfort levels in using technology to maintain student motivation and engagement during online learning. This research also emphasizes the necessity for professional development, such as training for online instruction.

This section will provide an overview of the study's background, research problem, research objectives, and related research questions.

1.1 Background of Study

The World Health Organization (WHO) has defined COVID-19 as an infectious disease caused by a newly discovered Coronavirus. According to WHO (2020), the International Federation of the Red Cross (IFRC), UNICEF, and WHO advised national and local authorities to implement comprehensive public health and social measures (PHSM), including school closures, to prevent the spread of COVID-19. As reviewed by Tang (2022), in a special message on COVID-19 announced by the Prime Minister on March 16, 2020, it was declared that the government would initiate a nationwide Movement Control Order (MCO) starting from March 18th and continuing until March 31st. This order, enforced under the Control and Prevention of Infectious Diseases Act 1988 and the Police Act 1967, encompassed six key aspects, including the closure of all kindergartens, public and private schools, both day schools and residential schools, international schools, Tahfiz centers, and all other educational institutions throughout the country.

In response to the MCO, the Ministry of Education (MoE) issued guidelines for implementing teaching and learning, emphasizing that education should continue at home to ensure students do not miss out on their education while remaining in a safe environment. These guidelines stressed that teaching and learning should be tailored to students' capabilities and readiness to use communication tools and applications, promoting technology-assisted online learning approaches.

As a result of this crisis, the global education industry, including Malaysia, has undergone a profound transformation. Online learning is now available at all levels of education, from kindergarten to higher education institutions. While developed countries may have encountered fewer challenges in transitioning to online learning, developing countries like Malaysia, where physical classrooms have historically been prioritized over online learning, face numerous challenges (Mulenga, 2020).

Despite the MoE (2013) advocating for teachers to maximize the use of ICT for distance and self-paced learning, ensuring access to high-quality teaching regardless of location or student skill level, some teachers, especially veteran educators, continue to rely on traditional classrooms. This reliance persists despite the provision of technological equipment such as LCD screens, projectors, and various other technology tools in some schools. According to Pamela (2016), the shift to a digital, 1:1 instructional model presents unique challenges. It requires a perceptual shift among veteran teachers who have predominantly employed traditional teaching methods throughout their careers. Consequently, an educational gap exists between the pre-ODL and post-ODL implementation phases. Therefore, this research aims to investigate the challenges and strategies employed by veteran teachers in teaching and learning during ODL.

1.2 Statement of Problem

The COVID-19 pandemic has had a profound impact on various sectors, including education. Consequently, there has been a significant transformation in the education sector, with schools, universities, and even kindergartens adopting ODL as a primary teaching platform. The global education system has been forced to innovate and find alternatives to traditional face-to-face instruction in response to this crisis. This shift is evident in the widespread adoption of online teaching and learning by teachers and students.

Teachers play a pivotal role in helping students develop critical perspectives, especially given the current circumstances. One primary concern is whether teachers, particularly those with extensive experience (veteran teachers), might encounter challenges when integrating technology into their teaching and learning processes during the pandemic. These educators play a crucial role, but can they effectively manage their virtual classrooms to ensure student motivation and engagement? It is worth noting that, in many cases, veteran teachers express their inability to use technology rather than a reluctance to do so, a sentiment supported by Tsai (2015).

1.3 Objective of the Study and Research Questions

This study aims to examine the challenges faced by veteran teachers during ODL, as well as their confidence and comfort levels in utilizing technology, and the need for professional development in the transition to digital education. Specifically, this study seeks to answer the following questions:

1. What are the significant differences between the years of teaching experience and the challenges faced during ODL?
2. What are the significant differences between the years of teaching experience and confidence and comfort levels in using technology?
3. What are the associations between the confidence and comfort levels in using technology and the need for professional development?

2. Literature Review

2.1 Challenges Faced by Veteran Teachers During Online Distance Learning.

The integration of Information and Communication Technology (ICT) into the education sector, as emphasized by Suryani (2017), has become inevitable. ICT offers teachers valuable tools to enhance their teaching and learning methods. However, Steiner & Woo (2021) argue that since the outbreak of the epidemic in March 2020, teachers have been thrust into new working conditions that have significantly increased the complexity and demands of teaching. Teachers find themselves with limited time to prepare teaching materials, grapple with unfamiliar technology, juggle various instructional methods, and manage the transition back to in-person instruction due to time constraints.

For veteran teachers, who are defined as those with extensive teaching experience, typically over 20 years, the rapid acquisition of ICT skills can be particularly daunting. Many of these educators were trained in an era where traditional, face-to-face teaching methods were the norm, leading to a potential conflict between their established practices and the demands of modern technology-driven education. Studies have indicated that veteran teachers may hold both positive and negative perceptions towards digital technologies in education (Monteiro et al., 2020). They may encounter issues related to misconceptions about their digital skills, competencies, and willingness to adapt to new practices. Veteran teachers often find themselves at a crossroads, torn between remaining in their comfort zones and embracing technological advancements. According to Steiner & Woo (2021), a staggering 78 percent of teachers reported experiencing frequent job-related stress in January 2021, compared to 40 percent of employed individuals. This statistic is particularly significant for veteran teachers who may struggle more with adapting to new teaching landscapes, making it a challenging endeavour.

Despite extensive research on technology and education, the preference for traditional classroom-based education remains strong among most individuals, including veteran teachers (Garba et al., 2015). In the context of ODL, teachers, including veteran educators, may face difficulties in assessing students' comprehension and ensuring their active engagement and participation (Kartimi et al., 2021). The transition to online teaching during the pandemic has introduced challenges such as insufficient infrastructure, student preparedness, and the development of appropriate materials for online instruction (Virgin et al., 2021). These challenges have been further complicated by factors like financial limitations and fluctuations in student motivation. The psychological impact of e-learning on teachers has also been observed, with reports of increased anxiety stemming from the shift to online teaching and learning activities (Azizah et al., 2022).

There is a notable dearth of comprehensive research that specifically addresses the challenges and needs of veteran teachers during ODL, as most of the research in this domain tends to focus on teachers in a more general sense.

2.2 Veteran Teachers' Confidence and Comfort Level in Using Technology

One of the most significant challenges encountered during the implementation of technology in classrooms is the lack of integration, expertise, and confidence among educators, particularly veteran teachers (Garbo, 2016). A previous survey administered to 764 teachers revealed that the primary predictor of teachers' technology use was their level of confidence in achieving instructional goals through technology integration. Veteran teachers, often being less familiar with digital tools compared to their younger counterparts, may face greater challenges in building this confidence. Several studies have identified key factors influencing teachers' technology integration. Monteiro et al. (2020) highlighted the presence of myths and misconceptions surrounding veteran teachers' digital skills and motivation to change practices, emphasizing the importance of addressing these misconceptions to enhance their confidence in technology use.

The motivation of teachers to master new technologies is a critical factor in the successful implementation of ICT in classrooms. As outlined by Suryani (2017), some educators encounter difficulties in learning new ICT tools and adapting to technological changes. Veteran teachers may strive to push the boundaries of their comfort zones but are often constrained by internal factors during their ICT learning journey. These constraints include aspects such as intrinsic motivation, self-confidence, age, energy levels, and learning capacity. For older generations of teachers, overcoming psychological and social barriers to incorporating ICT in the classroom can be a formidable challenge. Common barriers to their ICT learning include social comparison, increasing conflicts, a lack of supportive team culture, and a dearth of external incentives. Moreover, Caner & Aydin (2021) stressed the importance of self-efficacy beliefs in pre-service teachers for successful technology integration, indicating that enhancing teachers' confidence in their technological abilities is crucial. Furthermore, Sadik (2020) and Starčič & Lebeničnik (2020) highlighted the importance of teachers' beliefs and behaviors as role models in technology integration, suggesting that veteran teachers' confidence can positively influence their peers and students in adopting technology.

Considering these challenges, the OECD (2020) recommends that governments and school administrations make concerted efforts to support teachers, including veterans, in effectively utilizing internet resources in their instructional activities. Promoting pedagogies that guide and motivate students to engage in active learning can also serve as valuable guidance for veteran teachers who may struggle with the adoption of new technology. Consequently, this approach can contribute to reducing the number of veteran teachers who contemplate leaving their teaching careers. On the other hand, Joubert et al. (2020) pointed out that teachers' anxiety and attitudes towards technology use pose challenges, indicating that addressing these concerns is essential in improving veteran teachers' comfort levels with technology.

Nevertheless, as reported by Steiner & Woo (2021), as of January 2021, approximately 23% of teachers expressed their likelihood of leaving their current teaching positions by the end of the 2020–2021 school year. Many of these teachers were undoubtedly affected by the challenges posed by the pandemic, and a significant proportion of them were veteran teachers. These findings underscore the need for further research to gain a deeper understanding of the factors influencing veteran teachers' confidence and comfort levels in using technology.

2.3 Veteran Teachers' Needs for Professional Development in Technology

Since the outbreak of COVID-19 and the rapid expansion of the Internet, school systems and educators have been compelled to address the growing need for professional development in technology. However, a universally accepted approach for assessing how changes in professional development and teaching strategies impact student outcomes remains elusive. The educational system grapples with various variables, including the age diversity of teachers, which can create a professional disconnect as veteran teachers may encounter institutional resistance to innovations proposed by younger colleagues. According to Jiang et al. (2016), a study of three generations (baby boomers, millennials, and the silent generation) highlights the demand for digital skills training, including internet safety, among older teachers. Consequently, veteran educators often find themselves in need of professional development throughout their teaching careers.

Veteran teachers have distinct needs for professional development in technology compared to novice teachers. While novice teachers often require more support in knowledge training, veteran teachers express a stronger need for technology-related training, particularly in areas like using ICT in the classroom and adopting new technologies in their work environments (Fang et al., 2021). Integrating digital tools into teaching practices necessitates significant changes in both technological and professional knowledge for veteran teachers (Jacinto & Carreira, 2023). Therefore, it is crucial to understand and address the specific professional development needs of veteran teachers in technology to enhance the quality of education delivery.

Workshops and training programs for teachers can aid in enhancing their technological and pedagogical proficiency in online learning. This includes the development of interactive teaching strategies, improved communication skills, and strategies for overcoming challenges related to student engagement and motivation. Research suggests that professional development programs aimed at improving teachers' technological competencies should be tailored to the specific field and consider the technology requirements and connections within that field (Uzal & Erdem, 2020). Additionally, it is essential to explore how teachers conceptualize technology in relation to authentic science practices to develop effective models of professional development that facilitate technology integration in classrooms (Mishra et al., 2019). Tailoring professional

development initiatives to individual needs and interests is crucial for successful technology integration in education (Uerz et al., 2018).

Moreover, providing veteran teachers with autonomy in their career opportunities and professional development is vital for supporting their ongoing vocational vitality (Gray et al., 2021). Collaborative mentoring has been identified as a promising approach to meeting the professional development needs of veteran teachers, offering opportunities for hands-on classroom work, reflective practice, and knowledge sharing (Gonzalez et al., 2019). Understanding veteran teachers' perceptions of technology and addressing their beliefs and barriers can inform the development of effective professional development programs that cater to their specific needs (Monteiro et al., 2020; Zhang et al., 2019).

Addressing the professional development needs of veteran teachers in technology is essential for enhancing their teaching practices and ensuring effective technology integration in education. Tailoring programs to their specific requirements, providing autonomy, and offering collaborative mentoring opportunities are key strategies to support veteran teachers in their ongoing professional growth and development.

2.4 Conceptual Framework

Figure 1 illustrates the conceptual framework to illustrate the relationships among the factors studied. This framework will help readers better understand the research. The theories employed in this study are derived from Moore's Transactional Distance Theory (TDT) and Bandura's Self-Efficacy Theory.

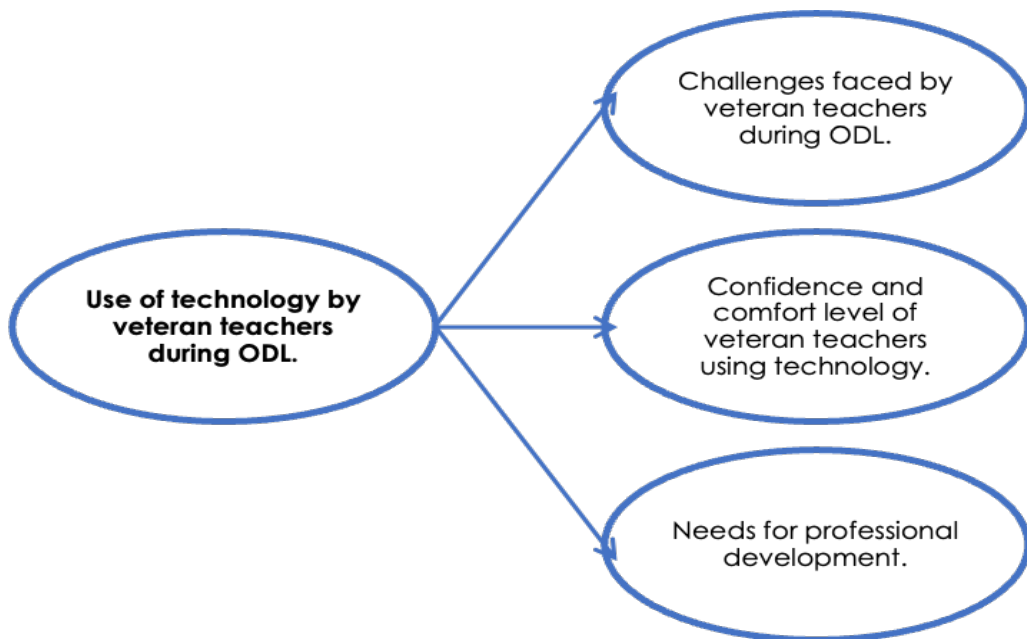


Figure 1. Conceptual Framework of the Study

TDT, as defined by Moore (1993), addresses the physical and temporal separation between teachers and learners in distance education. This separation creates a need for strategies to bridge these gaps effectively. TDT identifies three interconnected factors—structure, dialogue, and learner autonomy—that influence learning outcomes. These factors are directly relevant to the challenges faced by veteran teachers in the following ways:

- i. Structure: Veteran teachers may struggle with the rigid structures of online learning environments compared to the flexibility they are accustomed to in traditional classrooms. Effective course design and flexibility are essential to accommodate their established teaching styles while integrating new technologies (Ogodo et al., 2021).
 - ii. Dialogue: Meaningful interactions and effective communication are crucial in online learning. Veteran teachers, who may be less familiar with digital communication tools, need strategies to enhance dialogue with students to reinforce comprehension and engagement (Loose & Ryan, 2020).
 - iii. Learner Autonomy: Promoting student autonomy in an online setting can be challenging for veteran teachers who are used to more direct instructional methods. Adjustments in online pedagogy and communication strategies are necessary to support learner independence (Ogodo et al., 2021).
- By applying TDT, this study examines how these factors contribute to the challenges veteran teachers face and identifies strategies to mitigate these challenges in online distance learning (ODL).

Bandura's Self-Efficacy Theory provides insight into the psychological aspects of veteran teachers' experiences with technology. Self-efficacy, or confidence in one's abilities, is crucial for adapting to new technological environments. This theory is relevant in the following ways:

- i. Technological Knowledge and Digital Competence: Veteran teachers often have extensive pedagogical experience but may lack confidence in their technological skills. Bandura's theory helps explain how this lack of confidence can impact their ability to transition to online teaching effectively (Bandura, 1977; Ogodo et al., 2021).
- ii. Professional Skills: Teachers who doubt their effectiveness or capacity to provide unique learning opportunities are likely to experience less successful outcomes. This is particularly pertinent for veteran teachers who may feel overwhelmed by the rapid shift to online education (Bandura, 1977).

By understanding the role of self-efficacy, this study explores how boosting veteran teachers' confidence through targeted professional development can improve their adaptation to ODL environments.

TDT and Bandura's Self-Efficacy Theory provide a comprehensive framework for examining the challenges faced by veteran teachers in ODL. TDT addresses the structural and communicative aspects of distance education, while Self-Efficacy Theory focuses on the psychological and confidence-related factors. Together, these theories help us understand and address the specific needs of veteran teachers, ultimately enhancing their effectiveness and satisfaction in the online teaching landscape.

3. Methodology

This study employs a quantitative approach to gather data related to the research questions outlined where the aim is to delve into the experiences and perspectives of veteran teachers as they navigate the process of learning ICT. Given the limited research on the challenges faced and the need for professional development during ODL in this district, the target group for this study includes all veteran teachers in Meru, Klang. The term "veteran teachers" refers to those with extensive teaching experience, typically over 20 years. The target population consists of approximately 200 veteran teachers from three schools in the Meru, Klang district. The selection process is as follows:

- i. Identification of Schools: Three schools in Meru, Klang were selected based on the availability of veteran teachers.
- ii. Purposive Sampling: A purposive sampling technique was used to ensure that the sample included teachers with extensive experience in the field. This method was chosen to specifically target veteran teachers who can provide insights into the challenges and needs associated with ODL.
- iii. Random Selection within Schools: From the identified schools, veteran teachers were randomly selected to participate in the study. This was done to ensure a diverse representation of experiences and perspectives.

A total of 127 teachers were chosen as participants, in accordance with the Krejcie and Morgan Table for determining sample size. Both male and female teachers were included in the sample to ensure gender representation. The purposive sampling method was essential to focus on teachers with significant teaching experience, thereby enriching the study's findings with their unique insights.

Tables 1 to 3 show the reliability of the survey which refers to the consistency of results from instrumentation. Reliability is needed in the study to obtain valid results.

Table 1

Reliability Statistics for Section B: Challenges Faced by Veteran Teachers During ODL

Reliability Statistics	
Cronbach's Alpha	No. of Items
.881	11

Table 2

Reliability Statistics for Section C: Confidence and Comfort Level in Using Technology

Reliability Statistics	
Cronbach's Alpha	No. of Items
.901	11

Table 3
Reliability Statistics for Section D: Needs for Professional Development

Reliability Statistics	
Cronbach's Alpha	No. of Items
.927	9

Tables 1, 2, and 3 show that the overall internal consistency value or Cronbach's Alpha among the items is 0.881 for 11 items in Section B, 0.901 for 11 items in Section C, and 0.927 for 9 items in Section D respectively. Based on Cronbach's Alpha value, it can be concluded that all the constructs for this research have high-reliability standards. Since all the Cronbach's Alpha values exceed 0.70, it can be concluded that the questionnaire is suitable for conducting the research.

The Statistical Package for Social Science (SPSS) is used to analyse the data collected. Descriptive statistics and inferential statistics are applied to achieve the objectives listed. The descriptive analysis helps to measure the proposed factors that affected the performances of veteran teachers during ODL.

Table 4
Type of Statistical Used in the Research

No.	Research objectives	Instrument	Respondents	Type of analysis
1.	To investigate the significant difference between the years of teaching experiences and challenges faced during ODL.	Questionnaire	127 veteran teachers	ANOVA
2.	To determine the significant difference between the years of teaching experiences and confidence and comfort level in using technology.			
3.	To examine the association between the confidence and comfort level in using technology and needs for professional development.			Correlation Coefficient

4. Findings

This chapter discusses the findings according to the research objectives and research questions. Two tests are used to find the results of the research findings which are one-way ANOVA

and correlation coefficient test. Each of the tests will be interpreted separately according to the research objectives and questions.

4.1 Demographic Profile

Table 5

Descriptive Statistic: Years of Teaching Experience

Statistics Years of Teaching Experience		
N	Valid	127
	Missing	0
Mean		2.00
Median		2.00
Standard Deviation		.854
Variance		.730
Skewness		.543
Standard Error of Skewness		.215
Range		3
Minimum		1
Maximum		4

According to Table 5, the mean score for years of teaching experience is 2.00, with a median value of 2.00. The standard deviation for years of teaching experience is 0.854. The minimum value of 1 corresponds to 6 to 10 years of teaching experience, while the maximum value of 4 represents 21 to 25 years of teaching experience. The skewness coefficient for years of teaching experience is 0.543, indicating a right-skewed distribution of teachers' teaching experiences.

4.2 Analysis of the Difference Between the Years of Teaching Experiences and Challenges Faced During ODL

H₀: There is no significant difference between the years of teaching experiences and challenges faced during ODL.

H₁: There is a significant difference between the years of teaching experiences and challenges faced during ODL.

The above hypotheses are proposed for this research. To test this variable, a one-way ANOVA is selected. ANOVA allows us to analyze two or more independent variables simultaneously to see if there is an interactive effect between the independent variables.

Table 6
ANOVA Table

ANOVA					
CHALLENGES_FACED	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.778	3	1.926	2.230	.088
Within Groups	106.240	123	.864		
Total	112.018	126			

Table 7
Post-Hoc Test

Multiple Comparisons						
Dependent Variable: CHALLENGES_FACED						
Tukey HSD						
Year of Teaching Experience (I)	Year of Teaching Experience (J)	Mean Difference (I - J)	Standard Error	Sig.	90% Confidence Interval	
					Lower Bound	Upper Bound
6 – 10 years	11 – 15 years	.22727	.19383	.645	-.2216	.6761
	16 – 20 years	-.24727	.23811	.727	-.7987	.3041
	21 – 25 years	-.45455	.38150	.633	-1.3380	.4289
11 – 15 years	6 – 10 years	-.22727	.19383	.645	-.6761	.2216
	16 – 20 years	-.47455	.22355	.152	-.9922	.0431
	21 – 25 years	-.68182	.37258	.264	-1.5446	.1810
16 – 20 years	6 – 10 years	.24727	.23811	.727	-.3041	.7987
	11 – 15 years	.47455	.22355	.152	-.0431	.9922
	21 – 25 years	-.20727	.39742	.954	-1.1276	.7131
21 – 25 years	6 – 10 years	.45455	.38150	.633	-.4289	1.3380
	11 – 15 years	.68182	.37258	.264	-.1810	1.5446
	16 – 20 years	.20727	.39742	.954	-.7131	1.1276

From the ANOVA table presented above, it can be observed that the F-value is 2.230. This F-value is calculated by dividing the mean square between groups by the mean square within the groups. In this case, the p-value is computed as 0.088, which is greater than the conventional significance level of 0.05. As a result, the null hypothesis (H_0) is accepted. Therefore, the one-way ANOVA conducted to examine the challenges faced by veteran teachers during ODL across different years of teaching experience was found to be statistically non-significant, $F(3,123) = 2.230$, $p = 0.088$. Further Bonferroni tests revealed that there were no statistically significant differences among any of the groups.

4.3 Analysis of the Difference Between the Years of Teaching Experiences and Confidence and Comfort Level in Using Technology

H_0 : There is no significant difference between the years of teaching experiences and confidence and comfort level in using technology.

H_1 : There is a significant difference between the years of teaching experiences and confidence and comfort level in using technology.

To assess the significant difference in confidence and comfort levels in using technology among different years of teaching experience, a one-way ANOVA was employed. ANOVA enables the simultaneous analysis of two or more independent variables to determine if there is an interactive effect among them.

Table 8
ANOVA Table

ANOVA					
CONFIDENT_COMFORT_LEVEL					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.911	3	.970	1.162	.327
Within Groups	102.696	123	.835		
Total	105.607	126			

Table 9
Post-Hoc Test

Multiple Comparisons						
Dependent Variable: CONFIDENT_COMFORT_LEVEL						
Bonferroni						
Year of Teaching Experience (I)	Year of Teaching Experience (J)	Mean Difference (I - J)	Standard Error	Sig.	90% Confidence Interval	
					Lower Bound	Upper Bound
6 – 10 years	11 – 15 years	-.29783	.19057	.724	-.7604	.1647
	16 – 20 years	-.23413	.23411	1.000	-.8023	.3341

	21 – 25 years	-.53646	.37508	.931	-1.4468	.3739
11 – 15 years	6 – 10 years	.29783	.19057	.724	-.1647	.7604
	16 – 20 years	.06370	.21979	1.000	-.4698	.5972
	21 – 25 years	-.23864	.36631	1.000	-1.1277	.6505
16 – 20 years	6 – 10 years	.23413	.23411	1.000	-.3341	.8023
	11 – 15 years	-.06370	.21979	1.000	-.5972	.4698
	21 – 25 years	-.30234	.39073	1.000	-1.2507	.6460
21 – 25 years	6 – 10 years	.45455	.38150	.633	-.4289	1.3380
	11 – 15 years	.68182	.37258	.264	-.1810	1.5446
	16 – 20 years	.20727	.39742	.954	-.7131	1.1276

By analysing the ANOVA table provided in Table 8, it can be deduced that the F-value stands at 1.162. This F-value is derived from the division of the mean square between groups by the mean square within the groups. In this instance, the p-value computes to 0.327, surpassing the conventional significance threshold of 0.05. As a result, we fail to reject the null hypothesis (H_0). Consequently, the one-way ANOVA conducted to assess the challenges experienced by veteran teachers during ODL across various years of teaching experience yielded statistically non-significant results, with an F-statistic of $F(3,123) = 1.162$ and a p-value of 0.327. Furthermore, Bonferroni tests indicated that there were no statistically significant distinctions among any of the groups.

4.4 Analysis of the Association Between Confidence and Comfort Level in Using Technology and Needs for Professional Development

H_0 : Needs for professional development are not associated with the confidence and comfort level in using technology.

H_1 : Needs for professional development is associated with confidence and comfort level in using technology.

Two hypotheses are formulated for examination. To assess these variables, a correlation coefficient test has been opted for. This statistical test allows for the analysis of the relationship between variables, with the strength of the relationship represented by the correlation coefficient. The Pearson Product-Moment correlation test was chosen, if the distribution of the sampled population follows a bivariate normal distribution.

Table 10
Correlation Coefficient Table

Correlations			
		CONFIDENT_ COMFORT_ LEVEL	NEEDS_ PROFESSIONAL_ DEVELOPMENT
CONFIDENTCOMFORT_ LEVEL	Pearson Correlation	1	.264**
	Sig. (2-tailed)		.003
	N	127	127
NEEDS_PROFESSIONAL_ DEVELOPMENT	Pearson Correlation	.264**	1
	Sig. (2-tailed)	.003	
	N	127	127

**. Correlation is significant at the 0.01 level (2-tailed).

Since the p-value is greater than 0.05, the H_0 is accepted. The Pearson product-moment correlation test indicated that the relationship between confidence and comfort levels in using technology and the need for professional development is not statistically significant, with a correlation coefficient r of 0.264 and a p-value of 0.03. This relationship is weak and positively oriented.

5. Summary of Findings and Discussion

Following statistical analysis, it has been found that there is no significant difference between the years of teaching experience and the challenges faced by veteran teachers during ODL since the p-value is greater than 0.05. From here, we can conclude that regardless of their years of teaching experience, veteran teachers still had difficulties in adapting their teaching and learning to the online learning environment. The findings also emphasize how crucial it is for online teaching and learning to recognize and address transactional distance. It is crucial to promote a sense of closeness and connection through a variety of techniques to lessen the difficulties faced by veteran teachers. To bridge the gap and foster effective teaching and learning experiences, this may involve providing clear communication channels, designing interesting and dynamic online activities, and giving opportunities for synchronous encounters.

To answer the second research question proposed in this research, the findings showed that there is no significant difference between the years of teaching experience and the confidence and comfort level of veteran teachers when they use technology ($p > 0.05$). Veteran teachers indicated similar levels of confidence and comfort using technology in their teaching practices, regardless of their teaching experience. This result indicates that the perceived confidence and comfort level are not considerably impacted by the number of years of teaching experience when utilizing

technology. It suggests that experienced teachers are equally as likely as their less experienced counterparts to embrace and feel at ease with technology.

Based on the self-efficacy theory, teachers' self-efficacy in using technology might rise when they have positive technological experiences and receive sufficient support and training. However, the results showed that there is no correlation between the need for professional development and the level of confidence and comfort in using technology ($p > 0.05$). This shows that teachers' perceptions of their needs for professional development may not always be linked up with how confident and at ease they feel about employing technology in their classrooms. Contrary to predictions, veteran teachers who reported higher professional development requirements also did not necessarily reflect a lower level of confidence and comfort. This shows that veteran teachers can appreciate the need for additional technology integration training while yet being at ease and confident in their current ability in technology.

6. Pedagogical Implications and Recommendations for Future Research

The research study targets educators, politicians, school boards, administrators, and teachers. This study aims to provide these stakeholders with a deeper understanding of the impact of technological integration on existing teachers, ushering in an era of technological education. The key takeaways for these parties are the rapid evolution of technology, the various reasons teachers employ technology, the fact that not all educators consider technology indispensable for educational progress, and the need for technological support.

Moreover, governments should allocate funding to support school districts in providing training and professional development for veteran teachers in ODL. This funding can be directed towards the development of online courses and workshops, one-on-one coaching for teachers, or the establishment of online support groups. In addition, governments should consider formulating national standards for ODL teacher training to ensure that all veteran teachers have access to high-quality training and are well-prepared to teach effectively in an online environment.

Aligned with the theoretical foundations of Self-Efficacy Theory, teachers should have ample opportunities to master technology, engage in social modelling, receive social persuasion, and reflectively evaluate their physiological feedback.

There are several recommendations that can be proposed for future research to further explore and understand this significant field of study. First, it would be beneficial to conduct in-depth qualitative research that focuses on the individual experiences and perspectives of veteran teachers as they transition to online teaching. Utilizing qualitative research techniques such as focus groups and interviews can provide deep insights into the specific challenges and coping strategies encountered by veteran teachers during ODL.

In addition, making comparisons between early-career teachers and veteran teachers in ODL may shed light on the unique challenges faced by each group. By comparing their experiences, needs, and support requirements, it is possible to design tailored interventions and professional development programs for both veteran and novice teachers in online teaching contexts.

Further research into the impact of specific support systems, such as peer support networks and mentorship programs, on the well-being and professional development of veteran teachers would

be valuable. By examining the effectiveness and best practices of such support structures, evidence-based recommendations for establishing and enhancing support programs for senior teachers in ODL can be formulated.

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Conflict of Interest

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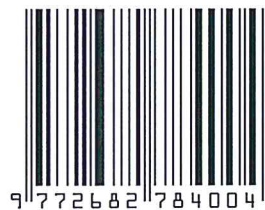
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