Teaching Competence and Information and Communication Technology Integration (ICT) of Private Schools in Davao City

Vanessa J. Septimo¹; Bryan L. Cancio² Rizal Memorial Colleges Inc. Department of Education Davao City, Philippines

Abstract:- The study investigated the relationship between teaching competence and ICT integration among private school teachers in Davao City for the 2022-2023 school year. Employing a descriptive correlation design with 100 teacher respondents, the analysis revealed consistently high levels of teaching competence, particularly emphasizing professional development, and a high level of ICT integration, showcasing positive attitudes and effective utilization of ICT. The study underscored the significance of educators having a strong teaching foundation for a moderate positive relationship between teaching competence and ICT integration. The significant impact of professional development on ICT integration highlighted the need for ongoing training and growth opportunities for teachers, emphasizing the role of continuous learning in adapting to technological advancements. These findings highlighted the close relationship between teacher competence and successful ICT integration, underscoring the importance of professional development in creating a technology-rich learning environment. Conclusively. the findings underscored the importance of professional development effective ICT integration. in shaping These recommendations aimed to foster a collaborative and supportive environment. enhancing educators' competence and ensuring effective ICT integration. These insights provided valuable guidance for educators, policymakers, and researchers aiming to enhance teaching competence and ICT integration in private schools in Davao City.

Keywords:- Teaching Competence, ICT Integration, Descriptive-Correlation, Quantitative Research.

I. INTRODUCTION

> The Problem and its Setting

ICT (Information and Communication Technology) in schools is crucial for enhancing educational experiences by providing students with access to a vast array of information, fostering digital literacy, and preparing them for a technology-driven world. Additionally, ICT facilitates more dynamic and interactive teaching methods, promoting collaboration and critical thinking skills essential for success in the modern workforce. However, the challenges of integrating ICT in schools often include issues such as inadequate infrastructure, limited access to devices, and a shortage of trained educators, hindering the seamless incorporation of technology into the learning environment. Additionally, concerns about cybersecurity, privacy, and the potential for increased disparities in access and digital skills among students can pose significant obstacles to the effective implementation of ICT in educational settings.

In United States of America, the use of ICT in schools has shown positive impacts on both teachers and students. It has increased student motivation, improved student participation, and enhanced student achievement and computer skills (n. a, 2023). the utilization of ICT has played a pivotal role in equipping students with essential computer skills, preparing them for the demands of the contemporary digital landscape. However, the use of ICT in learning is still limited, with teachers primarily using it for information and communication purposes (Saleh, 2017). It has been instrumental in elevating student motivation, as interactive and technology-driven lessons capture the interest of learners, making the educational experience more engaging. Moreover, the integration of ICT tools has significantly improved student participation by fostering collaborative learning environments where students actively contribute and interact with the subject matter. In addition, the positive impact extends to academic achievements, with studies indicating that students exposed to ICT-rich learning environments tend to exhibit higher levels of achievement.

In Philippine setting, ICT integration is a significant topic of discussion in education. ICT integration is a prominent and ongoing discourse in education, reflecting the growing recognition of technology's transformative potential in shaping contemporary learning environments. Discussions often center around optimizing the use of Information and Communication Technology to enhance teaching methodologies, student engagement, and overall educational outcomes. The Department of Education's Computerization Program aims to equip public schools with technological advances to enhance instruction and address 21st-century issues (Gamit, 2023). The implementation of the K to 12 Education program necessitates the use of technology in teaching, and teachers are required to integrate ICT into their daily teaching (Estrelle, 2022).

In recent years, the island of Mindanao has shown an increased focus on ICT integration in education and various sectors. Initiatives such as the Department of Education's ICT in Education Strategic Plan have aimed to enhance digital literacy and access to technology in schools. The Mindanao region, with its diverse communities, faces both challenges and opportunities in implementing ICT, including issues of infrastructure, connectivity, and ensuring equitable access to technology across different areas. Efforts may include the deployment of digital learning tools, teacher training programs, and partnerships with the private sector to promote a more tech-enabled and connected educational landscape in Mindanao. For the latest and specific information, it is recommended to refer to official reports, government announcements, or educational institutions in Mindanao.

The interrelation between teaching competence and ICT integration in private schools in Davao City is a crucial aspect of modern education. Teachers' competence plays a pivotal role in effectively incorporating ICT tools into the curriculum, as their proficiency and understanding of technology impact the quality of instruction. In Davao City, the success of ICT integration in private schools may be influenced by the availability of resources, teacher training programs, and institutional support. Schools that prioritize ongoing professional development for educators and provide access to updated technology are likely to witness a more seamless integration of ICT into teaching practices. The effective synergy between teaching competence and ICT integration enhances the overall educational experience, fostering a dynamic and technology-enhanced learning environment in private schools in Davao City.

On the study on Social Studies Techers' View of ICT by Hong (2016), it was found out the providing a wellorganized ICT teacher training is essential in encouraging teachers to view ICT positively. The study was supported using teachers' view and their experiences via face-to-face interview in a third world country setting. Meanwhile, this current study is though wanted to explore ICT integration, it is clearly different from that of Hong. This study will be conducted employing qualitative research to be correlated between competence among teachers in the local setting. These disparities will surely give new knowledge in the realm of research. Thus, study is conducted.

II. REVIEW OF RELATED LITERATURE

This section will review the literature and studies that are significant to the topic explored. They were reviewed to help clarify, describe, support, and evaluate the study. This section is presented based on the two variables under the study: teaching competence and ICT integration.

A. Teaching Competence

Teaching competence is an essential aspect of a teacher's professional development. It involves the knowledge, skills, and attitudes that teachers must possess to effectively carry out their duties (Ahmad, 2023). Teaching competence is a foundational element of a teacher's professional development, encompassing not only the

acquisition of knowledge and skills but also the cultivation of attitudes crucial for the effective execution of their duties. emphasizing the ability to engage students, adapt to diverse learning needs, and foster a positive and conducive learning environment. The holistic nature of teaching competence underscores its significance in shaping the quality and impact of education, extending beyond subject matter expertise to encompass the interpersonal and pedagogical dimensions of effective teaching. Competence in teaching includes the ability to create a positive learning environment, use innovative and creative teaching methods, and apply evaluation techniques effectively (Madina et al., (2023). This involves the skillful creation of a positive learning environment, incorporating innovative and creative teaching methods that cater to diverse learning styles, and the effective application of evaluation techniques to assess student understanding, collectively fostering an atmosphere conducive to comprehensive and engaging education. A proficient teacher's ability to balance these elements not only enhances student learning experiences but also contributes significantly to the overall effectiveness of the educational process.

Teachers need to continuously develop their competencies through coaching, training programs, and supervision. The level of teacher competence can impact student learning outcomes (Alifia et al., 2023). Teachers must engage in continuous professional development through coaching, training programs, and supervision to enhance their competencies, as the level of teacher competence directly influences student learning outcomes, emphasizing the critical role of ongoing learning and skill refinement in fostering a positive educational environment and improving academic achievement. The commitment to continuous improvement underscores the dynamic nature of teaching, where evolving competencies contribute significantly to the overall quality of education and student success. It is important for educational institutions to prioritize the development of teacher competencies to ensure quality education.

By enhancing their teaching competence, teachers can improve the effectiveness of the teaching and learning process in the classroom (Elena et al., 2022). Educational institutions must prioritize the development of teacher competencies to ensure quality education, as the enhancement of teaching competence directly correlates with improved effectiveness in the teaching and learning process within the classroom, ultimately benefiting students, and fostering a conducive and enriching educational environment. Educational institutions must prioritize the development of teacher competencies to ensure quality education, as the enhancement of teaching competence directly correlates with improved effectiveness in the teaching and learning process within the classroom, ultimately benefiting students, and fostering a conducive and enriching educational environment.

> Professional Knowledge.

Professional knowledge of teachers is a crucial aspect of effective teaching. Shulman's concept of pedagogical content knowledge highlights the amalgamation of content

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knowledge and pedagogical knowledge that teachers should possess (Shu-hua et al., 2022). Knowledge among teachers is fundamental to effective teaching, with Shulman's concept of pedagogical content knowledge underscoring the critical amalgamation of content knowledge and pedagogical expertise, emphasizing the nuanced understanding required for successful instruction and student engagement. This integrated knowledge base enables educators to navigate the intricacies of subject matter while employing effective pedagogical strategies tailored to the unique needs and understanding levels of their students. This knowledge base is essential for delivering good lessons and is categorized into seven categories, including pedagogical content knowledge (E et al., 2020). The foundational knowledge base for delivering effective lessons is categorized into seven key areas, with pedagogical content knowledge playing a crucial role among these categories. This encompassing understanding, as delineated by Shulman, empowers teachers to integrate subject matter expertise seamlessly with pedagogical skills, ensuring the creation of engaging and meaningful learning experiences for their students.

Additionally, interprofessional education (IPE) emphasizes the development of a knowledge base for collaborative working in health and social care professions (Peter et al., 208). This places a significant emphasis on cultivating a knowledge base that promotes collaborative working across various health and social care professions. This approach seeks to enhance communication, mutual understanding, and teamwork among professionals, ultimately improving the quality of patient care through a comprehensive and integrated approach to healthcare education.

IPE recognizes the fluid and contextual nature of interprofessional knowledge, which is constructed through interprofessional learning and practice (Elena et al., 2012). It further acknowledges the dynamic and context-dependent nature of interprofessional knowledge, emphasizing that this knowledge is actively constructed through the process of interprofessional learning and collaborative practice. By recognizing the fluidity of this knowledge, IPE aims to equip healthcare professionals with the adaptive skills necessary for effective teamwork and patient-centered care in everevolving healthcare environments. Furthermore, employers value not only technical knowledge and skills but also abilities such as collaboration, adaptability, and lifelong learning (Elena et al., 2012).

➤ Professional Skills.

Professional skills of teachers are essential for the individual support of students and improving education outcomes (Ashita, 2023). The proficiency of teachers in honing professional skills is pivotal for providing tailored individual support to students, contributing significantly to improved educational outcomes by addressing diverse learning needs and fostering a conducive and effective learning environment. Teachers' adeptness in applying a range of professional skills, from differentiated instruction to classroom management, plays a central role in creating a positive and enriching educational experience for students. Studies have shown that teachers' professional skills, including their subject knowledge, pedagogical content knowledge, and pedagogical-psychological knowledge, influence their ability to diagnose students' skills and knowledge accurately (Peiris, 2022). Research has consistently demonstrated that teachers' professional skills, encompassing subject knowledge, pedagogical content knowledge, and pedagogical-psychological knowledge, significantly impact their capacity to accurately diagnose students' skills and knowledge levels. The interplay of these competencies enables educators to effectively tailor their instructional strategies, providing targeted support that addresses individual learning needs and enhances overall student comprehension and achievement.

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In Sri Lanka, improving teachers' professional skills has been found to directly impact student outcomes, highlighting the need for enhancing teacher training programs (Axbirynosa and Kanmbipeaesa, 2022). Enhancing teachers' professional skills has been revealed as a direct driver of improved student outcomes, underscoring the imperative for comprehensive and ongoing teacher training programs. The correlation between teacher proficiency and positive student achievements reinforces the significance of continuous professional development to ensure educators are equipped with the necessary skills to meet the evolving needs of their students.

The professional competence of a teacher is a combination of theoretical and practical readiness, including the ability to think and act pedagogically (Alam et al., 2022). A teacher's professional competence is a fusion of theoretical knowledge and practical readiness, encapsulating the capacity to think and act pedagogically by seamlessly applying educational theories to real-world teaching scenarios. This holistic approach ensures that educators not only possess a robust understanding of pedagogical principles but also demonstrate the practical skills needed to effectively translate this knowledge into meaningful and impactful teaching practices.

In Pakistan, professional development interventions, such as training programs, have been effective in developing teaching skills among primary school teachers (Roma et al., 2021). Professional development interventions, notably training programs, have demonstrated efficacy in cultivating and enhancing teaching skills among primary school teachers, contributing to elevated instructional quality and improved student learning outcomes. Students' attitude towards teachers' professional skills in higher education is influenced by various factors, including the ability to generate interest, clarity of information, teamwork, and subject competence. Overall, teachers' professional skills play a crucial role in improving student outcomes and the quality of education.

> Personal Characteristics.

Teachers' personal characteristics play a significant role in their beliefs, practices, job satisfaction, and overall effectiveness. Studies have shown that teachers' personal and professional characteristics influence their beliefs and

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practices, such as teacher autonomy, efficacy, and teaching strategies (n.a. 2022). The personal characteristics of teachers, encompassing traits, attitudes, and individual dispositions, exert a substantial influence on their beliefs, instructional practices, job satisfaction, and overall effectiveness in the classroom. Research indicates a reciprocal relationship, demonstrating that teachers' personal and professional characteristics, including autonomy, efficacy, and chosen teaching strategies, shape their pedagogical beliefs and practices, ultimately impacting the learning experiences of their students.

Additionally, teachers' personal and professional demographic characteristics have been found to have varying effects on students' academic performance in English (April, 2020). The academic performance of students is influenced by the diverse effects of teachers' personal and professional demographic characteristics, with factors such as experience, educational background, and cultural competence impacting the learning outcomes of students in distinct ways. Research suggests that understanding these nuanced effects is crucial for tailoring educational approaches to meet the diverse needs of students and promoting equitable academic achievement across different demographic groups.

Personality dimensions, empathy, and locus of control have been identified as important predictors of teachers' classroom management styles and self-efficacy (Gordana, 2018). Particularly traits like openness and agreeableness, along with high levels of empathy and an internal locus of control, have emerged as significant predictors of teachers' classroom management styles and self-efficacy, showcasing the intricate interplay between individual psychological characteristics and effective teaching practices. These findings underscore the importance of considering teachers' personal attributes when designing professional development programs aimed at enhancing classroom management skills and overall teaching effectiveness.

Job satisfaction among teachers is influenced by factors such as working conditions, opportunities for growth, salary, relationships with colleagues, and autonomy (Iqbal et al., 2019). Teacher job satisfaction is influenced by working conditions, growth opportunities, salary, positive colleague relationships, and autonomy, emphasizing the importance of addressing these factors for a supportive work environment, enhancing teacher well-being, and improving education quality.

Furthermore, teachers' psychological characteristics, including self-efficacy, personality, emotional intelligence, and mindfulness, have been found to impact teacher well-being, retention, effectiveness. and positive interpersonal relations (Lisa et al., 2021). Teachers' psychological characteristics, encompassing self-efficacy, personality traits, emotional intelligence, and mindfulness, play a pivotal role in shaping their effectiveness in the classroom, overall well-being, job retention, and positive interpersonal relations with students and colleagues. Understanding and nurturing these psychological attributes are integral to fostering a positive and sustainable teaching environment, with implications for both teacher success and the quality of educational experiences for students.

Ethical Standards and Values.

Teachers show a high level of inclination towards ethical values, particularly in terms of love, justice, and cooperation (Sencer et al., 2022). Teachers consistently demonstrate a strong inclination towards ethical values, emphasizing a profound commitment to principles of love, justice, and cooperation, underscoring the ethical foundation that underpins their professional ethos and interactions within the educational context. This collective dedication to ethical values reflects a shared commitment among educators to foster an inclusive and morally grounded learning environment.

Teachers are expected to behave with integrity and uphold professional values, as stated in codes of conduct and competency statements (Era et al., 2022). Teachers are held to high standards of integrity and professional values, as explicitly outlined in codes of conduct and competency statements, reinforcing the expectations for ethical behavior and accountability within the teaching profession. Adherence to these standards not only ensures the trust and respect of the educational community but also contributes to the maintenance of a positive and effective learning environment.

Values and ethics in the teaching profession are crucial for responsible and dynamic professional behavior (Sonia, 2016). Values and ethics form the bedrock of responsible and dynamic professional behavior in the teaching profession, guiding educators in their interactions with students, colleagues, and the broader educational community to ensure integrity, trust, and the effective delivery of quality education. Upholding these principles fosters a positive and ethical learning environment, nurturing the development and well-being of students.

Education plays a significant role in understanding and assimilating ethical values (Ramakrishna and Reddy 2017). Education serves a crucial role in fostering an understanding and assimilation of ethical values, providing individuals with the knowledge, critical thinking skills, and moral foundation necessary to navigate complex ethical dilemmas and contribute positively to society. Through education, individuals develop the capacity to make informed, ethical decisions and actively participate in creating a more ethical and just world.

The ethical training of teachers is connected to the regulation of a deontological code and their personal and professional conceptions (Nicolas et al, 2016). The ethical training of teachers is intricately linked to the adherence to a deontological code, providing a set of ethical guidelines, and is further influenced by their personal and professional conceptions, shaping their individual perspectives on ethical behavior within the teaching profession. This intersection of formal codes and personal beliefs emphasizes the importance of a comprehensive approach to ethical training that

addresses both regulatory standards and the nuanced ethical considerations that arise in the dynamic context of education.

> Professional Development.

Professional development for teachers is a range of formal and informal processes and activities that teachers engage in to improve their teaching knowledge and skills, with the goal of improving student learning outcomes (Amutha, 2012). Professional development for teachers encompasses a diverse array of both formal and informal processes and activities, providing educators with opportunities to enhance their teaching knowledge and skills. The aim is to elevate student learning outcomes by ensuring that teachers stay abreast of educational advancements, innovative pedagogies, and continuously refine their instructional practices.

It is important for teachers to continuously develop their expertise in areas such as pedagogy, information and communication technology, and communication (Amit, 2015). Continuous development of expertise in areas like pedagogy, information and communication technology, and communication is vital for teachers to stay abreast of evolving educational practices, foster effective classroom environments, and meet the diverse needs of students in the modern learning landscape. Ongoing professional growth ensures that educators remain dynamic and well-equipped to navigate the ever-changing educational landscape while delivering high-quality instruction.

However, research studies have shown that traditional professional development programs have been costly yet ineffective (Cathy, 2019). Research studies have consistently indicated that traditional professional development programs have been both costly and largely ineffective, often failing to produce substantial improvements in teaching practices and student outcomes. This recognition has prompted a shift towards more innovative and evidence-based approaches to teacher development that emphasize sustained, job-embedded learning experiences for educators. To address this, a new vision of effective professional development should focus on addressing the underlying constructs that determine a teacher's beliefs and practices, such as their mental model of how students learn and their implicit theories of intelligence (Kennedy, 2008).

Additionally, professional development programs should be designed to meet the specific needs of teachers and overcome barriers such as inadequate in-service training, problems in school functioning, and individual and other external factors (Melmet, 2021). A transformative vision of effective professional development necessitates a focus on addressing the foundational constructs that shape a teacher's beliefs and practices, including their mental models of how students learn and their implicit theories of intelligence. By targeting these underlying cognitive frameworks, professional development initiatives can instigate profound shifts in teaching approaches, fostering more adaptive, student-centered methodologies, and contributing to sustained improvements in educational outcomes.

B. ICT Integration

To further integrate ICT into education, it is recommended to provide teacher training programs that include ICT and to create learning networks based on important experiences that incorporate the use of ICT in education (Ludmila, et al, 2015). The focus in the United States is shifting from devices to processes, with an emphasis on using ICT as the base for new models of teaching and learning that focus on 21st Century skills (Christine and McLanchian, 2017).

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The Learner Information System is an online service used to manage learner information and improve collaboration in the organization, and its acceptance by teachers is positive (Matias et al, 2021). Sustaining ICT integration practices in geographically isolated and disadvantaged areas requires a strong community of practice, support system, and contextual ICT integration practices (Natallo and Que, 2021). In addressing the slow and intermittent internet connection in public high schools, a local caching system using Software Defined Networking and Network Function Virtualization is proposed to improve the quality of education (Jacob et al, 2019).

ICT integration in schools has been found to have a positive impact on students' academic performance and reasoning skills (Hakin et al., 2023). The positive impact of ICT integration in schools on students' academic performance is evident through increased engagement and motivation facilitated by interactive and multimedia learning engagement This contributes to improved tools. comprehension and retention of academic content, positively influencing overall academic outcomes. Additionally, the integration of ICT fosters the development of reasoning skills as students navigate digital platforms, collaborate on projects, and engage in interactive learning experiences that require critical thinking and problem-solving. It creates learnercentered learning environments and facilitates the development of mathematical skills (Senad et al, 2023). ICT integration in education fosters learner-centered learning environments by providing personalized and interactive tools that cater to individual students' needs and preferences. Additionally, these technologies play a significant role in enhancing the development of mathematical skills by offering dynamic and engaging platforms for practicing and applying mathematical concepts, contributing to a more effective and enjoyable learning experience.

The use of ICT tools in teaching and learning processes can improve scholastic performance and offer students various experiences in geography education (Florentina et al., 2023). The incorporation of ICT tools in teaching and learning not only enhances scholastic performance but also enriches geography education by providing students with diverse, interactive experiences that go beyond traditional methods, fostering a deeper and more comprehensive understanding of geographical concepts. However, the implementation of ICT in schools faces challenges such as limited resources and the need for teacher training (Suresh, 2022). The successful implementation of ICT in schools encounters challenges such as constrained resources, both in

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terms of infrastructure and technology, and the imperative need for comprehensive teacher training programs to effectively harness the potential of digital tools in the educational landscape.

Goodness of ICT. The integration of Information and Communication Technology (ICT) in schools has been found to have a positive impact on students' academic performance and reasoning skills. It has been shown that teaching through ICT can lead to better understanding of complex concepts, such as the greenhouse effect, compared to traditional methods (Alami, 2016). Utilizing ICT in teaching, particularly when explaining intricate concepts like the greenhouse effect, has demonstrated superior efficacy in providing dynamic comprehension by enhancing visualizations, interactive simulations, and multimedia resources, surpassing the effectiveness of traditional instructional methods. Additionally, the use of ICT in education can create a dynamic and proactive learning environment, allowing students to study anywhere and at any time (Mimoza, 2022). By adopting ICT in education, a dynamic and proactive learning environment is cultivated, empowering students with the flexibility to engage in studies at any time and from any location, thereby fostering a personalized and accessible approach to learning.

ICT resources have been found to enhance critical thinking skills and improve the effectiveness of teachers, leading to enhanced student achievement (Amit, 2016). The integration of ICT resources in education has been demonstrated to elevate critical thinking skills among students and enhance teacher effectiveness, thereby contributing to improved student achievement through interactive and innovative learning experiences. However, there are challenges to integrating ICT in education, including difficulties faced by both students and teachers in educational practice.

To fully realize the potential benefits of ICT integration, it is important to provide necessary ICT resources to schools, teachers, and students, and to develop concrete models and guidelines for teachers (Hana, 2022). To unlock the full potential of ICT integration in education, it is imperative to furnish schools, teachers, and students with the essential ICT resources, ensuring equitable access and utilization. Additionally, the development of concrete models and guidelines for teachers becomes crucial, providing a framework for effective integration that aligns with educational goals and enhances the overall learning experience.

The process of integration of Information and Communication Technologies (ICT) in the Educational System is a dynamic process influenced by multiple interdependent factors (Maria et al., 2022). The dynamic process of integrating Information and Communication Technologies (ICT) into the educational system is intricately shaped by a multitude of interdependent factors, including technological infrastructure, teacher training, curriculum design, and evolving educational goals. Successful ICT integration necessitates a holistic approach that addresses the complex interplay of these factors, ensuring a seamless and effective alignment with the evolving needs of education.

Usefulness of ICT. ICT in education has proven to be useful in various ways. It has improved learning, teaching, and performance by enhancing students' language skills, learning engagement, and success in language acquisition (Valerino et al., (2023). ICT in education serves as a multifaceted tool, demonstrating its usefulness by notably elevating learning experiences, teaching methodologies, and overall academic performance through the enhancement of students' language skills, increased learning engagement, and heightened success in language acquisition. The integration of ICT not only expands educational possibilities but also underscores its pivotal role in fostering comprehensive language development and academic achievement. ICT tools have expanded educational opportunities, especially for socially vulnerable groups, such as low-income groups, women, aged, and differently-abled individuals (n. a., 2023). ICT tools have significantly broadened educational opportunities, particularly for socially vulnerable groups, such as low-income individuals, women, the elderly, and differently-abled individuals, by providing inclusive access to resources, flexible learning platforms, and tailored support mechanisms, thus contributing to reducing educational disparities.

During the COVID-19 lockdown, ICT has played a crucial role in ensuring accessibility and quality of education by creating virtual learning environments and facilitating online courses at a lower cost (Musa et al., 2022). ICT emerged as a pivotal force in maintaining the accessibility and quality of education by establishing virtual learning environments and facilitating cost-effective online courses, underscoring its indispensable role in crisis response and educational continuity.

Students also recognize the importance of ICT in education, particularly in learning mathematics, as it makes learning easier, provides additional references, and enhances understanding of the subject (Nia et al., 2022). Students increasingly acknowledge the significance of ICT in education, particularly in the realm of learning mathematics, where it not only simplifies the learning process but also offers supplementary references and augments their overall comprehension of the subject. The integration of ICT thus becomes a fundamental aspect of enhancing students' engagement, accessibility, and depth of understanding in mathematical education.

The COVID-19 pandemic has further highlighted the benefits of ICT tools in education, leading to the development of guidelines for their effective use in teaching and learning processes (Marko et al., 2022). The pandemic has underscored the pivotal role of ICT tools in education, prompting the development of comprehensive guidelines to optimize their effective use in teaching and learning processes, emphasizing adaptability and resilience in the face of disruptions to traditional education systems. This recognition reflects a paradigm shift towards acknowledging ICT as an essential component in shaping the future of

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education, promoting accessibility, and ensuring continuity during unprecedented challenges.

Attitude of Teachers. Teachers' attitudes towards ICT integration varied across the studies. In mainland China, mathematics teachers were willing to incorporate digital technologies in their teaching after experiencing large-scale online teaching (Mao-neng, 2023). The variation in teachers' attitudes towards ICT integration, as observed in studies such as those in mainland China where mathematics teachers exhibited a willingness to incorporate digital technologies after experiencing large-scale online teaching, underscores the dynamic nature of teaching competence. It highlights the adaptability and openness of educators to embrace technological advancements as they navigate the evolving landscape of education. Such findings suggest that a comprehensive understanding of teaching competence should not only encompass traditional pedagogical skills but also include the ability to integrate and leverage modern technologies effectively, reflecting the multifaceted nature of educators' proficiency in contemporary educational contexts.

In Indonesian secondary schools, teachers had positive feelings about using educational technology in the classroom, but many were not familiar with the overall concept of new educational technologies (An Investigation on the, 2023). The positive feelings expressed by teachers in Indonesian secondary schools regarding the use of educational technology, despite a lack of familiarity with the overall concept of new educational technologies, sheds light on a facet of teaching competence. It suggests that while there might be enthusiasm or openness to integrate technology into teaching practices, there is a need for professional development and training to enhance educators' competence in navigating and effectively utilizing these new tools. This scenario underscores the importance of continuous learning and professional growth to ensure that teachers not only embrace technological advancements but also possess the necessary skills to integrate them seamlessly into their instructional methods, ultimately contributing to a wellrounded teaching competence.

Prospective teachers had positive perceptions towards ICT integration for learning math, but faced challenges such as limited awareness of mathematics application software (Sharik, 2023). Despite challenges like limited awareness of mathematics application software, prospective teachers' positive attitudes toward ICT integration for learning math highlight the evolving nature of teaching competence. This competence extends beyond subject matter knowledge to include the adept integration of technology into instructional practices. Recognizing the need for enhanced technological skills, targeted professional development programs can ensure that teaching competence aligns with contemporary educational demands, emphasizing the dynamic and multifaceted nature of teaching that integrates traditional pedagogical skills with modern technologies for improved learning experiences.

Prospective teachers had positive perceptions towards ICT integration for learning math, but faced challenges such as limited awareness of mathematics application software (Ruhugo, 2022). The positive perceptions held by prospective teachers regarding ICT integration for learning math. despite facing challenges such as limited awareness of mathematics application software, illuminate a dimension of teaching competence. This scenario underscores the evolving nature of teaching competence, emphasizing the necessity for educators to not only possess subject-specific knowledge but also to be adept at leveraging technological tools for effective instruction. To enhance teaching competence in this context, targeted professional development programs could be implemented to address the identified challenges, equipping prospective teachers with the skills and awareness needed to navigate and integrate technology seamlessly into math education, thus fostering a more comprehensive and adaptable teaching competence.

Universities worldwide have been implementing ICT in their curriculum due to the global demand to acquire and access skills and knowledge by learners in the 21st century. Information and Communication Technology (ICT) has increasingly become essential in our daily lives and educational institutions for teaching and learning processes. Teachers being pivotal in instruction, have experienced a myriad of challenges to enhance access, efficiency, and quality. Their attitudinal capacity being very crucial has not been empirically evaluated to ascertain its influence (Pedro et al., 2022).

Usage of ICT. The usage of ICT (Information and Communication Technology) is widespread in various fields. In the context of education, ICT has been utilized to overcome limitations in accessing learning resources, especially in underdeveloped areas where library resources are scarce (Shamshir et al., 2023). The widespread usage of Information and Communication Technology (ICT) in various fields directly relates to teaching competence, highlighting the need for educators to possess technological proficiency. Teaching competence in the contemporary landscape encompasses not only traditional pedagogical skills but also the ability to effectively integrate ICT into instructional practices. Educators who are adept at utilizing technology can create dynamic and engaging learning environments, fostering student participation and enhancing the overall educational experience. Therefore, recognizing and adapting to the prevalent use of ICT is an integral aspect of developing comprehensive teaching competence in today's educational settings.

ICT is also extensively used in the adult population, with mobile phones and laptops being the most frequently used devices. The average time spent using ICT during working hours is 5 hours, and 3.5 hours in free time. The main purpose of ICT usage is searching for information on the Internet and social networks (Magerciakova, 2023). The extensive use of Information and Communication Technology (ICT), particularly mobile phones and laptops, in the adult population is directly relevant to teaching competence. In the realm of education, teaching competence

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now extends beyond traditional methods to include the effective integration of technology into instructional practices. Educators who are proficient in leveraging devices like mobile phones and laptops can create more dynamic and adaptive learning environments, catering to the preferences and technological familiarity of the adult learners. Recognizing and incorporating these prevalent technologies into teaching strategies is an essential aspect of modern teaching competence, ensuring educators can effectively engage and instruct adult learners in contemporary educational settings.

In the field of social education, there is a need for increased usage of ICT tools, particularly for socioeducational interventions. However, the current usage is limited to management, administrative tasks, and communication (Alejandro et al., 2023). The call for increased usage of Information and Communication Technology (ICT) tools, especially for socio-educational interventions, underscores the evolving landscape of teaching competence. Teaching competence now involves not only traditional pedagogical skills but also the ability to harness the potential of ICT tools for more effective and inclusive educational practices. Educators with enhanced competence in integrating these tools can facilitate socio-educational interventions that cater to diverse learning needs and bridge educational gaps. Recognizing and responding to the growing importance of ICT in educational interventions is essential for educators to maintain a high level of teaching competence in a technologically advancing world.

In the teaching of English as a foreign language, ICT tools and approaches have been recognized as effective in improving language skills, providing individualized learning opportunities, and motivating learners (Abdiraupova, 2021). The acknowledgment of ICT tools and approaches as effective in improving language skills, providing individualized learning opportunities, and motivating learners directly relates to teaching competence. In the contemporary educational landscape, teaching competence encompasses not only traditional pedagogical skills but also the ability to leverage technology for enhanced learning outcomes. Educators proficient in integrating ICT tools can create dynamic and personalized learning experiences, fostering language development and sustaining learner motivation. Recognizing the effectiveness of ICT in education becomes an integral aspect of teaching competence, ensuring educators are equipped to employ innovative tools and methods for the benefit of their students' language acquisition and overall educational engagement.

Impact of ICT. Information and Communication Technologies (ICTs) have had a significant impact in various sectors. In the tourism sector in Ecuador, ICTs have been found to support 80% of activities, improving access to information, communication between companies and tourists, and ease of tourist mobility (Pazmino et al., 2023). The impact of Information and Communication Technologies (ICTs) in various sectors closely ties to teaching competence, expanding educators' roles beyond traditional pedagogical skills to include effective technology integration. Competent

educators adept at leveraging ICTs can create engaging and adaptive learning environments, adapting to students' evolving needs and enhancing educational outcomes in today's technologically-driven educational landscape.

In the field of education, ICTs have been recognized as powerful tools for educational change and reform, expanding access to education, strengthening its relevance to the digital workplace, and raising educational quality (Marta, et al, 2022). The recognition of Information and Communication Technologies (ICTs) as powerful tools for educational change and reform is directly linked to teaching competence. In the evolving landscape of education, teaching competence now involves not only traditional pedagogical skills but also the adept integration of ICTs. Educators who are competent in leveraging these technologies can contribute to educational change by expanding access, enhancing relevance to the digital workplace, and raising the overall quality of education, showcasing the importance of technological proficiency as an integral component of modern teaching competence.

In the context of students with low vision or blindness. ICTs have been explored as a support in higher education, focusing on their educational needs and transitioning to higher education (Impact of ICT in Education, 2022). The exploration of Information and Communication Technologies (ICTs) as a support for individuals with low vision or blindness in higher education directly relates to teaching competence. Teaching competence in this context expands to include the ability to effectively integrate accessible ICT tools, accommodating diverse needs and ensuring an inclusive learning environment for students with visual impairments. Educators who are competent in leveraging these technologies contribute to the successful transition of students with visual challenges to higher education, emphasizing the importance of adaptability and inclusivity within the spectrum of teaching competence.

Additionally, ICTs have been studied in relation to environmental sustainability, with findings indicating that their impact varies depending on the quality of ICT infrastructure in a country, improving sustainability in countries with high ICT quality but potentially degrading the environment in countries with moderate and low ICT quality (Nibedita, 2022). Teaching competence is increasingly intertwined with the impact of Information and Communication Technologies (ICTs), as evidenced by findings indicating varying effects dependent on the quality of ICT infrastructure, raising the importance for educators to navigate and mitigate environmental implications in different contexts.

C. Synthesis

Teaching competence, encompassing knowledge, skills, and attitudes, is pivotal for effective instruction and positive learning environments, impacting student outcomes significantly. Interprofessional education emphasizes collaborative knowledge development for healthcare professionals, highlighting the need for comprehensive training. Teachers' personal characteristics, including

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autonomy and empathy, influence student experiences and effectiveness in teaching. Job satisfaction, influenced by working conditions and autonomy, underscores the importance of supportive environments. Ethical values guide teachers' behavior, with education playing a pivotal role in instilling responsible decision-making. Professional development, essential for staying current, should address underlying constructs shaping teachers' beliefs and practices. Tailoring programs to teacher needs and overcoming barriers professional development. contributes to impactful highlighting the interconnected nature of these elements in fostering improved educational outcomes.

Integrating ICT into education enhances 21st Century skills through teacher training and learning networks. The use of ICT tools enhances scholastic performance, provides varied experiences in geography education, and fosters dynamic learning environments.

Teaching through ICT surpasses traditional methods in efficacy, especially for complex concepts like the greenhouse effect. Integrating ICT resources enhances critical thinking skills and teacher effectiveness, but challenges exist in educational practice. To fully benefit from ICT, providing necessary resources and developing models and guidelines for teachers is crucial. ICT integration is a dynamic process influenced by various factors, requiring a holistic approach to align with educational goals. ICT proves useful by improving language skills, engagement, and performance, especially for vulnerable groups. During the COVID-19 lockdown, ICT ensured accessibility and quality of education through virtual learning environments.

The importance of ICT in learning mathematics is recognized by students for its ease, additional references, and enhanced understanding. The pandemic has emphasized the benefits of ICT in education, leading to guidelines for effective use, signifying a transformative shift toward acknowledging ICT's essential role in shaping the future of education.

D. Theoretical/Conceptual Framework

This study is anchored on the Theory of Constructivism by John Piaget in 1980. This is a theory that encompasses various perspectives and fields of study. In education, it emphasizes student-centered and multisensory learning experiences, as opposed to teacher-centered approaches focused on rote learning (David, 2022). Within education, the constructivist approach contrasts with traditional teachercentered methods that rely on rote learning, promoting a more dynamic and interactive teaching environment. When integrating ICT into education, constructivism supports the creation of technology-enhanced, student-centric learning environments that foster critical thinking and problemsolving skills.

The theory of constructivism emphasizes that individuals actively construct their own knowledge through experiences and interactions with their environment. When applied to the integration of information and communication technology (ICT) in teaching, constructivism suggests that teachers should facilitate learning experiences that allow students to actively engage with technology. In this context, ICT serves as a tool for students to explore, collaborate, and create their understanding of the subject matter. By embracing a constructivist approach to ICT integration, teachers can empower students to take an active role in their learning and develop essential skills for the digital age.

In this context, ICT is not just a means of delivering content but becomes a powerful tool for students to construct knowledge actively. Teachers play a pivotal role in designing activities that encourage students to use technology as a medium for exploration and collaboration. This approach aligns with the principles of constructivism, where learning is seen as a dynamic and participatory process.

By embracing a constructivist approach to ICT integration, teachers empower students to take an active role in their learning journey. Students not only acquire knowledge but also develop essential skills for the digital age, such as critical thinking, problem-solving, and effective collaboration. The constructivist perspective on ICT integration transcends the traditional teacher-centered model, fostering a learner-centric environment where students become creators and contributors in their educational experience. This pedagogical approach not only enhances students' engagement and understanding but also prepares them to navigate the complexities of the ever-evolving digital landscape beyond the classroom.

This framework explores the relationship between teaching competence, including professional knowledge, skills, personal characteristics, ethical standards, and values, as well as professional development, and the integration of information and communication technology (ICT) in education. Utilizing a descriptive correlational approach, it investigates the connections between teachers' competencies and their use of ICT, shedding light on factors contributing to successful integration practices in education.

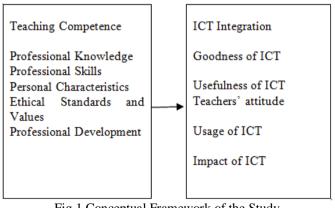


Fig 1 Conceptual Framework of the Study

E. Statement of the Problem

The purpose of the study was to determine the relationship between teaching competence and ICT integration among private school teachers in Davao City for school year 2022-2023. It specifically answered the following questions:

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- What is the Level of Teaching Competence Among Private School in Davao City in Terms of:
- Professional knowledge;
- Professional skills;
- Personal characteristics;
- Ethical standards and values; and
- Professional development?
- What is the Level of ICT Integration Among Private Schools in Davao City in Terms of:
- Goodness of ICT; and
- Usefulness of ICT;
- Teachers' attitude
- Usage of ICT; and
- Impact of ICT?
- Is there a Significant Relationship between Teaching Competence and ICT Integration Among Private Schools in Davao City?
- Does the Domain in Teaching Competence ICT Integration Among Private Schools in Davao City Significantly Influence ICT Integration?
- F. Hypotheses
- > Hol:

There is no significant relationship between teaching competence ICT integration among private schools in Davao City?

➤ Ho2:

There is no domain in teaching competence ICT integration among private schools in Davao City significantly influence ICT integration.

➢ For a Better Understanding of the Variables, the Following Terms are Defined:

Teacher competence refers to the comprehensive set of knowledge, skills, and attributes that educators possess, enabling them to effectively plan, deliver, and assess instructional content. It encompasses pedagogical expertise, subject matter knowledge, communication skills, and the ability to create a positive and inclusive learning environment.

ICT integration refers to the seamless incorporation of information and communication technologies, such as computers, software, and the internet, into the educational process to enhance teaching and learning. It involves using these technologies as tools to facilitate communication, collaboration, and the acquisition of knowledge in various academic disciplines.

Moreover, the present investigation has a strong foundation in previous studies that demonstrate the connection between teaching competence and ICT integration among private schools in Davao City. The https://doi.org/10.38124/ijisrt/IJISRT24APR1670

researcher hopes that this study will be beneficial to DepEd officials, school heads, teachers, students, and future researchers.

DepEd Officials. ICT integration is crucial for the Department of Education officials as it enhances 21st Century skills, improves academic performance, and fosters learner-centered environments through teacher training and learning networks. Furthermore, it addresses challenges such as limited resources and teacher training, ensuring a dynamic and effective educational landscape aligned with evolving goals and needs.

School Heads. For school heads, ICT integration is vital as it empowers educators to enhance teaching methods, improve student academic performance, and create dynamic, learner-centered environments. Embracing ICT ensures that schools stay at the forefront of educational innovation, preparing students for the challenges of the digital age and providing them with valuable skills for future success.

Teachers. ICT integration is crucial for teachers as it enhances their ability to deliver dynamic and engaging lessons, catering to diverse learning styles and fostering student participation. It equips teachers with powerful tools to access updated information, collaborate with peers, and adapt their instructional methods, ultimately preparing students for the digital demands of the modern world.

Future Researchers. Lastly, for future researchers, ICT integration is crucial as it provides seamless access to vast repositories of information, facilitates collaborative research through online platforms, and enables sophisticated data analysis tools. Embracing ICT ensures that future researchers can efficiently gather, process, and share knowledge, accelerating the pace of discovery and innovation in their respective fields.

III. METHOD

This section presents the research design, research locale, respondents of the study, research instrument, data gathering procedure, and data analysis. A detailed discussion is provided.

Research Design

A non-experimental quantitative research design was used in this study. As cited by Creswell (2018), defined quantitative research design as a process of collecting and analyzing numerical data, it is a systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical, and computational techniques. The results are depicted in numerical form. Specifically, the researcher will utilize a descriptive correlation design among teachers. Descriptive means to describe the level of teacher competence and ICT integration of private schools in Davao City. While correlation determines if there is a significant relationship between teacher competence and ICT integration.

being studied. The respondents are of below the legal age

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to provide a detailed portrayal of the current state of teaching competence among teachers in these schools, encompassing factors such as pedagogical skills, subject matter expertise, and instructional strategies. Concurrently, the correlational aspect seeks to establish potential relationships or associations between teaching competence and the integration of ICT tools in the teaching-learning process. This investigation unveiled insights into whether higher levels of teaching competence correlate with more effective utilization of ICT resources in the educational setting. By employing a descriptive-correlational approach, this research contributed valuable information for educational stakeholders, policymakers, and school administrators, aiding in the enhancement of teaching practices and the seamless integration of technology in private schools in Davao City.

In this research framework, the descriptive aspect aimed

➢ Research Locale

The research was conducted in private schools in Davao City. Davao City is the biggest division among in region XI. It is composed of three major districts (I, II and III). Each of it is sub-divided by cluster lead by a PSDS supervising both private and public schools. The division has been supervising private school, 170 and 76 elementary and high schools respectively. The academic environment of Davao City private schools is characterized by a diverse range of institutions offering various educational programs. These schools often emphasize quality education, with many following national curriculum standards and integrating innovative teaching methodologies.

Additionally, the academic atmosphere in Davao City private schools is influenced by a commitment to holistic development, fostering not only academic excellence but also the cultivation of values and skills essential for students' overall growth.

> Research Respondents

The 100 respondents of the study were teachers in private schools in Davao City for school year 20203-2024 and were volunteers to participate in the study. According to Creswell (2017), the researcher can select respondents and research locale that are associated with the research problem therefore informed consent will be used. A complete enumeration was utilized in this study to determine the relationship between teacher competence and ICT integration. The respondents were selected to gather data to answer the survey questions.

Complete enumeration, as a sampling technique, involves studying the entire population rather than selecting a subset for analysis. In the context of assessing teaching competence and ICT integration in private schools in Davao City, complete enumeration entailed evaluating every teachers and examining the ICT infrastructure and practices across all participating schools.

Research Instrument

In gathering the data, this study focused on getting the levels of teacher competence and ICT integration. Further, the data were gathered also will give shed on the establishment of the relationship between the two variables mentioned. The researcher utilized online google forms in administering the survey questions and informed consent were utilized.

In determining the level of teacher competence, the tool was divided in to five indicators namely: professional knowledge, professional skill, personal characteristics, ethical standards and values and professional development. This part has a total of 42 items distributed to each indicator. Moreover, in gathering the data for teacher competence, the researcher will adopt the survey tool from the study The Development of Indonesian Teacher Competence Questionnaire by Panggabean (2016). This adapted and modified questionnaire has passed through reliability test with a Cronbach's alpha of 0.723 suggesting that the items within the scale or questionnaire you're analyzing are moderately reliable.

The respondents used the following in rating the questionnaire: 5 as Very High; 4 as High; 3 as Moderate; 2 as Low, and 1 as Very Low. The Likert scale below will be used to analyze the result:

| Scale | Descriptive Value | Interpretation | | | |
|-----------|-------------------|---|--|--|--|
| 4.20-5.00 | Very High | This indicates that the teaching competence is always manifested. | | | |
| 3.40-4.19 | | | | | |
| 2.60-3.39 | | | | | |
| 1.80-2.59 | Low | This indicates that the teaching competence is seldom manifested. | | | |
| 1.00-1.79 | Very Low | This indicates that the teaching competence is never manifested. | | | |

Table 1 Research Instrument

In determining the level of ICT integration, the adopted tool is divided into five dimensions: goodness, usefulness of ICT, ICT attitude, Usage of ICT and Impact of ICT. There were 35 items in total in measuring the level of ICT integration of teachers. To purpose of this is to specifically assess the specific performance of the teachers. The respondents used the following in rating the questionnaire: 5

as Very High: 4 as High: 3 as Moderate: 2 as Low, and 1 as Very Low. This part has passed through validation test by experts.

The Likert scale below used to analyze the result: The Likert scale below used to analyze the result of the data ICT integration

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Table 2 Analyze the Result

| Scale | Descriptive Value | Interpretation | | | | |
|-----------|--|---|--|--|--|--|
| 4.20-5.00 | Very High This indicates that the ICT integration is always evident. | | | | | |
| 3.40-4.19 | High | This indicates that the ICT integration is often evident. | | | | |
| 2.60-3.39 | Moderate | This indicates that the ICT integration is evident. | | | | |
| 1.80-2.59 | Low | This indicates that the ICT integration is seldom eviden | | | | |

> Ethical Considerations

Planning a study requires a thorough understanding of its purpose, its direction, and what constitutes ethical research. The conduct of this study carefully adhered to ethical standards to prevent any rights violations by participants. The researcher made sure that respondents willingly involve themselves for discussion, that they will be safe from harm, and that their names are confidential. This study conducted in environments where respondents will be communicated in both their local language and English. Cultural boundaries, translation issues, and perceptions of power and authority are all 'ethical considerations inherent in research. As the researcher, it emphasized further that a substantial amount of English as a Second Language study was carried out by teacher-researchers in places where ethical issues might not be formally addressed. Considering this, this chapter looked at the ethical guidelines that were considered and contextualized by researchers working in the field of EAL. Some of these principles are discussed below.

First was the informed consent. With the inform consent, the respondents should understand what are expected out from them. The purpose of having this informed consent is to ensure that the respondents fully trusted the researcher upon understanding their role. The respondents of this study will be asked to participate voluntarily and emphasize to the them that they have their right to participate or withdraw, and they are assured of the records' confidentiality. Informed consent forms will be administered before the data gathering. The respondents will be required to submit first the informed consent before the researcher allowed them to participate in the study and this is a for them to accomplish. The informed consent will be administered through face to face. In securing the safety of the respondents, the researcher will make sure that it will be observed the following safety protocol implemented in the country.

Second was be peer debriefing. To enhance the future validity of the research, peer debriefing involves discussing with one or more peers who were not personally involved in the research. It included providing a knowledgeable, objective peer with the opportunity to analyze and evaluate their future transcripts, research methods, and conclusions. Qualitative researchers employed this technique in the future to explore their procedure in an impartial, independent manner, thereby creating credibility in their research. This was done because the discussion in the future focus group (FGD) exposed the researcher to uninterested peers.

Third, information was be taken during the interview, and FGDs kept confidential. The study observed the Data Privacy Act of 2002, ensuring that the data cannot be traced back to their real sources to protect their identities. Thus, utmost care was taken to ensure the future anonymity of the data sources and the de-identification of any personal information shared or read. All responses of the teachers, being the future respondents, secured in full confidentiality. All these were governed by the virtue that divulging any information about those who were involved in the study is a serious breach of ethical standards.

Fourth was intrusiveness. The respondents' time and convenience were not be interrupted, and the gathering of the data will were done according to their most secured and available time. Communication letters sent ahead of time to address this concern, where they made necessary arrangements with their schedules, and FGDs were done via face-to-face interactions. As a reminder, unethical research made future participants and researchers feel exposed and vulnerable, further emphasizing the imperative for ethical conduct in the complete enumeration process evaluating teaching competence and ICT integration in private schools in Davao City. Thus, the validity and reliability of the future data were obtained can by the researcher's unethical actions, underscoring the critical importance of maintaining ethical standards throughout the complete enumeration process in assessing teaching competence and ICT integration in private schools in Davao City.

Data Gathering Procedure

The following steps were undertaken by the researcher in the gathering of data for this study:

• Asking Permission to Conduct the Study.

The researcher secured a certificate from the Research Ethics Council, confirming that universal ethical norms were observed to preserve and maintain respondents' dignity. Once secured, the researcher requested an endorsement letter from the Dean of the Graduate School, as well as the approval of the future thesis adviser to conduct the study on the teacher competence and ICT integration of private schools in Davao City.

• Seeking Permission from the School Heads.

With the endorsement letter, the researcher sent a request letter to the target private schools to conduct the study, followed by a letter informing the school principals of the involved schools of the research study to be conducted on the respective teachers.

• Administration and Retrieval of Questionnaires.

The researcher properly explained the method of answering the offered questionnaires to the designated respondents of the study, with the agreement and full support of the SDS and school administrator. The researcher translated each question from the indicators throughout the

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administration of the online survey surveys to ensure that the respondents understood each question and provide valid replies. The selected teachers in the school complied honestly and provided with all the necessary data needed in the survey questionnaire, the researcher retrieved all the answered questionnaires via google forms once done.

• Gathering and Tabulation of Data.

The data were compiled and calculated following the successful administration and retrieval of the future survey questionnaires. Subsequently, using SPSS and with the aid of a future statistician, relevant statistical methods were used to collect the necessary data for interpretation and further analysis.

• Interpretation of Data -

Statistical Package for the Social Sciences (SPSS) was by the statistician for complex statistical data analysis of data of this study.

> Data Analysis

In analyzing the result of the study, the researcher used the following statistical tool:

• Mean.

The mean is a mathematical average computed in various ways, such as the arithmetic and geometric mean methods. This measure is crucial in predicting the future ICT integration of teachers.

• Pearson-r.

This was utilized to see if there is a significant association between teacher competence and ICT integration of private schools in Davao City at the 0.05 level of significance.

• Linear Regression.

Linear regression analyzed the association between teacher competence and ICT integration in Davao City's private schools, modeling the dependency of ICT scores on teacher competence. This method revealed the strength and direction of the linear relationship, offering insights into how changes in teacher competence predict ICT changes.

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IV. RESULTS AND DISCUSSIONS

This chapter encapsulates the findings and discussion derived from the gathered data, organized into four distinct sections. Firstly, it describes into the teaching competence and ICT integration of teachers among private schools in Davao City. Further, this presents the significant relationship and the influence of the variables.

Teaching Competence among Private Schools in Davao City

This section presents the level teaching competence of Private schools in Davao City in terms of: 1) professional knowledge, 2) professional kills, 3) personal characteristics, 4) ethical standards and values; and professional development.

• Professional Knowledge.

Presented in table below is the discussion of teaching competence, particularly in terms of professional knowledge. is a multifaceted quality crucial for effective education. Professional knowledge encompasses not only a teacher's command of their subject matter but also their ability to convey complex concepts in an accessible manner. A competent teacher should possess a deep understanding of the curriculum, staying abreast of the latest developments and research in their field. Beyond subject expertise, effective pedagogical skills are paramount, enabling instructors to adapt their teaching methods to diverse learning styles and student needs. Continuous professional development plays a pivotal role, ensuring that educators remain informed about evolving educational practices and technologies. A teacher's professional knowledge is not static but dynamic, evolving to meet the changing demands of education. Ultimately, a wellrounded teaching competence in terms of professional knowledge ensures that educators are equipped to inspire, guide, and cultivate the intellectual growth of their students.

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | I show mastery of the teaching materials | 4.18 | 0.71 | High |
| 2 | I take a long time for the students to answer my questions. | 3.70 | 0.85 | High |
| 3 | I show wider and deeper knowledge than the one written in the textbooks. | 3.98 | 0.76 | High |
| 4 | I am competent to answer most of students' question. | 3.94 | 0.78 | High |
| 5 | I give satisfactory answer when students ask. | 4.08 | 0.77 | High |
| | Overall | 3.98 | 0.50 | High |

Table 3 Teaching Competence in terms of Professional Knowledge

The results of the assessment on teaching competence, particularly regarding professional knowledge, present significant implications for instructional practices. The item "I take a long time for the students to answer my questions" with a mean of 3.70 and a standard deviation (SD) of 0.85, interpreted as high, suggests that, there is a high level of agreement among respondents that teachers might be taking an extended period for students to respond. The higher standard deviation indicates a certain degree of variability in perceptions, suggesting that some respondents may feel more strongly about this issue than others. The implication here is that addressing the time taken for student responses should be a focus area for improvement in teaching practices, potentially through strategies to enhance class engagement and participation.

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On the other hand, the item "I show mastery of the teaching materials" obtained the highest mean of 4.18, interpreted as high, with a lower standard deviation of 0.71. This implies a generally high level of agreement among respondents that teachers exhibit mastery over the teaching materials. The lower standard deviation indicates a more consistent perception, suggesting that this aspect of teaching competence is widely acknowledged. The implication here is that teachers are effectively conveying expertise in their subject matter, contributing positively to the overall perception of teaching competence.

The overall results, with a mean of 3.98 interpreted as high and a standard deviation of 0.50, also interpreted as high, signify a generally positive consensus regarding teaching competence in terms of professional knowledge. The low standard deviation underscores a high level of agreement among respondents, indicating that, on average, there is a cohesive perception of teaching competence. This bodes well for the overall effectiveness of the educators, suggesting that they are perceived as knowledgeable and skilled in their instructional roles.

These results highlight specific areas for improvement, such as addressing the time taken for student responses, while also affirming strengths in demonstrating mastery over teaching materials. The findings serve as valuable feedback for educators and educational institutions, guiding targeted efforts to enhance teaching competence in alignment with the perceived needs of students and stakeholders.

These findings align with Shuba et al.'s (2022) assertion that teachers' professional knowledge is pivotal for effective teaching. Shulman's pedagogical content knowledge emphasizes the fusion of content and pedagogical expertise, a fundamental requirement for successful instruction. This integrated knowledge equips educators to navigate subject intricacies and employ tailored pedagogical strategies. Categorized into seven key areas, including pedagogical content knowledge, this foundational knowledge is vital for delivering effective lessons. Shulman's framework empowers teachers to seamlessly integrate subject expertise with pedagogical skills, ensuring engaging and meaningful learning experiences for students (E et al., 2020).

Additionally, interprofessional education (IPE) emphasizes the development of a knowledge base for collaborative working in health and social care professions (Peter et al., 208). This places a significant emphasis on cultivating a knowledge base that promotes collaborative working across various health and social care professions. This approach seeks to enhance communication, mutual understanding. and teamwork among professionals. ultimately improving the quality of patient care through a comprehensive and integrated approach to healthcare education.

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• Professional Skills.

The insights encapsulated in Table 2 provide a focused examination of teaching competence within the boundary of professional skills, highlighting specific areas of strength and potential improvement among educators. This table serves as a comprehensive snapshot, offering a nuanced perspective on educators' proficiency in various skill domains crucial for effective teaching. The presented results shed light on specific facets of professional skills, laying the groundwork for a detailed exploration of strengths and potential areas of improvement in the realm of teaching competence.

The results of the assessment on teaching competence, particularly regarding professional skills, reveal valuable insights. The item "I feel that my students get bored in the classes" with the lowest mean of 3.48, interpreted as high, and a standard deviation of 1.00 indicates a moderate level of agreement among respondents. The higher standard deviation suggests a considerable variability in perceptions, implying that some teachers might have stronger feelings about student boredom than others. This result underscores the importance of addressing potential student engagement issues, perhaps through innovative teaching methods or interactive strategies to enhance the overall learning experience. Addressing concerns related to perceived student boredom should be a priority, with an emphasis on adopting engaging teaching methods to enhance classroom dynamics.

Conversely, the item "I give quizzes and tests" received the highest mean of 4.20, interpreted as high, with a standard deviation of 0.77. The high mean suggests a consensus among respondents that incorporating quizzes and tests is.

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | I tend to rely on one way of teaching (e.g., students' presentation, lecture, etc. | 4.01 | 0.80 | High |
| 2 | I often ask open-ended questions. | 3.83 | 0.83 | High |
| 3 | I have various ways of teaching. | 3.96 | 1.00 | High |
| 4 | I feel that my students get bored in the classes. | 3.48 | 1.00 | High |
| 5 | I always have some ways to make the students pay attention to the lessons | 4.12 | .71 | High |
| | taught. | | | |
| 6 | I allow the students to do something unusual as long as it gains better learning | 3.90 | 0.79 | High |
| | experience. | | | |
| 7 | In the first meeting, I tell them how I should do during the class. | 4.10 | 0.81 | High |
| 8 | Before teaching, I inform the learning objective. | 4.11 | .79 | High |
| 9 | I get out of the class to take any left teaching materials while teaching. | 3.74 | .97 | High |
| 10 | When I have problems in class, I solve it independently, without other | 3.89 | 0.83 | High |
| | intervention. | | | |

Table 4 Teaching Competence in Terms of Professional Skills

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| 11 | I move around the class when the students are working in group. | 4.18 | 0.74 | High |
|----|---|------|------|-----------|
| 12 | I inform the grading aspects of my assignments. | 4.08 | 0.81 | High |
| 13 | I give quizzes and tests. | 4.20 | 0.77 | Very High |
| 14 | I return students' assignments that have been graded. | 4.02 | 0.89 | High |
| 15 | In the beginning of the class, I review the materials taught in the last meeting. | 4.00 | 0.77 | High |
| 16 | I present written information about grading rubrics of my assignments. | 4.07 | 0.82 | High |
| 17 | I give comments or feedbacks, either in written or oral form, of my | 4.03 | 0.79 | High |
| | assignments. | | | |
| | Overall | 3.98 | 0.43 | High |

A common and effective practice. The relatively lower standard deviation indicates a more consistent perception among participants, highlighting a shared belief in the efficacy of assessment tools for gauging student understanding and learning progress. The widespread agreement on the effectiveness of quizzes and tests suggests that such assessment tools are well-regarded, providing valuable insights into student learning and comprehension. These findings can guide targeted professional development initiatives, encouraging educators to explore innovative teaching strategies while leveraging effective assessment practices to further enhance their professional skills in creating dynamic and engaging learning environments.

The overall results, with a mean of 3.98 interpreted as high and a low standard deviation of 0.43, indicate a strong consensus among respondents regarding teaching competence in terms of professional skills. The low standard deviation suggests a high degree of agreement, reinforcing the notion that, on average, there is a cohesive perception of strong professional skills among the surveyed educators.

Ashita (2023) expressed that professional skills of teachers are essential for the individual support of students and improving education outcomes. The proficiency of teachers in honing professional skills is pivotal for providing tailored individual support to students, contributing significantly to improved educational outcomes by addressing diverse learning needs and fostering a conducive and effective learning environment. Teachers' adeptness in applying a range of professional skills, from differentiated instruction to classroom management, plays a central role in creating a positive and enriching educational experience for students.

Further studies have shown that teachers' professional skills, including their subject knowledge, pedagogical content knowledge, and pedagogical-psychological knowledge, influence their ability to diagnose students' skills and knowledge accurately (Peiris, 2022). Research has consistently demonstrated that teachers' professional skills, encompassing subject knowledge, pedagogical content knowledge, and pedagogical-psychological knowledge, significantly impact their capacity to accurately diagnose students' skills and knowledge levels. The interplay of these competencies enables educators to effectively tailor their instructional strategies, providing targeted support that addresses individual learning needs and enhances overall student comprehension and achievement.

• Personal Characteristics.

Table 3 provides a detailed look at teaching competence, highlighting various characteristics essential for effective instruction. This brief overview offers insights into educators' proficiency, focusing on specific traits crucial for successful teaching.

The results on teacher competence in terms of personal characteristics unveil significant insights, particularly concerning the item "I have special treatment for his or her favorite student(s)." The lowest mean of 3.52 interpreted as High and a standard deviation (SD) of 1.12 indicate a moderate level of agreement among respondents, suggesting that some may feel more strongly about the existence of special treatment for certain students.

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|---|------|------|-------------------------------|
| 1 | I have special treatment to his or her favorite student(s). | 3.52 | 1.12 | High |
| 2 | I demonstrate a good behavior to be a role model. | 4.05 | 0.84 | High |
| 3 | I am not reluctant to repeat explaining the materials for some students who are | 3.78 | 0.95 | High |
| | slow learners. | | | |
| 4 | I show different behavior when he/she is inside and outside the class. | 3.83 | 0.92 | High |
| 5 | I practice fair treatment for the students. | 4.08 | 0.94 | High |
| 6 | I give compliments to other teachers in front of the students. | 3.99 | 0.77 | High |
| 7 | I do not talk negative things during the class. | 3.99 | 0.90 | High |
| 8 | I show enthusiasm while teaching. | 3.92 | 0.88 | High |
| | Overall | 3.89 | 0.51 | High |

Table 5 Teaching Competence in Terms of Personal Characteristics

This result raises a critical concern regarding perceived favoritism in teaching, which carries implications for both classroom dynamics and student perceptions. Addressing this issue is vital to cultivate an inclusive and equitable learning environment, as unchecked favoritism can adversely affect student motivation, engagement, and overall classroom

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morale. To mitigate this concern, it is imperative for educators to reflect on their practices, promote fairness, and adopt strategies that ensure consistent treatment for all students, fostering a positive and supportive atmosphere conducive to optimal learning outcomes.

Conversely, the item "I practice fair treatment for the students" with the highest mean of 4.08 interpreted as High and a standard deviation of 0.94 signifies a positive consensus among respondents, reflecting a shared belief that teachers are committed to fair treatment in their interactions with students. The high mean underscores a general acknowledgement of the importance of fairness in teaching practices. While the standard deviation, though slightly higher than ideal, still indicates a relatively consistent perception among participants, there is an opportunity for further improvement. This result highlights the importance of sustaining and reinforcing efforts to maintain consistent fairness in teaching practices. The implication here is that educators should continue to prioritize and enhance their commitment to equitable treatment, ensuring that it becomes an ingrained aspect of their teaching philosophy. Ongoing professional development and training initiatives can be valuable in promoting a shared understanding and implementation of fair practices among educators, ultimately fostering a positive and supportive learning environment for all students.

The overall results for teacher competence in personal characteristics, with a mean of 3.89 interpreted as High and low standard deviation of 0.5, show a positive consensus among respondents. This suggests collective agreement on teachers embodying favorable personal traits, contributing to a supportive learning environment. The high mean indicates commendable characteristics, fostering enhanced student-teacher relationships and increased student engagement. The low standard deviation underscores consistent perceptions. Moving forward, these positive results provide a foundation for continuous development through professional programs and collaborative practices, benefiting the overall learning environment and student outcomes.

Based on the findings of April (2020), teachers' personal and professional demographic characteristics have been found to have varying effects on students' academic performance. The academic performance of students is influenced by the diverse effects of teachers' personal and professional demographic characteristics, with factors such as experience, educational background, and cultural competence impacting the learning outcomes of students in distinct ways. Research suggests that understanding these nuanced effects is crucial for tailoring educational approaches to meet the

diverse needs of students and promoting equitable academic achievement across different demographic groups.

Moreso, personality dimensions, empathy, and locus of control have been identified as important predictors of teachers' classroom management styles and self-efficacy (Gordana, 2018). Particularly traits like openness and agreeableness, along with high levels of empathy and an internal locus of control, have emerged as significant predictors of teachers' classroom management styles and selfefficacy, showcasing the intricate interplay between individual psychological characteristics and effective teaching practices. These findings underscore the importance of considering teachers' personal attributes when designing professional development programs aimed at enhancing classroom management skills and overall teaching effectiveness.

• Ethical Standards and Values.

Table 4 serves as a comprehensive presentation of results focusing on teaching competence in terms of ethical standards and values. This detailed exploration offers valuable insights into how educators are perceived in their commitment to ethical principles, shedding light on the alignment between professional practices and ethical standards in the realm of teaching.

The result for the item "I inform my email and phone number to my student," with the lowest mean of 3.65 and a standard deviation of 0.92, suggests a high level of agreement among respondents. The relatively low mean implies that, there might be some reservation among educators about sharing personal contact information with students, possibly due to concerns related to professional boundaries or privacy. The standard deviation of 0.92 indicates a noticeable variability in opinions, suggesting that the comfort level with sharing personal contact details may differ among respondents. This variation could be attributed to diverse perspectives on the appropriateness and necessity of such disclosures within the context of ethical standards in education.

Implications of this result underscore the importance of clear and consistent guidelines regarding teacher-student communication practices. Educators may need explicit guidance on appropriate boundaries for sharing personal contact information to maintain professionalism and uphold ethical standards. Professional development programs and institutional policies could play a crucial role in providing educators with the necessary guidance and support to navigate ethical dilemmas related to communication and personal information sharing.

| Table 6 Teaching Competence in Terr | ms of Ethical Standards and Values |
|-------------------------------------|------------------------------------|
|-------------------------------------|------------------------------------|

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | I inform my email and phone number to my student. | 3.65 | 0.92 | High |
| 2 | I inform the students about plagiarism policy. | 4.03 | 0.79 | High |
| 3 | I encourage my students to show respect to the teachers and staff in school. | 4.12 | 0.80 | High |
| 4 | I encourage my students to appreciate their classmates. | 4.22 | 0.78 | High |
| 5 | Teacher appreciates students whose opinions are different with him/her. | 4.08 | 0.81 | High |

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| 6 | I do not hesitate to be contacted after the class. | 3.98 | 0.82 | High |
|---|--|------|------|------|
| 7 | I stimulate class discussion. | 3.85 | 0.82 | High |
| | Overall | 3.99 | 0.54 | High |

Meanwhile, the result for the item "I encourage my students to appreciate their classmates," with the highest mean of 4.22 (interpreted as high) and a standard deviation of 0.78, reflects a strong consensus among respondents. This suggests that educators, on average, are highly committed to fostering an environment where students are encouraged to appreciate and value their classmates. The high mean indicates a robust acknowledgement of the importance of cultivating positive interpersonal relationships among students. Educators are evidently dedicated to promoting a culture of appreciation, cooperation, and mutual respect within the classroom. This commitment aligns with ethical standards and values that emphasize the creation of a supportive and inclusive learning environment.

Further, the implications of this result are positive and highlight the ethical competence of educators in fostering a positive classroom culture. Encouraging students to appreciate their peers contributes to a healthy and respectful learning environment, aligning with broader ethical principles in education. Moving forward, educators can build upon this positive aspect by sharing best practices and engaging in professional development opportunities focused on enhancing interpersonal dynamics and ethical teaching practices. Reinforcing the importance of appreciation and respect can contribute to the overall well-being of the learning community and enhance the ethical standards and values within the educational context.

The overall mean of 3.99 (interpreted as high) and a low standard deviation of 0.54 in the results on teaching competence in terms of ethical standards and values suggest a robust and consistent perception among respondents, indicating a collective agreement that educators exhibit a high level of competence aligning with ethical principles. This positive acknowledgment underscores teachers' commitment to integrity, fairness, and responsibility, reflecting a shared belief that educators prioritize the creation of an ethical and morally grounded learning environment.

The low standard deviation emphasizes a high degree of consistency in respondents' perceptions, indicating a uniform recognition of the ethical competence demonstrated by educators. The promising implications for the educational community highlight a strong foundation of ethical competence among educators, contributing to a positive learning environment and fostering trust within the educational community. To further enhance teaching competence, educators can continue prioritizing and reinforcing ethical principles through professional development initiatives, collaborative discussions, and the integration of ethical considerations into their teaching practices. Additionally, emphasizing ethical standards and values in teacher training programs will contribute to the ongoing promotion of integrity and positive ethical behaviors within the education system.

Educators consistently exhibit a strong dedication to ethical values, emphasizing love, justice, and cooperation in their professional practices (Sencer et al., 2022). This collective commitment underscores the ethical foundation shaping their interactions within the educational context, reflecting a shared goal among teachers to nurture an inclusive and morally grounded learning environment. Furthermore, teachers are obligated to uphold high standards of integrity and professional values, as outlined in codes of conduct and competency statements (Era et al., 2022). This commitment not only ensures trust and respect within the educational community but also contributes to the maintenance of a positive and effective learning environment, reinforcing the expectations for ethical behavior and accountability within the teaching profession.

Further, values and ethics are foundational elements crucial for responsible and dynamic professional conduct within the teaching profession (Sonia, 2016). They guide educators in their interactions with students, colleagues, and the broader educational community, ensuring integrity, trust, and the effective delivery of quality education. Upholding these principles creates a positive and ethical learning environment, promoting the development and well-being of students. Education, as emphasized by Ramakrishma and Reddy (2017), plays a significant role in cultivating an understanding and assimilation of ethical values. Through education, individuals acquire knowledge, critical thinking skills, and a moral foundation, enabling them to navigate complex ethical dilemmas and actively contribute to creating a more ethical and just world.

• Professional Development.

Table 5 offers a comprehensive overview of teaching competence in terms of professional development, presenting a detailed analysis of educators' engagement, growth, and effectiveness in honing their skills and staying abreast of advancements in the field. This table serves as a valuable resource for understanding the extent to which teachers actively pursue and benefit from ongoing professional development opportunities, contributing to the enhancement of their overall teaching competence.

The result for the item "I encourage to widen my horizon through various ways," with the lowest mean of 3.99 (interpreted as high) and a standard deviation of 0.79, suggests a generally positive but somewhat varied perception among respondents regarding educators' commitment to broadening their professional horizons. The high mean indicates a consensus that educators are inclined to pursue various avenues for professional development, but the variability in the standard deviation implies differing degrees of emphasis or commitment among educators.

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|---|
|---|

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | I show wide knowledge about many things more than the subjects taught. | 4.17 | 0.81 | High |
| 2 | I encourage to widen my horizon through various ways. | 3.99 | 0.79 | High |
| 3 | I encourage my students to study as high as they can, no matter what my career | 4.11 | 0.92 | High |
| | will be. | | | _ |
| | Overall | 4.07 | 0.69 | High |

Table 7 Teaching Competence in Terms of Professional Development

The implications of this result emphasize the need to foster a culture consistently encouraging and supporting professional development among educators. While the high mean reflects a positive inclination toward expanding professional horizons, the variability suggests a need for more consistent and tailored strategies to ensure that all educators are actively engaged in continuous learning.

In addition, the highest mean of 4.17 (interpreted as high) and a standard deviation of 0.81 for the item "I show wide knowledge about many things more than the subjects taught" indicates a strong consensus among respondents. This reflects that teachers possess a broad knowledge base extending beyond their specific subjects, contributing to a well-rounded educational experience. The high mean underscores the acknowledgement that teachers' diverse expertise positively impacts student learning, emphasizing the importance of encouraging ongoing professional development to enhance teaching competence and create a more enriching educational environment. Recognizing and supporting educators in expanding their knowledge can lead to improved student engagement and a holistic understanding of various topics.

The overall mean of 4.07 (interpreted as high) and a standard deviation of 0.69 in the results on teaching competence in professional development indicate a strong, consistent perception among respondents. This suggests a collective agreement that educators, on average, demonstrate a high level of competence in engaging actively in professional development. The high mean underscores positive acknowledgment of teachers' commitment to ongoing learning.

Implications highlight the importance of prioritizing and investing in professional development for educators. The strong consensus indicates a robust foundation of competence, presenting an opportunity to further enhance teaching skills through targeted professional development. Institutions and policymakers can use these findings to reinforce and expand existing programs, ensuring they meet the diverse needs of educators. Emphasizing ongoing learning and providing support for teachers to pursue diverse development opportunities can contribute to continuous improvement in teaching competence and, consequently, the overall quality of education.

Professional development for teachers, as defined by Amutha (2012), encompasses a diverse range of formal and informal processes and activities designed to enhance teaching knowledge and skills. The primary goal is to improve student learning outcomes by keeping educators informed about educational advancements and encouraging the continuous refinement of instructional practices. It is crucial for teachers to continuously develop expertise in areas such as pedagogy, information and communication technology, and communication, as emphasized by Amit (2015). This ongoing development ensures that educators remain dynamic, well-equipped, and adaptable to the evolving educational landscape, facilitating high-quality instruction and effective classroom environments.

Research studies, including Cathy (2019), consistently show that traditional professional development programs have been costly and largely ineffective, prompting a shift towards innovative, evidence-based approaches. The emphasis is now on sustained, job-embedded learning experiences for educators, addressing underlying constructs such as teachers' beliefs and practices. Kennedy (2008) suggests that effective professional development should focus on mental models of student learning and implicit theories of intelligence. Furthermore, Melmet (2021) highlights the need for programs tailored to teachers' specific needs, overcoming barriers like inadequate training and external factors. This transformative vision aims to target foundational constructs, instigating profound shifts in teaching approaches and contributing to sustained improvements in educational outcomes.

Table 6 presents a comprehensive summary of the teaching competence observed in Private Schools within Davao City. This summary encompasses key domains crucial for effective teaching, including Professional Knowledge, Professional Skills, Personal Characteristics, Ethical Standards and Values, and Professional Development. The table provides a condensed overview of mean scores and standard deviations, shedding light on the perceived levels of competence within these domains. This detailed analysis serves as a valuable resource for understanding the strengths and areas of focus within the teaching competence of Private Schools in Davao City, contributing to a nuanced perspective on the overall quality of education delivery in these institutions.

The summary of teaching competence for private schools in Davao City reveals consistently high mean scores across multiple domains. In Professional Knowledge, Professional Skills, Personal Characteristics, Ethical Standards and Values, and Professional Development, the means range from 3.89 to 4.07, all interpreted as "High." The standard deviations, ranging from 0.43 to 0.69, suggest minimal variability in perceptions. This succinctly indicates a robust and uniform perception of high teaching competence among Private School teachers in Davao City, emphasizing excellence in professional knowledge, skills, personal characteristics, ethical standards, and ongoing development.

| Table 8 Summary of | of the Teaching | Competence of Private | e Schools in Davao City |
|----------------------|-----------------|------------------------|-------------------------|
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| No. | Domains Technical Vocational Competencies | Mean | SD | Descriptive Equivalent |
|-----|---|-------------|------|------------------------|
| 1 | Professional Knowledge | 3.98 | 0.50 | High |
| 2 | Professional Skills | 3.98 | 0.43 | High |
| 3 | Personal Characteristics | 3.89 | 0.51 | High |
| 4 | Ethical Standards and Values | 3.99 | 0.54 | High |
| 5 | Professional Development | 4.07 | 0.69 | High |
| | Overall | <i>3.98</i> | 0.53 | High |

Implications of these results are positive for Private Schools in Davao City. The high mean underscores a robust foundation in various aspects of teaching, including professional knowledge, skills, personal characteristics, ethical standards, and ongoing development. This, in turn, contributes to a high-quality educational environment. The low standard deviation implies a shared understanding among respondents, strengthening the reliability of the results.

Teaching competence, as highlighted by Ahmad (2023), is a fundamental aspect of a teacher's professional development, encompassing knowledge, skills, and attitudes essential for effective teaching. It goes beyond subject expertise to include creating a positive learning environment, utilizing innovative teaching methods, and applying effective evaluation techniques (Madina et al., 2023). The holistic nature of teaching competence underscores its importance in shaping education quality, emphasizing the interpersonal and pedagogical dimensions. A proficient teacher's ability to balance these elements enhances student learning experiences and contributes significantly to the overall effectiveness of the educational process.

Continuous development of teacher competencies through coaching, training programs, and supervision is crucial, as emphasized by Alifia et al. (2023). This ongoing professional development is essential for enhancing teacher competencies, directly impacting student learning outcomes. The dynamic nature of teaching underscores the importance of evolving competencies in fostering a positive educational environment and improving academic achievement. Educational institutions must prioritize the development of teacher competencies to ensure quality education. Elena et al. (2022) highlight that by enhancing their teaching competence, teachers contribute to the effectiveness of the teaching and learning process in the classroom, benefiting students, and creating a conducive and enriching educational environment.

Information and Communication Technology Integration (ICT) among Private Schools in Davao City

This section presents the level teaching competence of Private schools in Davao City in terms of: 1) goodness of ICT, 2) usefulness of ICT, 3) ICT attitude, 4) Usage of ICT; and impact of ICT.

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|---|------|------|-------------------------------|
| 1 | I feel confident learning new computer skills. | 3.94 | 1.29 | High |
| 2 | I find it easier to teach by using ICT | 3.95 | 1.08 | High |
| 3 | I am aware of the great opportunities that ICT offers for effective teaching. | 3.93 | 1.00 | High |
| 4 | I think that ICT-supported teaching makes learning more elective. | 3.84 | 1.13 | High |
| 5 | I have more time to cater to students' need and I can still have effective | 3.82 | 1.05 | High |
| | teaching without the use of ICT | | | |
| 6 | I am confident that my students learn best without the help of ICT. | 3.85 | 1.09 | High |
| 7 | Students make no effort for their lesson if ICT is used in teaching | 3.59 | 1.18 | High |
| | Overall | 3.85 | .78 | High |

• Goodness of ICT.

Table 7 assesses the goodness of Information and Communication Technology (ICT) integration in a specific context. It offers a detailed overview of how well ICT is implemented, examining its effectiveness in various aspects of education. The table considers different criteria to measure the success and impact of ICT integration, providing insights into strengths and areas for improvement in using technology for educational purposes. This analysis serves as a valuable resource for understanding the current state of ICT integration and its effectiveness in the given context.

The implication of this result suggests a need for further investigation into the factors influencing teachers' perceptions of the ease of teaching with ICT. Understanding the reasons behind the varied responses can inform targeted interventions, such as additional training or support initiatives, to address specific challenges or concerns that teachers may have. Improving teachers' comfort and confidence in using ICT can enhance the overall effectiveness of technology integration in the educational context.

The result for the item "Students make no effort for their lesson if ICT is used in teaching" in Table 7 shows a mean score of 3.59 and a standard deviation of 1.18. The mean, interpreted as High, suggests that, respondents perceive a moderate level of agreement with the statement that students make no effort for their lesson when ICT is used in teaching. The relatively high standard deviation of 1.18 indicates a considerable variability in responses, implying

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diverse opinions among respondents regarding the impact of ICT on students' effort.

The implication of this result underscores the need to explore and understand the varied perspectives on students' engagement with lessons when ICT is employed. Addressing these perceptions is crucial for effective ICT integration, as it can inform strategies to encourage active student participation and dispel any misconceptions or concerns about the potential negative effects of technology on student effort. Educational institutions may consider implementing targeted initiatives to promote a positive attitude toward ICT use among both educators and students, fostering a conducive and engaging learning environment.

The overall results for Information and Communication Technology (ICT) Integration in Table 7 reveal a mean score of 3.85 and a standard deviation of 0.78. The mean, interpreted as High, suggests that, respondents perceive a moderate level of goodness in ICT integration within the specific context examined. The standard deviation of 0.78 indicates a relatively moderate level of variability in responses, suggesting a somewhat consistent perception among respondents.

The implication of these results is that there is a balanced but not overwhelmingly positive or negative view of the goodness of ICT integration in the given context. This moderate perception may indicate that while there are positive aspects to ICT use, there may also be challenges or areas for improvement. To enhance the goodness of ICT integration, educational institutions could consider targeted initiatives such as additional training, support, or infrastructure improvements based on the specific feedback and concerns raised by respondents. Continuous assessment and improvement strategies can contribute to optimizing the benefits of ICT in education within the examined context. The integration of Information and Communication Technology (ICT) in schools positively impacts students' academic performance and reasoning skills. Teaching through ICT, especially for complex concepts like the greenhouse effect, has shown superior efficacy in enhancing comprehension through dynamic visualizations and interactive simulations (Alami, 2016). Moreover, ICT in education creates a dynamic and proactive learning environment, offering students the flexibility to study anywhere and at any time (Mimoza, 2022). This fosters a personalized and accessible approach to learning, aligning with the goodness of ICT by enhancing understanding and providing flexibility in education.

The integration of ICT resources in education, as highlighted by Amit (2016), enhances critical thinking skills and boosts teacher effectiveness, leading to improved student achievement through interactive and innovative learning experiences. Despite these benefits, challenges exist, including difficulties faced by both students and teachers in educational practice. To fully harness the advantages of ICT integration, it is essential to provide necessary ICT resources to schools, teachers, and students, ensuring equitable access. Additionally, the development of concrete models and guidelines for teachers becomes crucial, offering a framework for effective integration that aligns with educational goals and enhances the overall learning experience, aligning with the goodness of ICT.

• Usefulness of ICT.

Table 8 evaluates the usefulness of Information and Communication Technology (ICT) Integration within a specific context, providing a thorough examination of how ICT is perceived in terms of utility and effectiveness in education. By assessing criteria related to the usefulness of ICT tools and methodologies, the table reveals insights into the extent to which technology contributes to the overall quality and functionality of educational practices. The findings from this analysis offer valuable information about perceived strengths and areas for improvement in utilizing ICT for educational purposes in the examined context.

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | The use of ICT helps teachers to improve teaching with more updated materials. | 3.99 | 1.07 | High |
| 2 | I think the use of ICT improves the quality of teaching. | 3.89 | 1.08 | High |
| 3 | I think the use of ICT helps to prepare teaching resources and materials. | 3.90 | 1.02 | High |
| 4 | The use of ICT enables the students to be more active and engaging in the | 3.90 | 0.99 | High |
| | lesson. | | | |
| 5 | I think the use of ICT in teaching is a waste of time. | 3.56 | 1.28 | High |
| 6 | Students pay attention when ICT is used in teaching. | 3.86 | 1.03 | High |
| 7 | ICT is used in teaching. | 4.06 | 0.95 | High |
| 8 | The classroom management Is out of control if ICT is used in teaching. | 3.57 | 1.20 | High |
| | Overall | 3.84 | .81 | High |

Table 10 Information and Communication Technology Integration in Terms of Usefulness of ICT

The result for the item "I think the use of ICT in teaching is a waste of time" in Table 8 indicates a mean score of 3.56, interpreted as high, and a standard deviation of 1.28. The high mean suggests that, on average, respondents express a relatively high level of agreement with the

statement, indicating that there is a perception that the use of Information and Communication Technology (ICT) in teaching is considered a waste of time.

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The implication of this result is notable, highlighting a potential challenge or skepticism among educators regarding the effectiveness or efficiency of ICT in the teaching process. Addressing this perception may require targeted initiatives such as providing additional training, showcasing success stories, or addressing specific concerns raised by teachers. It is crucial to bridge this perception gap to maximize the benefits and goodness of ICT integration in education.

The result for the item "ICT is used in teaching" in Table 8 indicates a high mean score of 4.06 and a standard deviation of 0.95. The high mean suggests that, on average, respondents strongly agree with the statement, indicating a widespread acknowledgement that Information and Communication Technology (ICT) is actively used in teaching within the examined context. The low standard deviation of 0.95 indicates a relatively consistent perception among respondents, emphasizing a shared understanding regarding the prevalence of ICT usage in teaching.

The implication of this result is positive, showcasing a high level of ICT integration in teaching practices. The strong consensus among respondents indicates a widespread acknowledgement of the utility and effectiveness of ICT in the teaching process within the specific context. This suggests that educators recognize the importance of incorporating technology into their instructional methods, aligning with the goodness of ICT in enhancing educational practices and facilitating interactive and innovative learning experiences. To further enhance ICT integration, continued support, training, and resource provision can contribute to sustaining and maximizing the benefits identified in this positive result.

The overall result for Information and Communication Technology (ICT) Integration in Table 8 reveals a mean score of 3.84, interpreted as high, and a standard deviation of 0.81. The high mean suggests that, on average, respondents perceive a high level of goodness in ICT integration within the specific context under examination. The standard deviation of 0.81 indicates a moderate level of variability in responses, suggesting a reasonably consistent perception among respondents.

The implication of these results is positive, indicating a generally favourable view of ICT integration in education. The high mean reflects a strong consensus among respondents regarding the goodness of incorporating ICT into teaching practices. This suggests that, within the examined context, educators recognize the benefits and value of utilizing technology to enhance the overall quality of educational practices.

To build upon this positive perception and further enhance the goodness of ICT integration, continuous support, professional development opportunities, and addressing any identified challenges or concerns can contribute to maximizing the benefits and fostering a more effective and efficient educational environment. The moderate standard deviation also highlights areas where targeted interventions or improvements may be beneficial for a more consistent and optimized integration of ICT in education.

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ICT in education, as noted by Valerian et al. (2023), proves highly useful, enhancing learning, teaching, and performance. It elevates students' language skills, learning engagement, and success in language acquisition, serving as a versatile tool that expands educational possibilities. The integration of ICT not only fosters comprehensive language development and academic achievement but also addresses educational disparities by providing inclusive access and tailored support, especially for socially vulnerable groups such as low-income individuals, women, the elderly, and differently abled individuals (n. a., 2023).

ICT is instrumental in ensuring accessible and highquality education through virtual learning environments and cost-effective online courses (Musa et al., 2022). It's crucial role in maintaining educational accessibility and quality is evident in crisis response and ensuring uninterrupted learning. Additionally, students recognize the importance of ICT, especially in learning mathematics, as it simplifies the learning process, provides additional references, and enhances overall comprehension of the subject (Nia et al., 2022). The integration of ICT is fundamental in enhancing students' engagement, accessibility, and depth of understanding in mathematical education.

• ICT Attitude.

Table 9 assesses Information and Communication Technology (ICT) Integration by examining attitudes toward ICT in a specific context. The table offers a thorough analysis of how individuals perceive and use ICT in education, aiming to reveal insights into the factors influencing its integration. By evaluating criteria related to ICT attitudes, the table highlights the prevailing sentiments of educators and learners, contributing valuable information to understand the dynamics of ICT integration and the factors shaping overall attitudes toward technology in the examined context.

The item "ICT improves education" with the lowest mean of 3.28 and a standard deviation of 0.60 in the results of Information and Communication Technology (ICT) Integration suggests a relatively High agreement among respondents regarding the positive impact of ICT on education. The lower mean indicates that, on average, respondents lean towards agreement but not strongly.

Implications of this result could point to potential challenges or areas where there might be reservations or uncertainties among educators and learners about the effectiveness of ICT in enhancing the educational experience. Addressing these concerns through targeted professional development, training programs, and awareness campaigns can play a crucial role in fostering a more positive attitude toward ICT integration. Providing evidence of successful ICT implementations and showcasing tangible benefits could contribute to changing perceptions and fostering a more favourable attitude.

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The item "Using ICT is enjoyable" receiving the perfect mean of 5.00, interpreted as Very High, and a standard deviation of 0.00 in the results of Information and Communication Technology (ICT) Integration indicates unanimous and unvarying agreement among respondents that using ICT is a highly enjoyable experience. The absence of standard deviation suggests complete consensus without any variability in responses, emphasizing that all participants share an extremely positive attitude toward the enjoyment of using ICT in educational settings.

Implications of this result are quite favourable, as it indicates a strong and positive sentiment among educators and learners regarding the enjoyable nature of incorporating ICT into teaching and learning practices. This unanimity can be leveraged to promote and encourage further ICT integration initiatives. The high level of enjoyment suggests that individuals are likely to be motivated and engaged when using technology, potentially leading to increased enthusiasm for learning and teaching. In practical terms, recognizing and celebrating the positive experiences associated with using ICT can contribute to a supportive and encouraging educational environment. Sharing success stories, promoting collaborative ICT initiatives, and integrating enjoyable aspects into training and professional development can further enhance the overall positive attitude toward ICT integration. This result serves as a foundation for building on the enthusiasm and satisfaction derived from using ICT in educational contexts.

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The mean of 4.20, interpreted as Very High, indicates a strong consensus among respondents regarding a specific aspect of Information and Communication Technology (ICT) attitude, with minimal variability (SD = 0.10), showcasing a uniform perception. This positive attitude provides an opportunity to identify and amplify successful practices related to ICT integration appreciated by educators and learners.

| Table 11 Information and Communication Technology Integration in Terms of ICT Attitude | ; |
|--|---|
|--|---|

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | Using ICT is enjoyable | 5.00 | 0.00 | Very High |
| 2 | ICT motivates students to do more study | 4.96 | 0.27 | Very High |
| 3 | Using ICT in the classroom makes the subject matter more interesting for | 4.90 | 0.35 | Very High |
| | students | | | |
| 4 | ICT improves education | 3.28 | 0.60 | High |
| 5 | ICT should be priority in education | 3.41 | 0.70 | High |
| 6 | I can teach lessons that appropriately combine my subject, technologies, and | 3.88 | 0.60 | High |
| | teaching approaches | | | |
| 7 | I can select ICT tools to use in my classroom that enhance my teaching and | 3.77 | 0.55 | High |
| | students' learning. | | | |
| 8 | I can select and evaluate educational software. | 3.90 | 0.44 | High |
| 9 | I can select ICT tools to manage my classroom and engage my students. | 3.98 | 0.30 | High |
| 10 | I can solve simple problems in operating computers and other tools in | 4.88 | 0.33 | Very High |
| | classroom | | | |
| | Overall | 4.20 | 0.10 | Very High |

To capitalize on this positive sentiment, educational institutions can promote and expand initiatives related to the specific aspect with a Very High mean. Recognizing and reinforcing these successful components through targeted professional development, sharing best practices, and integrating them into educational policies can contribute to sustained positive attitudes toward ICT integration. Establishing continuous feedback mechanisms and ongoing communication channels will address evolving needs, ensuring the maintenance of high satisfaction and agreement levels.

Mao-neng's (2023) research reveals varying attitudes among teachers towards ICT integration, with Chinese mathematics teachers demonstrating a willingness to incorporate digital technologies post-large-scale online teaching. This underscores the dynamic nature of teaching competence, highlighting educators' adaptability to embrace technological advancements in evolving educational landscapes. Similarly, in Indonesian secondary schools, teachers showed positive feelings about using educational technology despite limited familiarity with new technologies, emphasizing the need for ongoing professional development to enhance teachers' competence in effectively utilizing these tools. These findings emphasize that teaching competence goes beyond traditional skills, encompassing the ability to integrate modern technologies effectively in contemporary educational contexts, requiring continuous learning and growth.

Sharik (2023) found that prospective teachers expressed positive perceptions towards ICT integration for learning math, despite facing challenges like limited awareness of mathematics application software. This highlights the evolving nature of teaching competence, emphasizing the need for educators to integrate technology adeptly into instructional practices. To address challenges and enhance teaching competence in line with contemporary demands, targeted professional development programs can ensure that educators possess both subject-specific knowledge and the skills to leverage technology effectively for improved learning experiences.

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Usage of ICT.

Table 10 assesses the usage of Information and Communication Technology (ICT) Integration in a specific context. It examines how extensively ICT tools are employed in various educational aspects, aiming to reveal the effectiveness and prevalence of technology integration in teaching and learning practices. The insights gained from this analysis offer valuable information about the current state of ICT utilization in the examined context.

result for the item "I use computer The application/software programs often in my teaching practice" indicates a relatively lower mean of 3.23, interpreted as High, with a standard deviation of 0.50. The high mean suggests a general agreement among respondents that computer applications or software programs are used frequently in teaching practices. However, the standard deviation indicates some variability in responses, implying that there is a moderate range of opinions among participants.

Implications of this result suggest a positive inclination toward incorporating computer applications and software in teaching practices, contributing to the overall integration of ICT in education. The variability in responses may highlight differences in the extent to which educators utilize these tools, emphasizing the need for targeted professional development to enhance proficiency and encourage more consistent use. Institutions can capitalize on this positive attitude by providing further training and support to educators, fostering a more uniform and effective integration of computer applications and software into teaching methodologies. Continuous monitoring and feedback mechanisms can also help tailor professional development initiatives to address specific needs, ensuring a more standardized and optimized usage of ICT tools in educational settings.

Moreover, the result for the item "I use ICT device or computer, application, and search engine in my work" reveals a notably high mean of 4.77, interpreted as Very High, with a low standard deviation of 0.42. This indicates a strong consensus among respondents that they actively use ICT devices, computer applications, and search engines in their work.

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | I use computer application/software programs often in my teaching practice | 3.23 | 0.50 | High |
| 2 | I use websites/search engines to access different types of information | 4.53 | 0.63 | High |
| 3 | I use ICT device or computer for my teaching practices | 3.94 | 0.37 | High |
| 4 | I use ICT device or computer | 4.55 | 0.58 | High |
| 5 | I use ICT device or computer, application and search engine in my work | 4.77 | 0.42 | High |
| | Overall | 4.21 | 0.27 | High |

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Implications of this result are highly positive, suggesting a widespread and effective integration of ICT tools in various aspects of professional activities. The Very High mean underscores a robust agreement among educators regarding the extensive use of ICT, highlighting a high level of proficiency and comfort with technology in their work. The low standard deviation signifies a consistent and uniform pattern of responses, indicating a shared understanding and practice among participants.

This result implies a technologically adept teaching community, with educators utilizing a range of ICT tools for diverse purposes. To build upon this positive trend, institutions can focus on reinforcing and expanding initiatives that encourage the integration of ICT in teaching and administrative tasks. Further professional development programs can be tailored to address emerging technologies, ensuring educators remain at the forefront of technological advancements. Collaborative platforms for sharing best practices and experiences can also contribute to sustaining the Very High level of ICT usage, fostering an environment of continuous learning and innovation within the educational community.

Overall, the mean of 4.21, interpreted as High, with a low standard deviation of 0.27 in the results on Information and Communication Technology (ICT) Integration in terms of Usage of ICT signifies a strong consensus among respondents. This result indicates that educators, on average, actively integrate ICT into various aspects of their professional activities.

Implications of this result are highly positive, suggesting a widespread and proficient utilization of ICT tools among educators. The High mean reflects a shared understanding and practice, highlighting a technologically adept teaching community that effectively incorporates technology into teaching, administrative tasks, and other work-related activities. The low standard deviation emphasizes the consistency and uniformity in responses, reinforcing the notion of a collective agreement regarding the high level of ICT usage.

This result implies a positive and forward-thinking educational environment where educators are embracing and effectively leveraging technology. To capitalize on this positive trend, institutions can continue to invest in professional development initiatives that enhance educators' ICT skills. Additionally, creating a collaborative culture that encourages the sharing of successful practices, exploring emerging technologies, and incorporating feedback mechanisms can contribute to sustaining and further improving the High level of ICT usage. Continuous support for educators to stay updated on the latest technological advancements can ensure the ongoing enhancement of ICT integration within the educational landscape.

The utilization of Information and Communication Technology (ICT) has become crucial in overcoming limitations in accessing learning resources, particularly in underdeveloped areas where traditional library resources are scarce (Shamshir et al., 2023). This widespread usage of ICT directly intersects with teaching competence, emphasizing the need for educators to possess technological proficiency. Teaching competence in the modern educational landscape extends beyond traditional pedagogical skills to encompass the effective integration of ICT into instructional practices. Educators who adeptly use technology can create dynamic and engaging learning environments, fostering student participation and enhancing the overall educational experience. Thus, recognizing and adapting to the prevalent use of ICT is integral to developing comprehensive teaching competence in today's educational settings.

Moreover, the adult population extensively uses ICT, with mobile phones and laptops being the most frequently used devices. On average, adults spend 5 hours using ICT during working hours and 3.5 hours in free time, primarily for purposes such as searching for information on the Internet and social networks (Magerciakova, 2023). This widespread use of ICT among adults is directly relevant to teaching competence, expanding the scope of education beyond traditional methods to include the effective integration of technology into instructional practices. Educators proficient in leveraging devices like mobile phones and laptops can

create dynamic and adaptive learning environments, catering to the preferences and technological familiarity of adult learners. Recognizing and incorporating these prevalent technologies into teaching strategies is an essential aspect of modern teaching competence, ensuring educators can effectively engage and instruct adult learners in contemporary educational settings.

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• Impact of ICT.

Table 11 evaluates the impact of Information and Communication Technology (ICT) Integration within a specific context. It examines how incorporating ICT tools into various educational aspects influences teaching and learning practices. The table assesses criteria related to the impact of ICT to understand how technology contributes to the overall quality and outcomes of education. The insights from this analysis are a valuable resource for understanding the dynamics of ICT integration and its tangible effects in the examined context.

The result for "ICT increased saving money for the future" (mean: 3.43, interpreted as High, SD: 0.50) shows a generally positive impact of Information and Communication Technology (ICT) on enhancing saving habits. Although there is some variability in opinions, the high mean suggests a consensus that ICT has positively influenced financial practices, particularly in terms of saving for the future.

| Table 13 Information and | 1 Communication | Technology Integration | on in Terms | s of Impact of ICT |
|--------------------------|-----------------|------------------------|-------------------|--------------------|
| ruble 15 mormuton une | | reemology megium | JII III I CI III. | or impact of ici |

| No. | Statements | Mean | SD | Descriptive Equivalent |
|-----|--|------|------|-------------------------------|
| 1 | ICT enhanced capability in teaching | 3.63 | 0.93 | High |
| 2 | ICT enhanced reciprocal relationship with colleagues | 3.49 | 0.50 | High |
| 3 | ICT increased saving money for future | 3.43 | 0.50 | High |
| 4 | ICT made me aware of preventing social issues | 4.25 | 0.45 | Very High |
| 5 | ICT made me aware of the rights and roles in society | 4.01 | 0.09 | High |
| | Overall | 3.76 | 0.09 | High |

This underscores the potential of ICT to contribute to financial literacy and prudent financial habits. Despite varied perceptions, the overall positive impact indicates an opportunity for educators and policymakers to leverage ICT for promoting financial literacy. Tailoring initiatives to address diverse perspectives can enhance the uniform recognition and utilization of ICT's positive influence on financial practices. This emphasizes ICT's broader role in shaping not only educational practices but also life skills and habits extending beyond the classroom.

The item "ICT made me aware of preventing social issues" received a very high mean of 4.25, indicating a strong consensus among respondents regarding the significant role of Information and Communication Technology (ICT) in raising awareness about preventing social issues. The low standard deviation reflects minimal variability in opinions, emphasizing a consistent acknowledgement of ICT's substantial impact on social issue awareness.

This result has significant implications, highlighting ICT's potential as a powerful tool for increasing awareness of and addressing social issues. The consensus among respondents underscores the unified recognition of ICT's role in fostering social consciousness. Educational institutions and policymakers can capitalize on this positive perception by integrating ICT tools that promote awareness of social issues into curricula. This result underscores the broader societal impact of ICT, showcasing its potential to contribute not only to educational outcomes but also to the development of socially responsible and aware individuals.

The overall mean of 3.76, interpreted as high, with a low standard deviation of 0.09 in the results of Information and Communication Technology (ICT) Integration indicates a strong and consistent perception among respondents. The high mean reflects a shared agreement that ICT has a positive impact across various aspects assessed in the study. The low standard deviation suggests minimal variability in respondents' opinions, emphasizing a uniform acknowledgement of the positive impact of ICT integration.

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Implications of this result are significant, indicating a widespread recognition of the high impact of ICT across the Educational institutions examined contexts. and policymakers can build upon this positive perception by further integrating and optimizing ICT tools and methodologies in teaching and learning practices. The low variability suggests a consistent understanding of the positive outcomes associated with ICT, allowing for targeted and unified initiatives to enhance the effectiveness of ICT integration. This underscores the potential for ICT to contribute substantially to educational quality and outcomes, emphasizing its role as a valuable and impactful tool in contemporary educational settings.

Information and Communication Technologies (ICTs) have had a significant impact in various sectors. In the tourism sector in Ecuador, ICTs have been found to support 80% of activities, improving access to information, communication between companies and tourists, and ease of tourist mobility (Pazmino et al., 2023). The impact of Information and Communication Technologies (ICTs) in various sectors closely ties to teaching competence, expanding educators' roles beyond traditional pedagogical skills to include effective technology integration. Competent educators adept at leveraging ICTs can create engaging and adaptive learning environments, adapting to students' evolving needs and enhancing educational outcomes in today's technologically-driven educational landscape.

In the field of education, ICTs have been recognized as powerful tools for educational change and reform, expanding access to education, strengthening its relevance to the digital workplace, and raising educational quality (Marta, et al, 2022). The recognition of Information and Communication Technologies (ICTs) as powerful tools for educational change and reform is directly linked to teaching competence. In the evolving landscape of education, teaching competence now involves not only traditional pedagogical skills but also the adept integration of ICTs. Educators who are competent in leveraging these technologies can contribute to educational change by expanding access, enhancing relevance to the digital workplace, and raising the overall quality of education, showcasing the importance of technological proficiency as an integral component of modern teaching competence.

Table 12 presents the summary of ICT integration among private schools in Davao City reveals a highly positive and cohesive landscape. Across various domains, teacher consistently express favorable views on the integration of information and communication technology (ICT) into their teaching practices. In assessing the goodness of ICT, the mean of 3.85, with a moderate standard deviation of 0.78, signifies a shared positive perception, indicating that educators find ICT to be beneficial, though with some degree of variability in opinions.

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The domain of the usefulness of ICT is similarly wellregarded, as reflected in a mean of 3.84 and a slightly higher standard deviation of 0.81. This suggests a positive attitude toward the practical benefits of ICT in educational practices, with some variation in the perceived usefulness among teachers.

A notable highlight is the domain of ICT attitude, where educators exhibit an exceptionally high mean of 4.20 and an extraordinarily low standard deviation of 0.10. This signifies an overwhelmingly positive and consistent stance towards ICT, emphasizing a unanimous belief in the significance and value of technology in education among educators in Davao City.

Examining the usage of ICT in teaching practices, the results demonstrate a very high mean of 4.21 and a moderate standard deviation of 0.27, indicating widespread and consistent incorporation of ICT tools and methodologies by educators. This suggests that educators in private schools are actively integrating technology into their instructional practices, showcasing a commitment to leveraging ICT for enhanced teaching and learning experiences.

In terms of the impact of ICT, the mean of 3.76, with an exceptionally low standard deviation of 0.09, underscores a shared belief in the positive effects of ICT integration on various aspects of teaching and learning, with minimal variability in opinions.

The overall mean of 3.98, coupled with a low standard deviation of 0.41, reflects a high level of consensus across all domains and indicates a strong foundation for ICT integration among private schools in Davao City. This comprehensive overview underscores the positive trajectory of ICT integration, signaling opportunities for continued growth, professional development, and strategic planning to further enhance the impact and effectiveness of technology in education.

Sustaining ICT integration practices in geographically isolated and disadvantaged areas requires a strong community of practice, support system, and contextual ICT integration practices (Natallo and Que, 2021). In addressing the slow and intermittent internet connection in public high schools, a local caching system using Software Defined Networking and Network Function Virtualization is proposed to improve the quality of education (Jacob et al, 2019).

| | Table 14 Summary of the ICT Integ | gration among Private School in Davao City |
|--|-----------------------------------|--|
|--|-----------------------------------|--|

| No. | Domains of ICT Integration | Mean | SD | Descriptive Equivalent |
|-----|----------------------------|------|------|------------------------|
| 1. | Goodness of ICT | 3.85 | 0.78 | High |
| 2. | Usefulness of ICT | 3.84 | 0.81 | High |
| 3. | ICT Attitude | 4.20 | 0.10 | Very High |
| 4. | Usage of ICT | 4.21 | 0.27 | Very High |
| 5. | Impact of ICT | 3.76 | 0.09 | High |

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ICT integration in schools has been found to have a positive impact on students' academic performance and reasoning skills (Hakin et al., 2023). The positive impact of ICT integration in schools on students' academic performance is evident through increased engagement and motivation facilitated by interactive and multimedia learning tools. This engagement contributes to improved comprehension and retention of academic content, positively influencing overall academic outcomes.

Additionally, the integration of ICT fosters the development of reasoning skills as students navigate digital platforms, collaborate on projects, and engage in interactive learning experiences that require critical thinking and problem-solving. It creates learner-centered learning environments and facilitates the development of mathematical skills (Senad et al, 2023). ICT integration in education fosters learner-centered learning environments by providing personalized and interactive tools that cater to individual students' needs and preferences. Additionally, these technologies play a significant role in enhancing the development of mathematical skills by offering dynamic and engaging platforms for practicing and applying mathematical concepts, contributing to a more effective and enjoyable learning experience.

The integration of ICT tools in geography education, as noted by Florentina et al. (2023), not only enhances academic performance but also provides students with diverse, interactive learning experiences. Despite these benefits, challenges such as limited resources and the necessity for teacher training, as highlighted by Suresh (2022), impede the successful implementation of ICT in schools. Overcoming these challenges is crucial for effectively leveraging digital tools in education.

Relationship between Teaching Competence and ICT Integration among Private School in Davao City

Presented in Table 13 is the test of relationship between teaching competence and ICT integration among private schools in Davao City.

The data reveals a moderate positive relationship between teaching competence and ICT integration among private schools in Davao City, as indicated by a correlation coefficient (R) of 0.519 and an R-squared value of 0.269. The statistically significant p-value of 0.000 indicates that the relationship is not likely due to chance, leading to the rejection of the null hypothesis. This suggests that higher levels of teaching competence are associated with increased ICT integration in the context of the surveyed private schools.

Florentina et al. (2023) and Mohammad et al. (2022) highlight a crucial positive link between teaching competence and ICT integration, emphasizing its significance in the technology-driven educational landscape. Proficiency in integrating ICT is essential for optimizing its impact on learning, with Mohammad et al. stressing the importance of teachers' confidence in successful integration. The positive correlation underscores the need for targeted professional development programs to enhance teachers' technological skills, fostering more effective ICT integration and recognizing teachers' competence to boost motivation for exploring new technologies in the dynamic learning environment.

| Table 15 Kelat | | | | | | | |
|---------------------|-----------|------|-------|-------|------------------------|---------|-----------------------|
| Variables | Mean SD R | | R | | Degree of Relationship | p-value | Decision @ 0.05 level |
| Teaching Competence | 3.98 | 0.53 | 0.519 | 0.269 | Moderate | 0.000 | Reject H _o |

Table 15 Relationship between Teaching Competence and ICT Integration among Private School in Davao City

Mohammad et al. (2022) stress the importance of teachers' confidence in their technological skills for successful ICT integration, indicating a positive correlation with the adoption of innovative teaching methods. The study likely offers evidence supporting this link, highlighting the significance of teacher confidence in driving effective ICT integration. Overall, these findings emphasize that the competence, including proficiency and confidence, of teachers is crucial for successful ICT integration. The studies likely provide empirical support, reinforcing the need to prioritize teaching competence development to enable educators to leverage technology effectively in their teaching practices.

3.98

0.41

Domains of Teaching Competence that Influenced the ICT Integration

Table 14 examines the correlation between teaching competence and Information and Communication Technology (ICT) integration in education, focusing on key teaching skills that influence technology integration. The goal is to underscore essential qualities educators require for effective technology use, offering insights into the impact of specific teaching skills on successful technology integration in education. This exploration enhances our understanding of the dynamic interplay between teaching skills and the effective utilization of technology in the contemporary educational landscape.

The regression analysis examines the influence of various domains of teaching competence on Information and Communication Technology (ICT) integration. The results indicate that among the factors considered, "Professional Development" significantly affects ICT integration (B=0.144, p=0.005). This suggests that an increase in professional development is associated with a positive impact on the integration of ICT in educational practices.

However, other domains, including professional knowledge, professional skill, personal characteristics, and ethical standards and values, did not show a significant influence on ICT integration.

ICT Integration

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The regression model suggests that the equation for predicting ICT integration is ICT integration = 2.608 + 0.144 (Professional Development). The overall model has an R value of 0.519, indicating a moderate level of correlation, and

the R-squared value of 0.269 suggests that approximately 27% of the variability in ICT integration can be explained by professional development.

| Model | В | Std. Error | Beta | t | p-value | Decision @ 0.05 level |
|------------------------------|-------|------------|-------|--------|---------|-----------------------|
| (Constant) | 2.608 | 0.250 | | 10.423 | 0.000 | Not Significant |
| Professional Knowledge | 0.008 | 0.070 | 0.013 | 0.119 | 0.905 | Not Significant |
| Professional Skill | 0.108 | 0.097 | 0.147 | 1.116 | 0.267 | Not Significant |
| Personal Characteristics | 0.031 | 0.065 | 0.050 | 0.478 | 0.633 | Not Significant |
| Ethical Standards and Values | 0.048 | 0.071 | 0.082 | 0.672 | 0.503 | Significant |
| Professional Development | 0.144 | 0.050 | 0.318 | 2.867 | 0.005 | |

Table 16 Domains of Teaching Competence that Influenced the ICT Integration

• Regression Model

ICT integration= 2.608 + 0.144 (professional development)

R=0.519; $R^2=0.269$; P-value=0.00

The study underscores the crucial role of professional development in shaping ICT integration, recommending a focus on and enhancement of such programs to benefit technology's effective use in education.

V. CONCLUSION AND RECOMMENDATION

This chapter provides conclusions derived from the study's findings. Additionally, it offers recommendations on how the insights from this study can be applied to enhance practical applications.

The study was to determine the relationship between teaching competence and ICT integration among private school teachers in Davao City for school year 2022-2023. It specifically will present the level of teaching competence and ICT integration among private schools, their significant relationship, and the domains that influence of ICT integration of private schools in Davao City.

Specifically, the researcher utilized a descriptive correlation design among teachers. Descriptive meant to describe the level of teacher competence and ICT integration of private schools in Davao City. While correlation determined if there was a significant relationship between teacher competence and ICT integration. The was conducted for school year 2023-2024, 100 teachers from private schools in Davao City volunteered as respondents, and informed consent was obtained due to their below-legal-age status. The research employed complete enumeration as a sampling technique to comprehensively investigate the relationship between teacher competence and ICT integration. The researcher used adopted survey questionnaires to collect the necessary information. Data collection involved strict compliance of ethical considerations. Mean, Pearson's r, and multiple linear regression were used to analyze the data that had been collected.

> Results of the Analysis Revealed the Following:

First, the level of teaching competence in private schools in Davao City demonstrates consistently high ratings across various domains, with an overall mean of 3.98, signifying commendable competence levels among educators. The emphasis on professional development, as indicated by the highest mean, underscores a positive commitment to ongoing growth and enhancement in teaching skills within the surveyed schools.

Second, the level of ICT integration among private schools in Davao City is high, with very high ratings in ICT attitude and usage of ICT. The findings suggest a positive perception and effective utilization of ICT in various domains, showcasing a commendable level of integration within the educational landscape.

Third, the data reveals a moderate positive relationship between teaching competence and ICT integration among private schools in Davao City. The statistically significant pvalue indicates that the relationship is not likely due to chance, leading to the rejection of the null hypothesis. This suggests that higher levels of teaching competence are associated with increased ICT integration in the context of the surveyed private schools.

Finally, the regression analysis explores the impact of teaching competence domains on ICT integration. The findings highlight that only professional development significantly influences ICT integration, implying that increased focus on professional development positively affects the integration of ICT in education. However, other domains such as professional knowledge, professional skill, personal characteristics, and ethical standards and values did not exhibit a significant influence on ICT integration.

➤ Conclusion

Based on the findings of the study, the following conclusions are drawn by the researcher:

Teaching competence for private schools in Davao City reveals consistently high mean scores across multiple domains. It underscores a robust foundation in various aspects of teaching, including professional knowledge, skills, personal characteristics, ethical standards, and ongoing development.

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The level of ICT integration among private schools in Davao City reveals a highly positive and cohesive landscape. This suggests a positive attitude toward the practical benefits of ICT in educational practices, with some variation in the perceived usefulness among teachers.

The data reveals a moderate positive relationship between teaching competence and ICT integration among private schools in Davao City. This suggests that higher levels of teaching competence are associated with increased ICT integration in the context of the surveyed private schools.

The findings emphasized the importance of professional development in influencing ICT integration. Educators and policymakers can consider prioritizing and enhancing professional development initiatives to positively impact the effective use of technology in educational settings.

➢ Recommendation

Based on the foregoing conclusions, the following are recommended:

• DepEd Officials.

Allocate resources and design focused professional development programs, emphasizing "Professional Development" for teachers, to enhance teaching competence and foster more effective ICT integration in private schools in Davao City.

• School Heads.

Foster an environment that encourages continuous professional development opportunities for teachers, with a focus on enhancing "Professional Development" in particular, to optimize ICT integration in private schools. This proactive approach can elevate teaching competence and create a technologically enriched learning environment.

• Teachers.

Actively engage in professional development opportunities, especially those related to "Professional Development," to strengthen teaching competence and facilitate effective ICT integration in the classroom. This investment in professional growth can positively impact teaching practices and contribute to improved student learning outcomes.

• Future Researchers.

Explore in-depth the dynamics of "Professional Development" and its role in influencing ICT integration in diverse educational settings. Investigate additional contextual factors that may contribute to or hinder the relationship between teaching competence and ICT integration, providing valuable insights for future research and policy considerations.

REFERENCES

https://doi.org/10.38124/ijisrt/IJISRT24APR1670

- [1]. Abdiraupova, Dilrabo, Asror, qizi. (2021). The usage of ict in teaching english.
- [2]. Ahmad, Miftah, Farid. (2023). Implementasi program pembinaan kompetensi profesional guru di smk darunnajah cipining. doi: 10.59024/jipa.v1i3.243.
- [3]. Alam, Zeb., Nasreen., Atta, Ullah. (2022). Investigating the Role of Professional Development Interventions in the Development of Teaching Skills Among Primary School Teachers of District Swat Khyber Pakhtunkhwa, Pakistan. Journal of social sciences review, doi: 10.54183/jssr.v2i2.34.
- [4]. Alami, Anouar. (2016). Integration of ict in environmental education – case study on the greenhouse effect among secondary school students. International Journal of Research in Education Methodology, doi: 10.24297/IJREM.V7I2.3841.
- [5]. Alejandro, Martínez-Pérez., Fernando, Lezcano-Barbero., Rebeca, Zabaleta-González., Raquel, Casado, Muñoz. (2023). Usage of ICT among Social Educators—An Analysis of Current Practice in Spain. Education Sciences, doi: 10.3390/educsci13030231.
- [6]. Amit, Ahuja. (2015). Professional Development of Teachers. Educational Quest: An International Journal of Education and Applied Social Sciences, doi: 10.5958/2230-7311.2015.00002.1
- [7]. Alifia, Mutsla, Fakhruddin., Annisa, Annisa, Lesi, Oktiani, Putri., Putri, Rizqi, Aura, Tanzilla, Sudirman. (2023). Kompetensi Seorang Guru dalam Mengajar. Journal on Education, doi: 10.31004/joe.v5i2.1021
- [8]. Amit, Ahuja. (2016). Integration of Information and Communication Technology in School Curriculum. Learning Community-An International Journal of Educational and Social Development, doi: 10.5958/2231-458X.2016.00001.4.
- [9]. Amutha. D (2012). Professional Development of Teachers. Social Science Research Network,
- [10]. April, Rose, S., Francisco. (2020). Teachers' Personal and Professional Demographic Characteristics as Predictors of Students' Academic Performance in English. doi: 10.47992/IJMTS.2581.6012.0105
- [11]. Ashita. (2023). The diagnosis of scientific reasoning skills: how teachers' professional knowledge predicts their diagnostic accuracy. Frontiers in Education, doi: 10.3389/feduc.2023.1139176.
- [12]. Ажыгулова., А., Калмырзаева. (2022). The structure of professional competence of a teacher. doi: 10.35254/bhu/2022.60.15
- [13]. Cathy, Box. (2019). The Professional Development of Teachers. doi: 10.1007/978-3-030-03092-6_5.
- [14]. Chemwei. B (2022). Relationship between Tutor Confidence and ICT Integration in Primary Teacher Training Colleges in Kenya. East African journal of interdisciplinary studies, doi: 10.37284/eajis.5.1.524

- [15]. Christine, A., McLachlan. (2017). Teachers perceptions of factors affecting the successful teaching of ICT.
- [16]. Creswell, J. W. & Poth, C. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed). Sage.
- [17]. D., J., David. (2022). Constructivism. doi: 10.4324/9781138609877-ree32-1.
- [18]. E., Brumberger., Claire, Lauer. (2020). A Day in the Life: Personas of Professional Communicators at Work:. Journal of Technical Writing and Communication, doi: 10.1177/0047281619868723
- [19]. Elena, Cristina, Gheorghe. (2022). Teaching competence in the formation of metacognitive competence of primary school students through cooperative learning. Univers pedagogic, doi: 10.52387/1811-5470.2022.3.11.
- [20]. Elena, Lisichko., Ekaterina, Postnikova., Sergei, I., Tverdokhlebov. (2012). Formation of Professional Competence of Students in Engineering Education. Creative Education, doi: 10.4236/CE.2012.37B027.
- [21]. Eran, Almagor., Eran, Almagor. (2022). Values education. doi: 10.4324/9781003201267-22
- [22]. Estrelle, Rose, A., Opeña. (2022). Integration of information communication technology (ict) in the new normal learning: its effect on teachers' individual performance commitment rating. EPRA international journal of environmental, economics, commerce and educational management, doi: 10.36713/epra10784.
- [23]. Florentina, Toma., Andreea-Bianca, Ardelean., Cătălina, Mihaela, Grădinaru., Alexandru, Nedelea., Daniel, Constantin, Diaconu. (2023). Effects of ICT Integration in Teaching Using Learning Activities. Sustainability, doi: 10.3390/su15086885.
- [24]. Florentina, Toma., Andreea-Bianca, Ardelean., Cătălina, Mihaela, Grădinaru.,
- [25]. Gamit., A. (2023). ICT Integration in Elementary School for Mathematics Subject. International Journal of Learning, Teaching and Educational Research, doi: 10.26803/ijlter.22.2.24.
- [26]. Gordana, Đigić. (2018). The relationship between personal and professional characteristics of teachers. doi: 10.22190/FUPSPH1801001D.
- [27]. Hans, Fischer., Andreas, Borowski., Oliver, Tepner.
 (2012). Professional Knowledge of Science Teachers. doi: 10.1007/978-1-4020-9041-7_30
- [28]. Hakim, Ali., M., M., Rafique., Bashir, Hussain. (2023). Effect of ICT Integration on Secondary School Students' Physics Achievement and Reasoning Skills. Voyage Journal of Educational Studies, doi: 10.58622/vjes.v3i2.73.
- [29]. Hana, Horany. (2022). Managing the implementation in schools of ict and its influence on the performance of school students. Analele Universității din Oradea, doi: 10.47535/1991auoes31(1)039.
- [30]. Iqbal, Amin, Khan., Munir, Khan., Mohammad, Naseer, ud, Din. (2019). Impact of Teachers Personal Characteristics on Their Job Satisfaction in Khyber Pakhtunkhwa, Pakistan. doi: 10.31703/GSSR.2019(IV-IV).29.

[31]. Jacob, Miguel, Pineda., Julian, Troy, C., Valdez., Wilson, M., Tan. (2019). Leveraging SDN and NFV for Provisioning Quality Network Infrastructure for Filipino Public Schools. doi: 10.1109/R10-HTC47129.2019.9042444.

https://doi.org/10.38124/ijisrt/IJISRT24APR1670

- [32]. Kennedy, A. (2008). The professional development of teachers.
- [33]. Lisa, Bardach., Robert, M., Klassen., Nancy, E., Perry. (2021). Teachers' Psychological Characteristics: Do They Matter for Teacher Effectiveness, Teachers' Well-being, Retention, and Interpersonal Relations? An Integrative Review. Educational Psychology Review, doi: 10.1007/S10648-021-09614-9.
- [34]. Ludmila, Isabel, Escorcia-Oyola., Clara, Alicia, Jaimes, de, Triviño. (2015). Trends in ITC Use in a School Context, Based on Teachers' Experiences. Educación y Educadores.
- [35]. Mao-neng, Fred, Li. (2023). Chinese mathematics teachers' TPACK and attitudes toward
- [36]. ICT integration in the post-pandemic era. Eurasia journal of mathematics, science and technology education, doi: 10.29333/ejmste/13346.
- [37]. Madina, Murzakhanovna, Akeshova. (2023). Professional teaching competence: key point of developing pupils'creativity. ҚазҰУ хабаршысы, doi: 10.26577/jes.2023.v74.i1.015
- [38]. Matias. J, Jesterlyn, Quibol, Timosan. (2021). Examining Teachers' Use of Learning Information Systems (LIS) of the Basic Education Schools in the Philippines Using Structural Equation Modeling. International Journal of Enterprise Information Systems, doi: 10.4018/IJEIS.2021010104
- [39]. María, José, Sosa-Díaz., María, Caridad, Sierra-Daza., Rubén, Arriazu-Muñoz., Fátima, Llamas-Salguero., Noelia, Durán-Rodríguez. (2022). "EdTech Integration Framework in Schools": Systematic Review of the Literature. Frontiers in Education, doi: 10.3389/feduc.2022.895042.
- [40]. Marko, Hell., Ante, Knežević., Ivan, Kekez. (2022). Estimating the Usefulness of ICT Tools for Implementing Critical Thinking in Higher Education. Management, doi: 10.30924/mjcmi.27.1.3.
- [41]. Marta, Montenegro-Rueda., José, María, Fernández, Batanero., José, Fernández-Cerero. (2022). Impact of ICT on university students with visual impairment. British Journal of Special Education, doi: 10.1111/1467-8578.12433
- [42]. Mariana, Magerčiaková. (2023). Use of information and communication technologies in the adult population from the aspect of nursingc. Ošetřovatelské perspektivy, doi: 10.25142/osp.2023.003.
- [43]. Mehmet, Erroğlu., Vildan, Donmus, Kaya. (2021). Professional development barriers of teachers: a qualitative research: Professional development barriers of teachers.
- [44]. Mimoza, Rama. (2022). The advantages of Implementing ICT IN Teacher Education. International Journal of Multidisciplinary Research and Growth Evaluation, doi: 10.54660/anfo.2022.3.6.6.

- [45]. Musa, Midila, Ahmed. (2022). The Usefulness of ICT in Education During the Lockdown for COVID-19. doi: 10.4018/978-1-7998-8402-6.ch014.
- Muhammad, Ashraf., Javed, Igbal., Muhammad, Arif., [46]. Muhammad. Asghar. (2022). Fostering ICT Competencies in Blended Learning: Role of Material, Curriculum Content, and Teaching Strategies. Frontiers in Psychology, doi: 10.3389/fpsyg.2022.758016.
- [47]. Natalio, E. and Que. (2021). Sustaining Successful ICT Integration in Remote Rural Schools. Pertanika journal of social science and humanities, doi: 10.47836/PJSSH.29.3.02.
- [48]. Nia, Monika, Sari., Atikah, Rahayu., Rhomiy, Handican. (2022). Pandangan mahasiswa terhadap penggunaan ict dalam pembelajaran matematika. Mathematic Education And Aplication Journal, doi: 10.35334/meta.v4i2.3297.
- [49]. Nibedita, Boruah. (2022). Impact of ICT in education. International Journal of Health Sciences (IJHS), doi: 10.53730/ijhs.v6ns2.5397.
- [50]. Nicholas, Charles, Mead. (2016). Values in teacher education: developing professional knowledge through engaging with trainee teachers' personal moral and political values in the context of standardsbased teacher education.
- [51]. Pratiwi, A., & Suzuki, A. (2017). Effects of farmers' social networks on knowledge acquisition: lessons from agricultural training in rural Indonesia. *Journal of Economic Structures*, 6(1), 1-23.
- [52]. Pedro, Paulo, Feitosa, de, Albuquerque. (2022). Influence of teachers attitude on ict implementation in kenyan universities. Cogent Education, doi: 10.1080/2331186x.2022.2107294.
- [53]. Peiris, T. C., Junainah, Abd, Hamid., Ali, Khatibi., S., M., Ferdous, Azam., Jacquline, Tham. (2022). Impact of teachers' professional skills on student achievement while learning english as a second language in sri lanka. European Journal of Social Sciences Studies, doi: 10.46827/ejsss.v8i1.1329/.
- [54]. M, Ramakrishna, Reddy. (2017). Professional ethics and teacher education.
- [55]. Roman, Chopyk., Nina, Hrybok., Natalya, Zakalyak., Mykola, Lukjanchenko. (2021). Teachers' professional skills as the component of the quality of higher education and the element of students' motivation. doi: 10.17770/SIE2021VOL1.6354.
- [56]. Ruhogo, V Abel., Jo, Tondeur., Guoyuan, Sang. (2022). Teacher Perceptions about ICT Integration into Classroom Instruction. Education Sciences, doi: 10.3390/educsci12090609.
- [57]. Saleh, Naji. (2017). The Impact of ICT on Schools. IOSR Journal of Business and Management, doi: 10.9790/487X-1901078385.
- [58]. Sharik, Zamir. (2023). Prospective Teachers' Perceptions, Reliance, and Barriers to ICT Integration in Mathematics Learning. Journal of education and educational development, doi: 10.22555/joeed.v10i1.800.

[59]. Shamshir, Singh., Shwetlana, Singh. (2023). Usage of ICT in relation to self-efficacy among secondary school teachers. International journal of advanced academic studies, doi: 10.33545/27068919.2023.v5.i2a.926.

https://doi.org/10.38124/ijisrt/IJISRT24APR1670

- [60]. Shu-hua, Wu., Tung-Pao, Wu., Edward, Hau-Chun, Ku., J., Chen. (2022). Culinary inheritance: a new paradigm of innovating knowledge teaching. Journal of Applied Research in Higher Education, doi: 10.1108/jarhe-04-2022-0113.
- [61]. Sencer, A., Temel., Murat, Kangalgil., Hüdaverdi, Mamak., Tevfik, Emre., Ebru, Aydin. (2022). Investigation of teachers' and teacher candidates' levels of inclination to ethical values. Journal for the Education of Gifted Young Scientists, doi: 10.17478/jegys.1133255
- [62]. Senad, Orhani., Emir, Saramati. (2023). ICT as a Didactic Tool to Facilitate the Learning Process in the Subject of Mathematics in Combined Classes. doi: 10.58806/ijirme.2023.v2i5n01.
- [63]. Sonia, Anand. (2016). Understanding Code of Professional Ethics in Teaching. International journal of applied research,
- [64]. Suresh, Bahadur, Diyal., Romkant, Pandey. (2022). Integration of ICT at Secondary Level School. doi: 10.3126/irj.v1i1.51813.
- [65]. Torres, H, Beltrán. (2022). A Correlational Study on Teachers' Level of Competence on and Attitudes Towards ICT Integration: Basis for the Development of Extension Training Program. Journal of Humanities and Education Development, doi: 10.22161/jhed.4.3.19.
- [66]. Valerio, Tonelli, Enrico. (2023). Integrating ICT in Language Teaching and Learning. Advances in higher education and professional development book series, doi: 10.4018/978-1-6684-7275-0.ch016.
- [67]. N. a. (2023). ICT (Instruction Computer Technology) Based PKN and IPS Learning Designs in Elementary Schools. doi: 10.56778/jdlde.v1i12.74.
- [68]. N. a. (2023). Social and Economic Maxims of ICT in Education. Advances in wireless technologies and telecommunication book series, doi: 10.4018/978-1-6684-6620-9.ch003.
- [69]. (2022). Portraits of Teachers: The Professional and Personal Characteristics of Twelve Primary Teachers.. doi: 10.31390/gradschool_disstheses.6907.
- [70]. (2022). Impact of ICT in Education: An Analysis. doi: 10.1007/978-981-19-5224-1_45.
- [71]. (2023). An Investigation on the Teachers' Perceptions on "ICT Integration": Evidence from Indonesian EFL Classrooms. Educational communications and technology yearbook, doi: 10.1007/978-981-19-9217-9_18.