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ICT Proficiency of Instructors in Selected Colleges in Roxas, Oriental Mindoro

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Abstract
The study evaluates the information and communication technology (ICT) proficiency of instructors in selected Colleges in Roxas, Oriental Mindoro, several key variables were assessed. The respondents rated "Communication and Internet" as the most proficient area with a weighted mean of 4.33, followed closely by "Photo Editing" at 4.25 and "Movie Maker" at 4.20. Other important skills included "Basic Computer Operations" with a mean of 4.19, "Desktop Publishing" at 4.18, and "Word Processor" also at 4.17. Additionally, "Presentation Software" received a weighted mean of 4.16, "Graphic Design" was rated 4.11, while "Spreadsheet" had a lower mean of 3.76. The overall mean score of 4.15 indicates that college instructors possess a very proficient level of ICT skills, highlighting their capability in utilizing various digital tools effectively in educational settings.

Keywords: college, communication, ICT proficiency, instructors

Introduction

In today's technological world, digital literacy has become a crucial component of education. It is essential for teachers to be technologically adept and digitally literate to effectively guide their students. The success of learners increasingly relies on how well a digitally literate teacher manages the teaching-learning process and transfers knowledge. Technology plays a vital role in enhancing the educational experience across various subjects, particularly in language, mathematics, and science (Jamlan, 2004) [3]. Teachers possess a set of fundamental skills, including teaching ability, world knowledge, and subject expertise. The use of computers and other digital tools provides an environment where teachers can store, create, transfer, and share information efficiently. However, these skills must be continuously updated to keep pace with the rapid advancements in technology. In a virtual learning environment, obtaining timely and accurate information is critical for teachers to become efficient and effective educators (Dwivedi *et al*., 2019) [1]. Technological advancements have made learning more accessible and engaging. The integration of technology not only improves individual lives but also makes teaching more enjoyable and convenient. Various platforms, such as computers and the internet, offer teachers the opportunity to enrich their daily teaching practices. Access to instructional resources has become faster and easier, allowing for more dynamic and interactive learning experiences.

In this digital age, virtual learning and e-learning have become commonplace, promoting lifelong learning and enabling differentiation in the classroom to meet diverse learner needs. Technology empowers teachers to provide a variety of learning experiences, transforming traditional teaching methods. Digital tools allow educators to connect their teaching directly to student activities, fostering a more engaging and relevant learning environment. Moreover, digital technologies enhance teachers' abilities to create instructional materials and resources that support students' problem-solving skills, critical thinking, and project-based activities. By leveraging these technologies, educators can empower learners to acquire globally relevant knowledge and quality education. The availability of diverse resources and systems enables students to achieve their goals and prepares them for success in an increasingly digital world (Shernoff *et al*., 2017) [6].

This study aims to evaluate the level of computer competency among English teachers, serving as a foundation for developing targeted training programs. It specifically assesses the Information and Communication Technology (ICT) proficiency of college instructors across various domains, including basic computer operations and maintenance, proficiency in word processing and presentation software, expertise in spreadsheets, graphic design, communication and internet usage, desktop publishing, photo editing, and movie-making capabilities. By identifying the strengths and weaknesses in these areas, the study provides valuable

insights that can inform the design of professional development initiatives tailored to enhance the technological skills of educators, thereby improving their instructional practices and overall effectiveness in the classroom.

Methodology

Research Design

Descriptive research is a vital approach in understanding and interpreting current conditions of various phenomena. This method primarily focuses on gathering quantifiable data through survey questionnaires, which helps create a comprehensive profile of the subject matter from different perspectives, whether individual or organizational. The process begins with the distribution of questionnaires to respondents, who provide their answers, allowing researchers to collect and analyze relevant data. In addition to the questionnaires, researchers often engage respondents in discussions about specific topics to gain deeper insights into their perspectives (Louis, 2023) [5]. By employing the descriptive method, researchers can effectively describe and summarize essential aspects of the phenomena under study, thus contributing valuable information to the field of research.

Respondents of the Study

The respondents of the study were the selected instructors from the three known private colleges of the Municipality of Roxas, Oriental Mindoro namely; John Paul College, Clarendon College and Paradigm Colleges of Science and Technology, Inc. These educators have identified ICT as a fundamental medium for delivering lessons, enhancing student engagement, and facilitating a more interactive learning environment. By leveraging various digital tools and platforms, instructors are able to cater to diverse learning styles and needs, making education more accessible and effective for students.

Data Gathering Procedures

The researcher distributes questionnaire to the instructors who were oriented on the significance of the study; the researcher explained the questions to ensure clarity before the instructors completed the surveys individually. Upon completion, the questionnaires were promptly collected for analysis. Finally, the collected data were collated, tabulated, and statistically analyzed to draw meaningful conclusions from the research findings.

Statistical Treatment

The study used weighted mean for statistical treatment, it is a vital tool that allows researchers to calculate an average that takes into account the varying importance of different data points. Unlike a simple average, which treats each value equally, the weighted mean assigns different weights to each value based on its significance or relevance to the data set. This approach is particularly useful in studies where certain observations must be prioritized, such as in survey analysis where responses may have different levels of importance. By employing the weighted mean, researchers can obtain a more accurate representation of the central tendency of their data, leading to better-informed conclusions and decisions in their studies.

Results

The respondents assessed three variables as expert, these are: “Communication and Internet” (WEIGHTED MEAN =4.33); “Photo Editing” (WEIGHTED MEAN =4.25; and “Movie maker” (WEIGHTED MEAN =4.20), while “Basic Computer Operations” (WEIGHTED MEAN =4.19); “Desktop Publishing” (WEIGHTED MEAN =4.18); “Word Processor” (WEIGHTED MEAN =4.17),; (WEIGHTED MEAN =4.17); “Presentation Software” (WEIGHTED MEAN =4.16); “Graphic Design” (WEIGHTED MEAN =4.11); and “ Spreadsheet” (WEIGHTED MEAN =3.76), \were assessed as very proficient. The overall mean of 4.15 confirms that college instructors’ level of ICT proficiency is very proficient.

Discussion

In today's technologically driven world, Information and Communication Technology (ICT) proficiency is not just an advantage but a necessity in the educational landscape. This study sought to evaluate the proficiency of college instructors across several key ICT variables. The results highlight the essential skills that educators must possess to effectively engage with students and enhance their learning experiences. The study assessed three variables deemed as expert levels: “Communication and Internet” with a Weighted Mean (WEIGHTED MEAN) of 4.33, “Photo Editing” with a Weighted Mean of 4.25, and “Movie Maker” with a Weighted Mean of 4.20. These results indicate that college instructors excel in these areas, which are crucial for modern education. Proficiency in “Communication and Internet” reflects an instructor's ability to utilize online platforms for educational purposes, facilitating seamless interaction with students. The high score in “Photo Editing” suggests that instructors are not only capable of creating visually appealing materials but also adept at engaging students through creative content. Similarly, mastery in “Movie Maker” underlines the importance of incorporating multimedia in teaching, thereby enriching the learning environment (Escueta *et al*., 2020) [2].

In addition to these expert-level skills, the study identified several other competencies where instructors were rated as very proficient. “Basic Computer Operations” received a Weighted Mean of 4.19, “Desktop Publishing” was rated at 4.18, and “Word Processor” garnered a Weighted Mean of 4.17. These competencies form the foundation for effective computer use in an educational setting. The ability to perform basic operations on a computer is essential for instructors to navigate the digital educational landscape.

Furthermore, expertise in “Desktop Publishing” and “Word Processing” is critical for creating instructional materials that are both functional and visually engaging. Moreover, instructors were assessed on their proficiency with “Presentation Software” (WEIGHTED MEAN =4.16), “Graphic Design” (WEIGHTED MEAN =4.11), and “Spreadsheet” (WEIGHTED MEAN =3.76). While the scores for “Presentation Software” and “Graphic Design” indicate a solid understanding of tools that enhance teaching presentations and visual aids, the score for “Spreadsheet” suggests a potential area for improvement. Spreadsheets are vital for data management and analysis, skills that can significantly benefit instructors in organizing course materials and assessing student performance (Topi *et al*., 2010) [7].

The overall mean score of 4.15 confirms that instructors demonstrate a very proficient level of ICT capabilities. This finding is crucial as it points to the readiness of educators to integrate technology into their teaching practices. An instructor's ability to effectively utilize ICT tools not only enhances their teaching methods but also prepares students for a technologically advanced workforce.

The importance of ICT proficiency among instructors cannot be overstated. As educational paradigms shift to incorporate

more technology, instructors must stay abreast of these changes to provide the best possible learning outcomes for their students. The high levels of proficiency in key areas, particularly in communication and multimedia tools, reflect a commitment to excellence in teaching. However, continuous professional development should be encouraged to address areas like spreadsheet capabilities to ensure that instructors are well-equipped to meet the demands of modern education (Kamalov *et al*., 2023) [4].

Conclusion

Instructors in Information and Communication Technology (ICT) possess a wealth of skills and knowledge about various computer software and programs, which is essential for effective teaching and student engagement. However, the rapid advancement of technology necessitates that these educators remain attentive and proactive in updating their expertise. As new software, tools, and methodologies emerge, staying abreast of these changes is critical not only for personal professional development but also for ensuring that students receive relevant and up-to-date knowledge. By embracing continuous learning, instructors can enhance their teaching effectiveness, foster innovation in the classroom, and better prepare students for the ever-evolving technological landscape they will encounter in their careers.

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