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Information and communications technology (ICT) competencies and capabilities of teachers in public high schools: basis for an enhancement plan

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Abstract: The aim of this research was to identify the ICT capabilities of public high schools and educators in Division of Rizal. This includes the profile of educators- respondents in terms of age; gender; length of years of teaching ICT; maximum educational degree; trainings attended, or learnings acquired related to ICT; and assessment of level of ICT competencies of the respondents in terms of knowledge and skills in basic computer/ ICT operation; usage of ICT as an instrument for teaching / learning; and use of the Internet and web applications to teaching/ learning. This study used descriptive research that includes 62 teachers and 4 ICT Administrators from the public high schools in the schools from Division of Rizal. This is a male-dominated study, composed of young respondents with a good number of years in service. Based on the findings, teacher-respondents are highly competent on creating a new spreadsheet (enter data), creating a new document and slide show. Furthermore, some respondents believed that they are competent because they can format cells, copy, delete and rename files, change font and layout, and edit an existing slide show. Also, most of the ICT coordinators have a 5-year basic computer training course that helps them integrate the technology with the curriculum. They gauge themselves competent in creating materials for students' use (e.g., hand-outs, tests) and communicating with student(s) and/or students' parents as well as communicating with colleagues/other professionals. Furthermore, respondents are also competent to access research and best practices (e.g., preparation, tracking, assessment, and reporting) for teaching and curriculum administration. Further, this means schools should support the need of teachers when it comes to employing ICT- based skills. There is a need for continuous training and upgrading of facilities and equipment that will support teachers' demand regarding it.

Keywords: Information and communications technology, Competencies, Public school

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INTRODUCTION

To live, to learn & to work efficiently in a twenty-first era community, schoolchildren and teachers must use technology effectively. Used to create greater access to education, tackle disparities, enhance teaching and learning performance, and provide personalized learning experiences (Ted, 2015).

According to UNESCO (2015), traditional educational approaches can no longer provide teachers with the required skills to train students for economic success in today's workplace. To live, learn & work efficiently in a twenty-first era community, learners and teachers must use technology effectively. Used to create greater access to education, tackle disparities, enhance teaching and learning performance, and provide personalized learning experiences.

Macaranas (2015) reported that DepEd ICT4E Strategic Plan to make use of ICT in global education is well underway. Leaders are state-of-the-art countries like Finland, the United States, and the UK. Asia-Pacific countries addressed this challenge by formulating various policies and strategies.

For a living, studying, and working efficiently in a twenty-first era community, learners and teachers must use technology effectively. Used to create greater access to education, tackle disparities, improve teaching and knowledge performance, and provide personalized learning experiences.

Work has shown that utilizing ICT in school allows passive participants to be involved in class (Largis, 2018). ICT has many benefits, including developing problem-solving techniques, promoting collective learning, offering versatile learning environments, and growing efficiency. Hence, schools showed deep dedication towards ICT in education through a sequence of creativities to introduce ICT.

The Enhanced Basic Education Information System (EBEIS) and the LIS (Learner Information System) are utilized. Also, e-Student Software, Student Learning Empowerment Development Package: Interactive Courseware and Tablet Laptop, Use of ActivBoard for Today's Technology and Distribution of Computer Kits are implemented elementary and middle public schools nationwide to promote education and knowledge with ICT aid.

However, particularly those entering had little to no special computer training. Teachers who show basic computer literacy are unlikely to know the full spectrum of resources that technology can bring.

Since teachers change agents, they should gain a certain degree of expertise in using ICT to incorporate technology into daily activities in a meaningful way effectively. Today's classroom teachers must be equipped with technology tools, expertise, skills and the right attitude towards ICT to become more productive and successful in promoting students ' learning (Moore, 2016; Kuok, 2018).

ICT is not only recognized as a guide but may be used to supplement existing teaching approaches. It is an essential resource for encouraging modern methods. These also improve student leadership, communication, problem-solving, and lifetime thinking capabilities (Pebber, 2018).

Statement of the problem

This study aims to evaluate the ICT skills of public middle school teachers and the ICT skills of public secondary schools in the Rizal Division, the findings of which were used as the subject for an improvement plan.

The study directly referred to the questions below:

1. What is the profile of teacher respondents in public high schools as to (a) age; (b) gender; (c) years of teaching ICT; (d) highest degree earned; (e) trainings attended or learnings acquired related to ICT; and (f) school where they are teaching?
2. What is the standard of ICT competencies of the respondents in terms of (a) knowledge and skills in basic computer/ICT operation; (b) using ICT as a teaching/learning tool; and (c) usage of the Internet and web applications for teaching/learning?
3. Is there a substantial gap in the degree of ICT competencies of the respondents when clustered according to their profile?
4. What is the profile of respondent-schools in terms of (a) number of years of ICT instruction; (b) number of ICT teachers; and (c) training of ICT teachers?
5. What are the ICT capabilities of the respondent-schools as perceived by the grouped respondents in terms of (a) hardware; (b) software; (c) support facilities; (d) connectivity; and (e) technical support and maintenance?
6. Is there an essential connection between the level of ICT competencies of the teacher-respondents and the ICT capabilities of the respondent-schools?
7. Based on the research findings, what kind of ICT Development Plan can be proposed?

REVIEW OF RELATED LITERATUE

ICT in instruction

Despite all these advances in ICT technology, there was small proof of ICT implementation and usage among teachers. Evidence shows that the education industry invests massively in it, but deployment in the school sector lagged. Many experiments are undertaken to investigate why teachers utilize emerging technologies in teaching and learning processes (Yoon, 2018).

Horn (2015) reported that online instructional sites continue to draw learners (Yun, 2017). Ferns (2017) has described ICT as a platform that enables users to build, store, view, and communicate information in all formats, including notebooks, mobile devices, and all of them.

Specifically, there is the awareness that conventional, hierarchical "one-size" school architecture needs to incorporate more customized, user-centric solutions to satisfy the demands of an increasingly diverse student body (Lesh, 2019).

Technology and new media have radically altered many things in our lives. According to Daren (2018), curriculum reformers say it will and should be a core component of existing attempts to personalize schooling. Technology advancement will continue to advance and foster awareness and capability development and studying about and technology is necessary for students to develop skills for the present time.

Lao (2018) claimed that one of the most significant facets of community, education, involved ICT in many topics. For instance, work has found that introducing ICT into education enables learners to be more interested in their learning than a passive observer or participant. ICT also provides other job incentives, including improving problem-solving capabilities, promoting collaborative learning, establishing and increasing learning opportunities. Therefore, ICT is considered necessary for teaching and learning in schools Klinsky (2016) proposed tech-specific apps would improve student results. When appropriately implemented, it may help enhance student achievement. Using drilling and workout equipment usually involves preparation, preparing, and organizational abilities that managers consider missing even in many college graduates.

Factors affecting teachers' use of ICT

Teachers are at the forefront of school transition. Therefore, they must be willing to educate youth in the intelligence field wherewith capacity to use ICT (Plump et al., 2016; Drenn, 2015).

Frank (2018) reported the behaviors and abilities to develop teachers as factors relevant to primary education. Once teachers have a healthy technology outlook, integrate it into their instruction, pedagogical principles, and new teaching strategies. While knowing how to implement apps, teachers should often explore ways to exploit these technologies best in the fields they instruct and incorporate devices in instructional environments that meet critical learning goals.

The computer caught the imagination in an educational environment as a teaching device (Rori, 2019). Jones (2019) established driving factors for teacher attitudes towards teaching and ICT, teacher ICT awareness and skills, school engagement in the implementation process, and ICT tools. This versatile method can bring, monitor, and retrieve knowledge and is capable of involving students in learning opportunities to enhance their performance and solving challenging challenges in improving their cognitive abilities (Lene, 2016; Fai, 2017).

Moreover, Morris (2017) analyzed age and gender gaps in workplace adoption and continuing usage of technology. Tests found that men's and younger workers' choices were more heavily affected by their mindset towards using modern technologies. In comparison, the social standard and assumed behavioural regulation affected women and older employees.

Furthermore, Ramani (2016) observed that age does not affect ICT attitudes. Findings showed that as teachers' age dropped, their ICT habits improved. Also, Roman (2017) suggested that teachers could significantly increase their productivity by utilizing ICT advancement tasks.

Also, Weil (2019) conducted a classroom ICT report were it found that teachers are incredibly trained and technically capable, creative and outstanding in solving challenges, but did not effectively incorporate technology as teaching and learning assistance. Two explanations for these findings were reported: students had an inadequate room on computers, and teachers wanted more time for development lessons. Most issues included obsolete facilities, technological limitations, academic challenges, and student abilities.

Teacher's competency

Accessible computer laboratories in Philippine schools were not enough. Teachers will know ICT's role in training students to manage technology properly but are less likely to incorporate technologies in their classroom environment because they accept the notion of technological utilization. Moreover, the biggest issue is the absence of technical and pedagogical skills and expertise to use accessible ICTs in the classroom. Teaching strategies include developing awareness, abilities and habits, and acceptable attitudes (Yoon, 2018).

Also, Yoon (2018) mentioned that uncertainties, beliefs, etc., might influence attitudes. For example, their confidence in using it affects new teachers' attitudes towards technology. Furthermore, if the equipment is available, and instructors have the requisite expertise and experience, they may be unable to do so if they are inexperienced in utilizing teaching technology.

Likewise, a professional understanding of teachers directly affects how schools integrate expertise into the schoolroom to improve students' learning performance (Ho, 2016). Educators must be knowledgeable and acquainted with the curriculum criteria and instructional methodologies of their discipline. Therefore, inexperienced teachers must learn to use technology in ways that encourage consistency requirements.

Technological leadership

As these concerns are embedded in deep-rooted issues of poverty, socioeconomic disparity, and unequal growth, ICTs cannot solve educational problems in the developing world independently. If employed prudently, what ICTs can do as educational tools allow developed countries to increase exposure and enhance teaching value. Forethought needs close analysis of overlapping problems surrounding ICT usage in education, politics and economics, growth of technology, human resources, language and material, community, wealth, quality, and not least curriculum and pedagogy (Linio, 2017).

DepEd (2015) has prioritized hiring tech-literate Filipino teacher-applicants since 2000. Many public organizations also require electronic technology. Hence, support is offered for teachers to guarantee the development of initiatives for needed professional skills.

Given numerous training programs offered to Filipino teachers, there is still a need to concentrate on in-service intensive and successful instructor teaching. Public high schools typically assign several staff to the interactive literacy program, which then moves on to peer

instructors. Private colleges employ ICTs to train their pupils. Operating public high school teachers receive ICT training. DepEd extended ICT instruction for pupils.

Potential challenges

Philippine schools primarily use computers as a topic of education for high school classes with legally restricted application to other learning fields. Yet, limited ICT resources hindered technical acceptance across the initiative. For non-formal education, internet technology is minimal, and out-of-school teens and parents who participate in non-formal education are typically not introduced to computers (Supleno, 2019).

Countries worldwide encounter common problems in their education programs, adopting ICT. Sadly, several state, national and regional policy institutions are still not paying heed and priority to ICT given its advantages. One big problem confronting young people residing in either deprived neighborhoods or remote areas frequently ignored by politicians is having sufficient ICT exposure (Supleno, 2019).

It is a matter of how the value-added application of ICT balances the expense of changes. In other terms, learning based on ICT is the most successful approach to accomplish the required educational objectives. If so, what is the form and scope of adoption that can be achieved provided current capital, human and other resources?

ICT use relies on whether there are adequate ICT services. Study findings based on ICT suggest that insufficiency or shortage of ICT facilities emerge as significant barriers (Blas, 2018). Several critical facilities, such as classrooms and Web access, are obstacles to the successful adoption of Philippine ICT curriculum requirements.

Though the Philippines never slips after neighboring Southeast Asian nations about ICT development, more research is underway to ensure the mainframes and supplementary ICT devices used in community high schools are used to enhance student success.

Also, Linio (2017) notes that just half or fewer of their teachers and students may use the program as an instructional resource in most surveyed colleges. Computers' critical use was in the students' high school coding courses in junior and senior years. Computers' benefits for specific topics, including Math and Physics, are also challenging at some public high schools. Although many high schools have their computers today, there are still very limited student-to-computer and teacher-to-computer percentages.

The alternative cause for the absence of ICT instruction implementation is the inadequate amount of instructional software accessible in classrooms. School software is often a collaboration device for word processing, slide shows, statistical spreadsheets, or archive management. Technology, English and Mathematics instructional applications are limited (Linio, 2017).

Another significant explanation for the insufficient utilization of ICT in classroom teaching is establishing curricular requirements and guidance for incorporating technology into subject areas.

ICT integration in Philippine education

Empowering Digital Age Filipinos said teachers are crucial to the classroom's effective technology adoption. He added that technology is no longer luxury; it is standard; and that digital learning is key to the learning requirements of the Philippine Department of Education. He also ordered Philippine public-school teachers to enroll in ICT preparation and credential programmes, which is an integral part of the department's overall education policy (DepEd, 2015).

The primary factor affecting learning performance is not hardware quality but pedagogical architecture for successful ICT use. The mainframe needs to be integrated into the program, not into the computer program. Right adoption will also focus on instruction architecture by explaining how and when knowledge is utilized in this manner. Effective assimilation of ICT into the knowledge phase will include learners (Apayo, 2015).

Increasingly, colleges and universities view themselves as creative educational entities that use web-based technologies or the Web to provide instruction. Metro Manila schools offer the most extensive Internet coverage, but the frequency of accessibility declines when one travels north and south in the archipelago.

According to Abian (2017), most money required to introduce ICT in teaching comes from government funds. Nevertheless, DepEd needs other organizations, administrations, and the private industry to finance several aspects of creating an ICT education program since today's century is an era of innovation and evolving technologies. Teachers need to be mindful and adaptable to learn and gain new skills to strengthen their teaching methods and techniques, particularly in ICT.

Rate ICT technology and accessibility

Overcurrent years, several schools have provided used open technologies and web resources (Raban, 2015). For starters, one Australian school listed providing personal laptop computers with their site rooms taking together all its resources, making it accessible via school-home radio connections where the radio is known in this culture as an innovation that has changed education and learning (Wardson, 2017).

It was also reported that in this school's teaching and learning process, many teachers implemented technology. This awareness emerged when they recognized the potential of studying online, creating interactive, net-based teaching tools. Software, software, and network access are essential for school ICT deployment.

Raban (2015) has published results demonstrating this internationally believed concern that networking is one of the critical barriers to adopting and implementing technologies worldwide.

Omar (2018) reported that several scholars indicated that educators do not practice technology in their school rooms because of the lack of resources to buy the essential equipment and software. Therefore, productive, and successful technologies rely on personnel, equipment, software, and access to capital.

Education standard and efficiency for teachers and school principals

In a study by Dela Cruz (2018), An evaluation of the Bulacan Division's Computer Literacy Program for Public Secondary Schools, he found that schools require school managers to help teachers improve their productivity and effectiveness using t-technology that allows correspondence and knowledge, planning, study and evaluation, providing instructional aids and tools, arranging and recording.

Furthermore, in his study Computer Literacy, Orlina (2019) concluded: its impact on teachers' teaching skills at Iloilo National High School that there was a significant difference in digital literacy of respondents separated by experience and age. Research showed that teachers in the old class had low computer literacy, whereas those in the young population had better computer literacy scores. The longer the teacher's work, the higher his job performance. He found that higher education teachers are more professional.

Every effective system of technology and education requires technical instructor learning. Ricci (2018) conducted a quantitative study of factors supporting instructor capacity

and teacher involvement. Career planning was found to influence how much ICT is tolerated in the classroom. They also stated that teacher education programs mostly concentrate on necessary reading abilities and less on specialized ICT usage in teaching. Amid numerous plans to implement developments in schools, students have not been trained in their instructional programs.

According to Ruih (2017), inadequate instruction to utilize electronics explains that educators do not regularly use mainframes in their classrooms. Educators can be assumed to experiment with skill through their instructor preparation sessions and discover methods for incorporating technology and improving their teaching skills.

Educators are increasingly likely to use ICT and find ways to collaborate with technology. Hence, educating students as technology experts will better bring computers into the classroom environment. Rusty (2017) presented mentor and fellow teachers to become instructional experts. Ten-degree one-to-five professors, based on this study, sent their students to sessions. Analytical papers published by each university team leader evaluated program strengths and disadvantages. The program results show teachers becoming more involved consumers of technologies, demonstrating a greater willingness to know alongside their pupils.

Teachers learned all about their students' programming abilities and passion, despite their hesitation to pose questions. Eventually, instructors utilized the skills of their pupils to improve their programming skills. Student talents were introduced to the school, and teachers were actively motivated to use technology. It was assumed not that just the proficiency and perseverance of teachers are needed for technological acceptance, then students' desire and potential stimulate the process (Rusty, 2017).

METHODOLOGY

Research design

The graphic research strategy was used to test the teachers' ICT skills and the capacities of public high schools in the Rizal City Schools Division.

To define the features of a population or phenomenon that is being studied, descriptive analysis is used. Questions on how/ when/ why the characteristics occurred are not addressed. Instead, it answers the "what" query (what are the studied individuals' features or conditions?). Any type of definite system, also known as graphic groups, is typically the characteristics used to characterize the situation or population (Nangarjan, 2018). The explanation is used for regularities, means and other numerical designs. Frequently, the safest way is to perform a survey investigation before writing descriptive research. The purpose of qualitative research is always to explain, and researchers should follow up on why the findings occur and the effects of the results.

Locale of the study and respondents

Teachers from public high schools and their students in the Division of City Schools in Rizal were the respondents of this study. Likewise, their ICT competencies shall determine the schools' capabilities to provide for its infrastructures and support and maintenance.

Research instruments

The questionnaire shall be a researcher-made instrument. The same was validated by at least five (5) experts in the field. These experts were picked from a pool of ICT specialists from the identified public high schools. The researcher welcomed their suggestions and made necessary revisions to make the said instrument valid.

Further, the questionnaire was also tested using Cronbach's alpha. It is a quiz of a perfect or examination's inner reliability. As the validation of experts using the rubrics above, Cronbach alpha should be at least in a 'good scale' or .70 or higher to retain an item in an "adequate" scale.

This study used an instrument with a brief questionnaire that acquires the most relevant information about the teacher's ICT competence, students learned/ known competence, and the schools' capabilities to provide for its infrastructure, support and maintenance. Three sections consisted of the questionnaire. The demographic details such as sex, age, length of service in teaching ICT, their highest educational achievement, ICT-related training/learning they received from their school or outside sources, and their school's name were determined in the first section of the teachers' questionnaire. Simultaneously, the ICT administrators' questionnaire determined the respondent- school profile on the number of years of ICT instruction, the number of ICT teachers and ICT teachers' seminars.

Data analyses procedure

The gathered data was classified, tabulated, and coded for analysis using Microsoft Excel. The tabulated and coded data were then transferred to SPSS for further analysis, employing several statistical tools. Frequency Distribution (f) was used to simplify calculations and determine the number of occurrences falling under each data group for the respondents. The Percentage (%) method was employed to determine the proportion of each respondent's profile based on the frequency or tally gathered. To assess the level of ICT skills of the respondents, the Weighted Mean (Wx) was utilized, specifically in evaluating their knowledge and competence in basic computer/ICT operations, the use of ICT as a teaching/learning tool, and the application of the Internet and web technologies in teaching. It also identified the ICT capabilities of the schools in terms of hardware, software, support facilities, connectivity, and technical maintenance.

Additionally, Analysis of Variance (ANOVA), a statistical test that examines variance, was used to analyze the ICT skill levels of the respondent groups. It was beneficial for drawing conclusions and making comparisons between two or more datasets while comparing three or more variables. The Chi-Square test was also employed to assess the probability that observed results were due to chance. Often referred to as the statistic of 'goodness of fit,' it helped determine how well the observed data aligned with the expected distribution if the variables were independent.

Despite advances in ICT technology, there is limited evidence of ICT implementation and usage among teachers. While the education sector invests heavily in ICT, the deployment of these technologies in schools remains behind. Many studies have been conducted to explore why teachers are slow to adopt new technologies in their teaching and learning processes (Yoon, 2018).

FINDINGS AND DISCUSSION

Respondents' profile

The majority (f=22, 35.5) of the respondents are 30 years old and below, followed by some (f=21, 33.9) who are 31 to 45 years old and 46 years old and above (f=19, 30.6). Also, most (x=38, 61.3) of the respondents are female, and some (f=24, 38.7) are male.

Mostly (f=29, 46.8) of the respondents have five years and below a number of years teaching ICT; 6 to 10 years old (f=15, 24.2); 11 to 15 years (f=12, 19.4); and 16 years and above (f=6, 9.7).

Most (f=29, 46.8) of the respondents have bachelor's degree, some (f=15, 24.2) have Master's Degree; with units in Master's degree (f=10, 16.1); Units in doctoral degree (f=6, 9.7; and Doctoral degree (f=2, 3.2).

Most (f=55, 10.01) of the respondents have attended Databases trainings; Word processing (f=52, 24.2); Spreadsheets (f=52, 9.7); Presentation Software trainings (f=50, 3.2); SIS Curriculum Manager (f=45, 16.1); and Software / Basic Computer Use Training (f=31, 46.8).

Data on knowledge and skills in basic computer/ ICT operation

Data showed that respondents are highly competent in Create a new spreadsheet (enter data) (x=3.66).

Also, respondents believed that they could create a new document (x=3.16) and slide show (x=3.13). It was also revealed that respondents saved files in a selected folder (x=3.05). Furthermore, some respondents believed that they are competent because they can format cells (x=2.61), copy, delete and rename files (x=2.62), change font and layout (x=2.62), and edit an existing slide show (x=2.85).

Most of the respondents are competent in creating materials for students' use (e.g. hand-outs, tests) (x=3.16) and communicating with student(s) and/or students' parents (x=2.97) as well as communicating with colleagues/other professionals (x=2.85).

Respondents are also competent in accessing investigation; then, most significant applies for instruction (2.84) and program management (e.g. preparation, tracking, assessing & writing) (x=2.81).

In terms of Internet and Web Applications to Teaching/Learning, respondents are competent in navigating to known websites (x=3.00). It was also revealed that they could access emails (x=3.00) and create and send emails (x=2.89). Also, they can develop favorites or bookmarks (x=2.87) and do basic searches (x=2.85).

The computed f-value and p-value for age (f-value=3.0092, p-value=.02131); sex (fvalue=3.0122, p-value=.00910); number of years in teaching ICT (f-value=3.6113, pvalue=.02211), highest educational attainment (f-value=3.0121, p-value=.03121); and Trainings Attended or Learnings Acquired related to ICT (f-value=3.1332, value=.43320) rejected the null hypothesis of no significant difference. This means that respondents' profile and variables given are significantly different.

The majority (f=3, 75.0%) of the ICT Coordinator-respondents are 5 years and below, while only few (f=1, 25.0%) are 6 to 10 years.

The majority (f=3, 75.0%) of the ICT Coordinator-respondents are 5 and below, while only few (f=1, 25.0%) are 6 to 10.

The majority (f=3, 75.0%) of the teachers are computer-literate, while only (f=1, 25.0%) are trained on integrating technology within the curriculum.

Majority of the respondents are convinced that they are capable on interactive whiteboards (x=3.12); digital projectors (x=3.01); speakers (x=2.99); notebooks for teachers program (x=2.93); laptop computers for student use (x=2.89); desktop mainframes for students use in your schoolroom (x=2.88); desktop/laptop computer designed for personal practice (x=2.77); digital cameras (x=2.68); printer (x=2.66) and desktop mainframes for learner use somewhere else at school (eg. computer lab) (x=2.65).

Majority of the respondents are convinced that they are capable on operating system (x=2.95); spreadsheet program (x=2.88); disk cleaner (x=2.87); web design program (x=2.78); disk defragmenters (x=2.77); virus protection (x=2.77); presentation program (x=2.69); word processor (x=2.66) and media players (x=2.65).

Most of the respondents are capable of creating personal email accounts (x=3.15); school intranet (x=2.97); performance monitoring or security, key and elected services/devices (x=2.92); ongoing procurement of cost-effective IT and communications equipment (x=2.89); and monitoring of WANs, LAN, performance, security and stability (x=2.69).

Most of the respondents are dialup only (x=2.82), mobile broadband (x=2.77), both broadband and dialup access (x=2.75) and broadband-only (x=2.68).

Most of the respondents are maintenance (x=2.88) and technical support (x=2.76).

Significant relationship between the level of ICT competencies of the teacher-respondents and the respondent-schools' ICT capabilities

A significant relationship between the level of ICT competencies of the teacher- respondents and the respondent-schools' ICT capabilities. The computer of of 9 and Sig. A value of .000 rejects the null hypothesis of no significant relationship. This means that level of ICT competencies of the teacher- respondents and the ICT capabilities of the respondent-schools are significantly related. An ICT Development Plan is proposed.

CONCLUSIONS AND RECOMMENDATION

The study reveals that most participants are middle-aged educators, with the majority being female. Although many teachers possess postgraduate units, indicating a commitment to professional development, they are relatively new to teaching ICT and require more training and experience to be fully equipped. Despite their novice status, teachers have attended numerous workshops and training sessions, which have contributed to their ICT knowledge, specifically in integrating technology into their lessons. The data shows that teachers are equipped with basic computer skills and are competent in using applications such as Microsoft Word, Excel, and PowerPoint, as well as web-based tools for communication and lesson development. However, there is a varying level of ICT competence among teachers, which may be due to differences in exposure and perception of technology use.

Furthermore, the study highlights that many ICT coordinators are relatively new to their roles, with less than five years of experience. There is also a shortage of ICT teachers in schools, which results in an increased workload for existing staff. The limited availability of ICT training programs further exacerbates the situation, necessitating innovative and resourceful approaches from teachers to enhance their skills. In terms of school ICT capabilities, the results indicate that teachers are supported by adequate equipment, software, and basic connectivity. However, there is a need for improved access to secure and robust internet connections to facilitate better communication and resource utilization.

Based on the findings, it is recommended that schools invest in continuous professional development for teachers, focusing on ICT training and upskilling. Additional seminars and workshops should be provided to improve teachers' competencies in using technology effectively in their teaching practices. Schools should also consider hiring more ICT teachers to alleviate the workload and provide specialized instruction in technology-related subjects. Moreover, there is a need to enhance the quality of school ICT infrastructure, particularly in terms of internet connectivity, to support teachers' access to online resources and improve communication.

Furthermore, schools should focus on creating collaborative environments where teachers can support each other in improving ICT skills, particularly in troubleshooting and integrating technology into classroom activities. Lastly, it is essential to continuously upgrade ICT facilities and equipment to meet the evolving demands of technology-driven education.

By providing sufficient resources and support, schools can ensure that teachers remain competent in ICT and are able to deliver high-quality, technology-enhanced lessons.

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