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Information and Communications Technology (ICT) Competency and Capability of Sauyo High School Teachers: A Basis for ICT Development Plan

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Abstract

The Philippines opted to embrace globalization in the mid-1990s as it set out to address globalization's challenges. This comes with the need to maintain the current education in the Philippines. The purposed of the study is to determine the Information and Communications Technology (ICT) Competency and Capability of Sauyo High School Teachers: A Basis for ICT Development Plan. A total of 112 teachers random-purposive sampling involved in the study. The study utilized a descriptive correlational method. Based on the results of the study the teacher respondents are predominantly 31-40 years old, female, earned a master's unit, and had attended 1-3 years of ICT training. The Level of ICT Competency of Sauyo High School Teachers is Proficient. The Level of ICT Capability of Sauyo High School is Very Satisfactory. There is no significant difference on the level of ICT competency of Teachers and on the level of ICT capability of Sauyo High School as perceived by the teachers when grouped according to profile. There is a significant moderately positive relationship between the level of ICT Competency of teachers and the level of ICT Capability of Sauyo High School as perceived by the teachers. Thus, the following are recommended in this study. Skills enhancement training on ICT use in teacher professional development is conducted. The training providers should refer to any existing competency standards. Department of Education (DepEd) should provide a mechanism for strengthening secondary teachers' ICT competence by integrating ICT training in the In-Service Training (INSET) of teachers anchored on the skill-set and basic competence to introduce their ICT skills further the-Advance meaningful ICT integrated teaching-learning to students.

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Keywords: Information Communication Technology, Competency, Capability, Teaching Pedagogy, Innovation, Software Application

Introduction

The Philippines opted to embrace globalization in the mid-1990s as it sets out to address the challenges that globalization would bring. Along with this comes the need to maintain our education current with that of our Asian neighbors and the rest of the world. Information and Communications Technologies (ICTs) have become the most fundamental building block of modern industrial society quickly. Many countries are now highly regarded for mastering information technology and understanding basic skills and concepts of ICT. ICT has been increasing at a fantastic rate in instruction among teachers. In accordance with the office of the Undersecretary for Administration (OUA) Memorandum 14-0120-0588 dated January 15, 2020, Communications Technology Services (ICTs) shall continue the services rendered by Educational Technology (EdTech). ICT has become an indispensable and imperative tool in improving the students' learning capabilities, and strengths. However, this new technology could not replace the teachers in the classroom. It is not a solution for all educational problems (Asebere, 2017). ICT is undoubtedly an effective tool that enables us to link various learning communities together in new and different ways (Drijvers, 2020). It provides excellent possibilities for effective communication between teachers and students in varying and innovative ways. This program aligns with the Department of Education's (DepEd) overall aim of "21st Century Education for All Filipinos, Anytime, Anywhere." This entails a technology-enabled education system that transforms kids into self-motivated lifelong learners as well as values-centered, hardworking, and accountable citizens.

Teachers are the primary participants in integrating ICT into their daily lessons, in addition to preparing students for the contemporary digital era. This is because of ICT's capability to provide a dynamic and proactive teaching-learning context). There is no doubt that technology is increasingly being used today, particularly for teaching and learning. This is because current technology provides a variety of tools that can be employed in the classroom to improve the quality of teaching and learning (Bruniges, 2018). ICT integration, according to Ab Jalil et. al (2018), is the process of evaluating where and how technology fits into the teaching and learning setting. It is possible for everyone to access websites from anywhere and enjoy the internet's free information. ICT has been proved in studies around the world to improve student learning and teaching techniques. Although the Department of Education is working to integrate ICT into education, it must not overlook the program's suitability for people who will be performing the most important job - teachers. Teachers should be assessed to see if they are adequately equipped in terms of ICT skills. They must be examined on a regular basis to see if they are keeping up with current educational technology developments. However, there is insufficient data and evidence to support the readiness of instructors in Sauyo High School to conduct the program. Evaluating teachers' basic ICT skills is primarily aimed towards policymakers at various levels who are responsible for schooling.

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There are also challenges experienced in the inclusion of ICT in the high school, particularly the lack of resources and the teachers' exposure to the use of modern technology (Dela Rosa, 2016).

Due to its dynamic nature, incorporating technology into education is a challenging task. As a result, ICT integration in education is seen as a critical component of improvement and development. ICT integration and implementation in the Philippine education system is a complicated process that necessitates strategic planning by policy and decision makers due to the concerns and obstacles associated with the use of learning technologies.

The government strives to increase the quality of ICT skills in schools, particularly in rural areas. It is also attempting to reduce the ICT capacity gaps in terms of quantity and quality across urban, rural, and distant locations across the country. In this regard, if the quality and quantity of ICT capacity are increased, this might improve the quality of teaching and learning. Tinio (2018), on the other hand, considers ICT integration in schools to be one of the most difficult tasks due to potential issues and problems with stakeholder resistance to change, which can lead to failure, particularly in the early phases of implementation. Any unresolved issue with ICT integration in schools, particularly in rural areas, may result in disparities between urban and rural students, resulting in deep economic and social inequity across the country. Sufficient access to ICT tools and Information and communication technology teachers are required for successful ICT implementation in the classroom. Close links to non-governmental groups and other stakeholders could help schools integrate ICT more effectively. It is critical that schools effectively implement ICT integration so that teachers can respond to the K-through-12 global education standard's demand in the classroom.

The emerging situation opens the new possibilities that teachers need to be assessed to identify current condition in the field. The present study aims to determine the level of ICT competency of the teachers in terms of teaching pedagogy, software applications and documentation, innovation, ICT operation/knowledge and skills in basic computer and usage of the internet and web applications. It also seeks to describe the level of ICT capability of Sauyo high School as perceived by the teachers in terms of hardware tools, software applications, sustenance facilities, Internet connectivity and technical support and maintenance.

Research Problem

This study aims to determine the level of ICT Competency of Sauyo High School teachers and level of ICT Capability of Sauyo High School as perceived by the teachers' basis for school ICT development plan.
Specifically, the study seeks to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
    1.1 Age
    1.2 Gender
    1.3 Highest educational attainment
    1.4 No. of ICT Trainings attended

2. What is the level of ICT competency of the teacher-respondents in terms of:
    2.1 Teaching Pedagogy
    2.2 Software Applications and Documentation
    2.3 Innovation
    2.4 ICT Operation/Knowledge and skills in basic computer

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2.5 Usage of the Internet and web applications

3. What is the level of ICT capability of Sauyo High School as perceived by the teachers in terms of:
3.1 Hardware tools
3.2 Software applications
3.3 Sustenance facilities
3.4 Internet connectivity
3.5 Technical support and maintenance
4. Is there a significant difference on the level of ICT competency of teachers when they are grouped according to profile?
5. Is there a significant difference on the level ICT capability of Sauyo High School as perceived by the teachers when they are grouped according to profile?
6. Is there a significant relationship on the level of ICT competency among the teachers and ICT capability of Sauyo High School as perceived by the teachers?
7. What ICT Development Plan may be proposed based on the findings of the study?

Statement of Hypotheses

1. There is no significant difference on the level of ICT competency of teachers when they grouped according to their profile.
2. There is no significant difference on the level of ICT capability of Sauyo High School as perceived by the teachers when they grouped according to their profile.
3. There is no significant relationship on the level of ICT competency among the teachers and ICT capability of Sauyo High School as perceived by the teachers.

Methodology

Research Design

The researcher used of a descriptive correlational design. Descriptive correlational designs are used to describe variables and the natural correlations that exist between and among them (Sousa et al., 2007). Since the study aimed to assess the level of ICT competency of the teachers and its relationship to the level of ICT capability of Sauyo High School, descriptive methods are therefore deemed appropriate types of research where a survey questionnaire was distributed to the identified respondents.

Research Respondents

The main respondents of the study we're the teachers of Sauyo High School for the School Year 2021-2022. There we're a total of 112 teachers who answered the survey questionnaire. The inclusive criteria were as follows: (1) permanent-regular teacher at Sauyo High School, (2) males and females (3) at least one year as a teacher in Sauyo High School, and (4) will sign an informed consent to participate as respondent.

Sampling Method

The researchers utilized slovin's formula to determine the sample size of the study. The sample size is comprised of 112 teachers out of 156 population of Sauyo High School teachers. Also, the researchers used the random sampling in determining the sample population for teacher respondents. In this kind of sampling, all members had a chance of being selected and to be a part of the research study as respondents.

Research Environment

The research was conducted in Sauyo High School. It is a legalized public school in the Division Quezon City which will serve as the research locale of the study.

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Research Instrument

First and foremost, this study relies on the result of the quantitative data to be gathered. Thus, more respondents are needed. Since the source of data is chiefly quantitative, a great number of respondents are imperative.

In this study, a set of questions via Google Form with a choice of answers, devised for the purposes of a survey or statistical study was used. The research instruments of the study underwent face and content validity by the validation team composed of the research panels with the guidance of the research adviser and research director of the Graduate School of Dr. Carlos S. Lanting College.

The instrument tested its reliability through Field Out Testing or Pilot Testing which will was tested. The researcher made questionnaires for the Level of ICT Competency and Capability as perceived by the respondents a total of 50 items with an internal consistency of "Excellent Reliability".

Table 1:
Likert Scale Weighted Mean Interpretation for the level of ICT competency of the teachers and the level of ICT capability of Sauyo High School as perceived by the teachers.

SCALE	WEIGHTED MEAN	INTERPRETATION
5	4.21-5.00	Expert/Outstanding
4	3.41-4.20	Proficient/Very Satisfactory
3	2.61-3.40	Demonstrating/Satisfactory
2	1.81-2.60	Basic/Poor
1	1.00-1.80	Low level/Needs Improvement

Table 2:
Size of correlation coefficient and its interpretation (Hinkle et al., 2003)

Size of correlation	WEIGHTED MEAN
0.90-1.00 (-0.90 to -1.00)	Very High positive (negative) correlation
0.70- 0.90 (-0.70 to -0.90)	High positive (negative) correlation
0.50-0.70 (-0.50 to -0.70)	Moderate positive (negative) correlation
0.30-0.50 (-0.30 to -0.50)	Low positive (negative) correlation
0.00-0.30 (0.00 to -0.30)	Negligible correlation

Data Gathering Procedure

In gathering the data, the researcher sought permission from the School Principal of Sauyo High School Mr. Gilore E. Ofrancia. Permission was granted to the School Principal, Coordinators, and Department Heads by the school covered in this study. The researcher asked permission from the respondents to allow answering the questionnaires at their most convenient time. Given these permissions, the researcher proceeded with the survey questionnaire via google forms as it is the safest way to gather necessary data at the time being. The system

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had been automatically recorded the responses of the stakeholders. The data were tabulated and tallied accurately.

A letter of invitation with consent to conduct this study was sent to the Office of the Administration for endorsement. Upon approval of the research committee and adviser, permission from the respective school head was secured before the definite gathering of data. The research instrument was directed online via Google Form to the selected respondents of the research locale who are the teachers.

Statistical Treatment

A self-made questionnaire was utilized as the study tool. The questions were carefully crafted to elicit responses that were relevant to the issues that needed to be answered for the research to attain its unique goals. The responses to be gathered from the survey questionnaires were subjected to statistical treatment using percentage and frequency distribution, weighted mean, Pearson R, independent T-test, and ANOVA was conducted to find any significant difference and relationship in the scores on the data to be gathered was analyzed and tabulated using SPSS version 25 and will be recorded, tallied, tabulated, analyzed, and interpreted to derive the implications of the study.

Results and Discussion

The Demographic Profile of Respondents

The following are the quantitative value of demographic profile of the respondents under study:

Table 3: Frequency Percentage Distribution on the profile of the respondents

Sample Characteristics	n	%
Age		
20-30	30	26.7857
31-40	34	30.3571
41-50	30	26.7857
51-60	15	13.3929
60 -ABOVE	3	2.6785
Gender		
Male	32	28.5714
Female	80	71.4286
Highest Educational Attainment		
Bachelor's Degree	39	34.8214
Master's Degree	18	16.0714
Master's Degree with units	48	42.8571
Doctoral Degree	2	1.78571
Doctoral Degree with units	5	4.46428
Number of ICT Training Attended		
1-3 Trainings	40	35.7142
4-6 Trainings	32	28.5714

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7-9 Trainings	20	17.8571
10-Above	20	17.8571

Note. *N=112*

Table 3 shows the Frequency Percentage Distribution on the profile of the respondents. As presented in the table, in terms of Age 34 respondents (30.3571%) are 31-40 years old, 30 respondents (26.7857%) are 20-30 years old and 41-50 years old respectively, 15 respondents (13.3929%) are 51-60 years old, and 3 respondents (2.6787 %) are 60-above years old. Thus, majority of the respondents are 31-40 years old. In terms of gender majority of the respondents are female 80 (71.4286%) while 32 (28.5714%) male respondents. Moreover, based on Highest Educational attainment there are 48 respondents (42.8571%) Master's Degree with units followed by 39 respondents (34.8214%) Bachelor's Degree, 18 (16.0714%) Master's Degree, 5 (4.46428%) Doctoral Degree with units and 2(1.78571%) Doctoral Degree. Lastly, in terms of Number of ICT Training Attended there are 40 respondents (35.7142%) attended 1-3 trainings, 32 respondents (28.5714%) 4-6 Trainings, 20 respondents (17.8571%) 7-9 Trainings and 10 -above trainings. Hence, majority of the respondents have 1-3 trainings.

Table 4: The Level of ICT Competency *of Sauyo High School as perceived by teachers*

Statement Items	**Mean**	**Annotation**
Teaching Pedagogy		
Uses generic software such as MS Office for teaching purposes	4.01	Proficient
Utilizes the internet effectively	4.20	Proficient
Uses scanners, digital cameras to import image for teaching materials	3.86	Proficient
Practices the use of web publishing software to publish teaching materials	3.46	Proficient
Utilizes email and online conferencing platforms in conducting synchronous and asynchronous sessions	4.14	Proficient
Composite Mean	**3.93**	**Proficient**
Software Applications		
Installs software applications needed for online teaching	3.76	Proficient
Effectively utilizes the installed software apps in conducting online classes	3.77	Proficient
Performs self-monitoring on the usage of educational software applications	3.62	Proficient
Improves the quality of synchronous teaching via software applications such as Class Point, Google Meet and Zoom	4.04	Proficient
Secures the effectiveness of asynchronous sessions with the aid of various software applications like the features of GSuite/Workspace	3.80	Proficient

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Composite Mean	**3.80**	**Proficient**
Innovation		
Applies ICT skills in teaching online distance learning	4.04	Proficient
Integrates ICT in developing projects and activities for the benefits of the learners, teachers, school, and the community	3.96	Proficient
Utilizes ICT in framing income generating projects of the school	3.37	Demonstrating
Establishes online communication using the school's Portal	3.76	Proficient
Adopts new online distance learning strategies and techniques	3.83	Proficient
Composite Mean	**3.79**	**Proficient**
ICT Operation/Knowledge and skills in basic computer		
Installs needed operating and window system in the laptop or desktop	3.79	Proficient
Understands the proper usage of icons in the desktop or laptop especially the features of MS Office such as Word, PowerPoint, Excel, Publisher, and One Note	3.96	Proficient
Applies simple editing and spelling check on the processed files as well as the importing of images from the internet	4.00	Proficient
Lay outs text, images, pictures, graphs, and smart art and utilizes video applications	3.90	Proficient
Publishes work using multimedia applications or platforms	3.77	Proficient
Composite Mean	**3.89**	**Proficient**
Usage of the Internet and web applications		
Uses Internet Browsers such as Internet Explorer, Google Chrome, and Mozilla Firefox	4.14	Proficient
Knows how to utilize search engines	4.13	Proficient
Downloads and uploads documents from/on the internet	4.16	Proficient
Uses Internet for self-directed learning	4.18	Proficient
Publishes work on the internet specifically in the school websites or learning management system	3.66	Proficient
Composite Mean	**4.06**	**Proficient**

Table 4 presents the mean distribution of responses on the level of ICT Competency of the Teachers. This manifests the teachers' ability to utilize information and communication technologies (ICT) successfully and efficiently for teaching purposes. With a total of 25 statements, 5 statements are classified under 5 categories. Category one, Teaching Pedagogy with a weighted mean of 3.93 (Proficient), category two, Software Applications with a weighted mean of 3.80 (Proficient), category three,

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Innovation with a weighted mean of 3.79 (Proficient), category four, ICT Operation/Knowledge, and Skills in Basic Computer with a weighted mean of 3.89 (Proficient), and lastly, Usage of the Internet and Web Applications with a weighted mean of 4.06 (Proficient). The responses to the questionnaire items reveal that respondents place varying degrees of weight on the ICT competency of the teachers. Thus, in terms of the mastery or skillfulness accorded by respondents to the stated categories, the respondents' rank order showed Usage of the Internet and Web Applications, Teaching Pedagogy, ICT Operation/Knowledge and Skills in Basic Computer, Software Applications, and Innovation. In that order, the findings reveal that Usage of the Internet and Web Applications was ranked first among the level of ICT competency of the teachers by the respondents in this study. While Innovation was deemed as having the lowest level of competency among the five categories. Whereas stable and fast internet connection supports instructional delivery in online distance learning (Manalo et al., 2020). However, the Philippines' median mobile and fixed internet connection speeds are only 18.79 Mbps and 49.10 Mbps respectively, which makes the country ranked 94th in the world for mobile speeds and 68th for fixed broadband speeds (Ookla, 2022). The success of any online distance learning modality heavily relies on internet connection because a failure can detract the entire online learning experience (Manalo et al., 2020). Thus, teachers exerting more effort to provide quality education despite the current state of the Philippines' internet connection is beneficial to the entire community. On the other hand, the statement with the lowest mean shows that teachers practice the use of web publishing software to publish materials (M=3.46). Since the Covid-19 pandemic prompted the education system to go virtual, educational materials such as books, modules, presentations, etc. also need to be delivered on an online basis. Fear comes along as teachers embrace technology. It has given a sense of responsibility to adapt and explore such so they may integrate it into their pedagogy and still perform professional functions (Lie, 2020). It may be gleaned that the teachers are highly knowledgeable and skilled in utilizing these software applications for improving the quality of their synchronous and asynchronous sessions. Data implies that teachers do self-evaluation on their skills and abilities in using educational software applications. Continues self-monitoring provides teachers with a better understanding on where they lack and on what aspects they should improve. Furthermore, acquiring the latest devices and integrating ICT into the lesson is not enough since it must be sustained over the long term (De Villa & Manalop, 2020). To fulfill this, teachers' self-monitoring on their usage of educational software applications is necessary. Income generating projects are activities that make money to finance a program or a project. With these, school can improve school facilities, offer scholarships, and finance other academic or educational projects. Now, ICT is a major component for these activities since they are more likely to be conducted online. Looking at the statement's annotation, it can be implied that teachers still need to enhance their knowledge in integrating ICT with their school's income generating activities. The teachers found difficulty to navigate digital tools and online platforms. Given this, the Philippine education system should enhance their digital literacy to provide a better-quality education.

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Continuous learning provides growth and development of teachers as professionals, making them ready and prepared in embracing changes in the teaching landscape (De Villa & Manalop, 2020).

Table 5: The Level of ICT Capability of *Sauyo High School as perceived by Teachers*

Statement Items	Mean	Annotation
Hardware Tools		
Has updated, and functional computer units	3.85	Very Satisfactory
Has available projectors and white board screens	3.53	Very Satisfactory
Has at hand Smart TV	3.58	Very Satisfactory
Has acquired printers for the staff and faculty	3.71	Very Satisfactory
Has functional scanners and photocopier machine	3.55	Very Satisfactory
Composite Mean	**3.64**	**Very Satisfactory**
Software Applications		
Installs MS Office in the computer units	4.01	Very Satisfactory
Software is up to date	3.84	Very Satisfactory
Acquires licensed Adobe Flash Player	3.54	Very Satisfactory
Installs software for photo editing and enhancing like Adobe Photo Shop, Adobe Spark and Canva for Education	3.78	Very Satisfactory
Secures antivirus applications like Avast, Kaspersky, and McAfee	3.72	Very Satisfactory
Composite Mean	**3.78**	**Very Satisfactory**
Sustenance Facilities		
Has available data information/data centers	3.83	Very Satisfactory
Has conducive ICT laboratory rooms	3.80	Very Satisfactory
Has sufficient manuals and instructions for ICT equipment	3.72	Very Satisfactory
Has the ability to acquire new and updated hardware and software	3.86	Very Satisfactory
Has institutional partnership with professional and corporate bodies for technical support	3.85	Very Satisfactory
Composite Mean	**3.81**	**Very Satisfactory**
Internet Connectivity		
Sufficient Internet bandwidth or speed	3.71	Very Satisfactory
Provides Local Access Network (LAN)	3.61	Very Satisfactory
Avoids buffering or lag through a large amount of bandwidth	3.48	Very Satisfactory
Does not have any delays in accessing different websites	3.46	Very Satisfactory
Considers alternative connections in the absence of Wi-Fi and LAN like broadband connections or dial up telephone lines	3.62	Very Satisfactory
Composite Mean	**3.58**	**Very Satisfactory**
Technical support and maintenance		

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Provides ICT skills among teachers	4.05	Very Satisfactory
Provides pedagogical support for the use of ICT	4.01	Very Satisfactory
Provides wide use of school's portal for references and inquiries	4.09	Very Satisfactory
Provides effective online learning support platform	4.04	Very Satisfactory
Provides effective professional learning resources for teachers	4.08	Very Satisfactory
Composite Mean	**4.06**	**Very Satisfactory**

Table 5 presents the mean distribution of responses on teachers' level of ICT capability, which are classified into five categories with five statements in each category, making a total of 25 statements. Category one, Hardware Tools with a weighted mean of 3.64 (Very Satisfactory), category two, Software Applications with a weighted mean of 3.78 (Very Satisfactory), category three, Sustenance Facilities with a weighted mean of 3.81 (Very Satisfactory), category four, Internet Connectivity with a weighted mean of 3.58 (Very Satisfactory), and lastly, Technical Support and Maintenance with a weighted mean of 4.06 (Very Satisfactory). The responses to the questionnaire items reveal that respondents place varying degrees of weight on the ICT Capability of the Teachers. Thus, in terms of the importance or priority accorded by respondents to the ICT capability of the teachers, the respondents' rank order showed Technical Support and Maintenance, Sustenance Facilities, Software Applications, Hardware Tools, and Internet Connectivity. In that order, the findings reveal that Technical Support and Maintenance was ranked first among the level of ICT capability of the teachers by the respondents to this study. Internet Connectivity was identified as one of the least likely categories contributing to the ICT capability of the teachers. Bani Hani (2014) claimed that educators have embraced technology for education. Especially, the integration of computers into educational systems has reconstituted the method of teaching and learning (Chai et al., 2012). Classrooms are equipped with computers and internet accesses (Gay, 2020). Teachers are supposed to utilize the technological advantage of the opportunities offered to them by the information society (Certin, 2017). Although the barriers related to equipment support can cause significant problems for technology integration, teachers may solve these problems through hand-me-downs, grants, and private donations. Teachers have a working knowledge of Microsoft Office Word, Excel, PowerPoint, and different web browsers. A good number of the teachers use MS Office to prepare their lectures, use the internet for accessing educational materials, and take classes with multimedia with the support of ICT (Farhana et al., 2019). According to Becta (2004), the inaccessibility of ICT resources is not always merely due to the non-availability of the hardware and software or other ICT materials within the school. It may be the result of one of a few factors such as poor organization of resources, poor quality hardware, inappropriate software, or lack of personal access for teachers (Becta, 2004). The barriers are extrinsic to the teacher and include lack of resources, manuals, instructions, time, access, and technical support. A reliable internet connection offers a lot of convenience and allows them to complete tasks with much less hassle, whether that's downloading a

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document or making a video. With a good internet connection, they can work, educate themselves, entertain themselves and save money. Finding a good deal is worth the search (Stiff, 2020). Schools use a diverse set of ICT tools to communicate, create, disseminate, store, and manage information. The existence of ICTs does not transform teacher practices in and of itself. However, ICTs can enable teachers to transform their teacher practices, given a set of enabling conditions. Teachers' pedagogical practices and reasoning influence their uses of ICT, and the nature of teacher ICT use impacts student achievement (Trucano, 2005).

Table 6: The significant difference on the ICT competency and the ICT capability of Sauyo High School as perceived by Teachers when grouped according to Gender

Variables	N	df	Mean	t-value	α	Sig.
ICT Competency						
Male	112	110	3.7238	-0.493	0.05	0.623
Female			3.7920			
ICT Capability						
Male	112	110	3.9725	0.881	0.05	0.380
Female			3.8585			

Note. N- Sample Size, df- Degrees of Freedom, t-computed value, α- level of significance, Sig.- significant value

Table 6 shows the significant difference on the ICT competency and the ICT capability of Sauyo High School as perceived by Teachers when grouped according to Gender. From the data obtained, the sample size of the study comprised of (N=112) respondents wherein the mean level of ICT Competency and ICT Capability of Male is 3.7238 (Proficient) and 3.7925 (Very Satisfactory) while female is 3.7920 (Proficient) and 3.8585 (Very Satisfactory) with the degrees of freedom of (df=110) and the t-computed values are equal to (t=-0.493) and (t=0.881) respectively. Since the probability value/Significant Value is equal to (Sig.=0.623>0.05) and (Sig.=0.380>0.05) is greater than the level of significance. Therefore, there is no enough evidence to reject the null hypothesis and it implies that there is no significant difference on the ICT competency and the ICT capability of Sauyo High School Teachers when grouped according to Gender. This only implies that Gender doesn't affect the ICT Capability of teachers. Regardless, of its orientation they can still do their job very well, especially when it comes to information and communication tools. During the last 10 years, the role of ICT in education changed radically. New technologies became a vital aspect of learning, work and lifestyle. form of research argued that computing isn't considered as a male domain anymore (King et al., 2017).

Table 7: The significant difference on the ICT Competency of Sauyo High School Teachers when grouped according to Age, Highest Educational Attainment and Number of Trainings Attended

Source of Variations		SS	df	MS	F	Sig.
Age	Between Groups	69.022	47	1.469		

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	Within Groups	64.398	64	1.006	1.459	.079
Highest Educational Attainment	Between Groups	43.465	47	.925		
	Within Groups	51.312	64	.802	1.153	.295
Number of Trainings Attended	Between Groups	64.405	47	1.370		
	Within Groups	72.024	64	1.125	1.218	.230

Note. N-112, SS- Sum of Squares, MS- Mean Squares, df- degrees of freedom, F-computed value, Sig.- Significant Value

Table 7 shows the significant difference on the ICT Competency of Sauyo High School Teachers when grouped according to Age, Highest Educational Attainment and Number of Trainings Attended. From the data obtained, the study comprised of (N=112) respondents with the degrees of freedom between groups (dfBG=47) and degrees of freedom within groups (dfWG=64) and F-computed values are equal to (Age F=1.459, Highest Educational Attainment F=1.153 and Number of Trainings Attended F=0.1.218). Since the probability/sig. values are (Age Sig.=.079>0.05), (Highest Educational Attainment Sig.=0.295 >0.05) and (Number of Trainings Sig.=0.230 >0.05). Therefore, there is not enough evidence to reject the null hypothesis and it implies that there is no significant difference on the level of ICT Competency of Sauyo High School Teachers when grouped according to Age, Highest Educational Attainment and Number of Trainings Attended. This implies that age will be a good think about making and using ICT within the teaching learning. This further intensified by (Lee, 2017; Teo, 2018; Yaghi, 2011) with those from some previous studies regarding the impact of teachers' age on ICT integration. These studies have found older teachers to be less confident with using computers. Lee (2007) as cited in Becta (2014) identified that a lot of teachers of 'advanced age' won't have any computer education when in college, and as a result need computer skills training to permit them to create use of computers in their work. Teo (2008) found that Singaporean pre-service teachers' attitudes for computer use were influenced by their age. Yaghi (2011) found that older teachers were less confident with using computers. Lastly, the more the ICT trainings attended by the teacher the more practical adne efficient in ICT. Conversely, findings further showed that there is a significant difference in the teachers' ICT competence in ICT-related seminars and training attended by the teachers either in ICT-basics, spreadsheets, and computer ethics and security. On the contrary, there's no significant difference in data processing, presentation, information and communication.

Table 8: The significant difference on the ICT Capability of Sauyo High School as perceived by Teachers when grouped according to Age, Highest Educational Attainment and Number of Trainings Attended

Source of Variations		SS	df	MS	F	Sig.
Age	Between Groups	74.158	51	1.454		
	Within Groups	59.262	60	.988	1.472	.075
Highest Educational Attainment	Between Groups	27.063	51	.531		
	Within Groups	67.714	60	1.129	.470	.997

Number of Trainings Attended	Between Groups	58.321	51	1.144		
	Within Groups	78.107	60	1.302	.878	.681

Note. N-112, SS- Sum of Squares, MS- Mean Squares, df- degrees of freedom, F-computed value, Sig.- Significant Value

Table 8 shows the many differences within the ICT capability of Sauyo High School as perceived by Teachers when grouped in keeping with Age, Highest Educational Attainment, and Number of coaching Attended. From the information obtained, the study comprised (N=112) respondents with the degrees of freedom between groups (dfBG=51) and degrees of freedom within groups (dfWG=60) and F-computed values are capable (Age F=1.472, Highest Educational Attainment F=0.470 and Number of Trainings Attended F=0.878). Since the probability/sig. values are (Age Sig.=.075 >0.05), (Highest Educational Attainment Sig.=0.997 >0.05) and (Number of Trainings Sig.=0.681 >0.05). Therefore, there's not enough evidence to reject the null hypothesis. It implies that there is no significant difference major on level of the ICT capability of Sauyo High School Teachers when grouped in keeping with Age, Highest Educational Attainment, and number of coaching Attended.

Technology includes a great impact on the majority aspects of education. It provides many opportunities for acquisition. It accelerates, enriches, and improves basic language skills. Students can learn faster and easier at anytime and anywhere. It also facilitates an energetic role of learners. However, the combination of ICT into teaching depends on many factors that affect its success or failure. the bulk of the studies during this area focused on teacher training, teachers' attitudes towards the ICT, and teachers' beliefs about the ICT in acquisition (Chen, 2018) Teachers' age, teaching experience, and gender are factors that affect ICT integration into pedagogy and learning.

Table 9: The significant relationship between the level of ICT competency of teachers and the level of ICT capability of Sauyo High School as perceived by the teachers

Variables	N	Df	r-value	Sig.	α
ICT Competency and ICT Capability	112	111	0.550	0.0000	0.05

Table 9 shows the significant relationship between the ICT Competency and the ICT Capability of Sauyo High School Teachers. From the data obtained, the sample size of the study comprised of (N=112) respondents with the degrees of freedom of (df =111) and r-computed value is equal to (r=0.550) moderately positive correlation. Since the probability/Sig. is equal to (Sig.=0.0000<0.05) and it is less than the level of significance. Therefore, there is enough evidence to reject the null hypothesis and it implies that there is a significant moderately positive relationship between the ICT Competency and the ICT Capability of Sauyo High School Teachers. This implies that competency and capability have its impact on the performance of teachers in utilizing ICT in their respective classroom instructions. The results indicate a positive relationship between teacher's confidences level and teacher's satisfaction with ICT training programs. It will be concluded that teachers' confidence level toward using ICT tools depends on their satisfaction with ICT training programs. as an example, when a

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lecturer believes that ICT training programs meet his needs and are top quality, he will trust that he will learn sufficient knowledge about ICT that may enable him to conduct his teaching processes effectively and with none fear or anxiety. The results also found a positive relationship between teachers' competency and teacher satisfaction with ICT training programs. The findings show that the teacher's satisfaction with ICT training programs influences the teacher's competency. If the teacher is satisfied with the programs, they'll quickly improve his capabilities of using ICT; for instance, he will learn ICT for pleasure because he enjoyed attending the ICT program; also, he is going to be sure that he will find the timely help and answers for his questions (Chwee et al., 2017).

Conclusions

In the light of the statistical analysis and the finding of the study, the following conclusions were drawn:

1. Teachers have been capacitated with seminar-workshop related to ICT training and development regardless of sex, age, position, and length of service.
2. the school administrators revisited and strengthen their programs in ICT by providing appropriate seminars and training to enhance teachers' ICT competence to deliver quality education to the students in this digital and technological era
3. ICT integration is vital for interactive, meaningful, and quality education in the educational system in the Philippines, in Sauyo High School to be specific, to better improve its Learning and Management System.

4. Teachers' ICT capability and competence aid them in effectively and productively performing daily tasks in school, which can provide quality educational outcomes.
5. There is professional development needed that focuses on the teachers' ICT skills to overcome the different apprehensions associated with the technology-driven teaching-learning process.
6. Teachers' competence in ICT strongly influences the effectiveness of their works in the academe through actualization.

Recommendations

In this research and in view of the findings and conclusions drawn in the study, the following recommendations are forwarded:

1. It is recommended that skills enhancement training on ICT use in teacher professional development be conducted. The training providers should refer to any existing competency standards.
2. Department of Education (DepEd) to provide a mechanism for strengthening secondary teachers' ICT competence by integrating ICT training in the In-Service Training (INSET) of teachers anchored on the skill set NICS-Basic to improve teachers' competence and further enhance their ICT skills by introducing the NICS-Advance to create meaningful ICT integrated teaching-learning to students
3. The government and curriculum developers should make available satisfactory educational software by seeing the assistance of software developers; However, this software should be affordable or be accessible to school
4. Teacher's professional development is a critical factor in the successful integration of

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computers in classroom teaching. With this, the administration should consider in the planning of faculty development program to send their faculty for intensive and up-to-date training, seminar, and seminar-workshop to keep their faculty updated on the current educational technology practices

5. Teachers must take advantage of existing and available technological tools offered in their institution or other organizations that emphasize open learning

6. It also recommended that another study be explored and includes performance indicators representing the latest ICT trends and practices in teacher professional development.

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