



# THE IMPACT OF DIGITAL LITERACY OF SCHOOL HEADS TO THEIR PERFORMANCE AS SCHOOL LEADERS

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## ABSTRACT

*Leadership is an important factor in the effective implementation of technology in schools. This study examines the impact and relationship of digital literacy of school heads to their performance as school leader. The digital literacy of the school head was measured through a survey questionnaire that sought to know their ICT background and level of knowledge on electronic technologies and computer program, On the other hand, performance of the school was measured through a survey questionnaire of teacher's evaluation of their school heads. The respondents were 30 school heads and 200 teachers of Pantukan North and South Districts, Division of Davao De Oro. The study revealed that the digital literacy of the school heads strongly influenced their performance in school. It is suggested that ongoing professional development opportunities on dimension of leadership and technology should be provided for principals to increase their levels of proficiency in computer use. This will help future researchers understand the importance of the use of technology in education and to come up with the best strategy to integrate ICT in their way of supervision, instruction, and administration.*

**KEYWORDS:** digital literacy, ICT competence, leadership performance, descriptive correlation

## INTRODUCTION

The integration of Information and Communications Technology (ICT) into classroom instruction, particularly in the new standard curriculum during this epidemic, is led by school administrators. The dissemination of knowledge and skills at all educational levels has been and will continue to be impacted by this condition. But despite the current pandemic condition, schooling will go on with the aid of ICT. The school administrators, on the other hand, also need to adopt the newest trends of the day, such as using technology and the internet; being adept at navigating particular educational platforms for online classes, conferences, and meetings with teachers; and efficiently submitting reports using various Microsoft applications. These are just a few of the prerequisites that a school administrator and instructors must overcome in order to impart the knowledge and skills necessary for 21st-century education.

To successfully lead their schools in the twenty-first century, school administrators need to be fully informed of the problems and promise of technology. As the faculty head, the coordinators, and the communicators of school events and programs, they must use technology effectively in these roles (Richardson & McLeod, 2011).

However, according to Kubota (2018) during his case study in the Philippines, the Department of Education (DepEd) gives training courses to teachers and principals (school heads) to encourage ICT literacy, however they are

only available in 'large' cities like Manila and Cebu. As a result, digital illiteracy among school personnel is still a problem faced by the Philippine educational system that needs to be addressed.

**The Concept of Digital literacy.** The phrase "digital literacy" encompasses media literacy, technology literacy, and ICT literacy, visual literacy, information literacy, and communication literacy. Hague (2010) defines digital literacy as the ability to engage in a range of critical and creative practices that involve understanding, sharing, and creating meaning with different types of technology and media. Beetham (2010) defines digital literacy as the learner's capacity to adapt to a digital environment through self-directed learning and employment. These two definitions concentrate on the abilities that a person with digital literacy may learn and use. These abilities include creativity and critical thinking, two traits that employers strongly value.

**E-leadership in implementing ICT.** School leadership has been highlighted as one of the major stakeholder roles impacting ICT transformation in schools among many aspects (Chen, 2013). Although principals are said to be responsible for systemic ICT transformations like ICT infrastructure deployment, cultivating an innovative school culture, and facilitating changes in teaching and learning practice as a school leader, empirical research on the impact of principal e-leadership is lacking (Chang, 2012).



**ICT competence, use and implementation.** Stuart et al. (2009) investigated the relationship between school leaders' ICT proficiency and desire to become ICT proficient. According to their results, the principals who considered themselves to be technology leaders possess high levels of ICT proficiency and routinely utilize ICT for administrative and educational responsibilities. Having computer and software proficiency makes school administrators more effective technology leaders (Stuart et al., 2009)

**Teacher's evaluation on their school head performance.** According to the study of Clark, Martorell and Rockoff (2009), there are several factors to determine the performance of a school head. The first one is the overall rating of a school leader using a certain tool wherein it sought to measure the school heads overall performance (Witziers, 2003). The second one is the student-based outcomes which includes the learner's attendance and engagement (Leithwood, 2003). The third one that measures school performance is using teacher-based outcomes such as teachers' evaluations of school principal performance and teacher mobility/attrition (Gates, 2006) The school head, according to Salwa et al. (2019), is one of the most important factors of the success of any educational effort and the most influential component in establishing high-quality educational processes and outcomes. Several studies have found that the school head's leadership has a direct and positive impact on teacher performance.

**Computer literacy development.** As computer technology becomes more widely available and advanced, the growing usage of electronic texts has broadened the definition of literacy and given rise to new literacies such as "computer literacy," "electronic literacy," and "information literacy." As a result of this circumstance, the definition of computer literacy is necessarily broadened (Verheijen, 2019). In the field of education, developing and improving computer skills is seen as a critical concern. (Falloon, 2020).

## OBJECTIVES

This Research aims to determine the relationship between digital literacy of school heads to their performance as school leaders

## METHOD

The study utilized the quantitative descriptive-correlational research design in determining the relationship between digital literacy of school heads and their performance through the aid of survey questionnaires to be administered to both teachers and school heads. According to Quaranta (2020), descriptive correlational studies describe the variables and the relationships that occur naturally between and among the variables. This design is being used to determine the relationship between digital literacy of school heads to their performance as school leaders.

The study was conducted in 30 selected schools of Pantukan District, seven of which belong to Pantukan North District (Ayan Elementary School, Bongabong Elementary School, Tagdangua Elementary and twenty-three of them belong to Pantukan South.

Pantukan is a coastal municipality of Davao De Oro. The center of Pantukan is situated at approximately 7° 8' North, 125° 54' East in the island of Mindanao and estimated 17.1 meters above mean sea level. It has a land area of 533.11 square kilometers or 205.83 square miles which constitutes of 11.69% of Davao De Oro's total land area. According to the 2020 census, it has a population of 90,786 people. This represented 11.83% of total population of Davao De Oro province, or 1.73% of the overall population of the Davao Region. The municipality is primarily dependent on mining, but agriculture thrives in communities within boundary. Pantukan is politically subdivided into 13 barangays. It comprises of 34 public elementary schools and 7 public high schools which were divided into 2 districts namely the Pantukan North District and Pantukan South District.

The respondents of this study were the 30 school heads and 200 teachers from the 30 public elementary schools in the district of Pantukan. The number of respondents per school is shown in Table 1 below.

**Table 1**  
**Respondents of the Study**

Name of School	School Heads	Position	Teacher Respondents
Ayan Elementary School	1	School Principal I	7
Bongabong Elementary School	1	School Principal I	7
Doroteo Elementary School	1	School Principal III	7
Lahi Elementary School	1	School Principal I	7
Magnaga Elementary School	1	Asst. School Principal II	6
Tagdangua Elementary School	1	School Principal II	6
Tugop Elementary School	1	School Principal I	7
Araibo Elementary School	1	Head Teacher III	7



Biasong Elementary School	1	Teacher In-charge	6
Binogsayan Elementary School	1	School Principal I	7
Bon Temple Elementary School	1	School Principal I	7
Bongbong Elementary School	1	School Principal III	7
Boringot Elementary School	1	Head Teacher I	7
Diat Elementary School	1	Teacher In-charge	7
Las Arenas Elementary School	1	Teacher III/Teacher Incharge	5
Liniputan Elementary School	1	Teacher In-charge	2
Matiao Elementary School	1	School Principal II	7
Nagas Elementary School	1	Teacher In-charge/MT-II	7
Napnapan Elementary School	1	School Principal I	7
P. Fuentes Elementary School	1	Head Teacher II	7
Piasusuan Elementary School	1	Teacher In-charge	7
Pulang Elementary School	1	Teacher In-charge	7
Sarog Elementary School	1	Head Teacher I	6
Tagugpo Elementary School	1	School Principal II	7
Tapis Elementary School	1	Head Teacher I	7
Araibo National	1	School Principal I	7

High School			
Boringot National High School	1	Head Teacher III	7
Napnapan National High School	1	School Principal III	7
Tagugpo National High School	1	School Principal I	7
Tambongon National High School	1	Head Teacher III	8
<b>TOTAL</b>	<b>30</b>		<b>200</b>

To obtain the important data to answer the problems, a researcher-made survey questionnaire was utilized. There were two types of questionnaires. One was given to the school heads which consisted of two major parts inquiring about ICT background and level of knowledge in using electronic technology and computer programs. The other one was given to the teachers which sought to know the teacher's evaluation on their school head's performance. This questionnaire was adapted from the internet and was modified by the researcher.

The research-made questionnaires were submitted to the adviser for corrections and recommendations to ensure the validity of the questionnaire. After which it was checked by another five validators for further validation and content validity. The comments and recommendations were entirely taken after ensuring the quality and legitimacy of the instrument.

The data in this study were gathered through the following systematized procedures: The first step that was done was to get permission to conduct the study. The researcher sent request letters to the Schools Division Superintendent of Davao De Oro, District Supervisor of Pantukan South District and Pantukan North District, Principal and School Heads of the 30 selected schools to seek permission to conduct the study in their area of responsibility. Upon the approval of the request letters, preparation of the research instrument followed. The researcher prepared the validated questionnaires that were distributed to the teachers and school heads.

The researcher personally went to the selected schools and conducted the survey. A proper explanation of the purpose of the study was done to make it comprehensible to the respondents. Instructions were also given clearly on how to answer the statements in the questionnaires. Moreover, retrieval of the research instruments was done right after its administration.



After the retrieval, collation and tabulation of data were done right away. The data gathered were encoded and submitted to the statistician for statistical treatment. Subsequent to the statistical treatment of the data gathered, analysis and interpretation of the results and findings were also carefully done with regard to the problem raised in the first chapter of this research study.

## RESULT AND DISCUSSIONS

This chapter presents the data and provides analysis and interpretation of the data gathered.

**ICT Background.** Table 2 presents the level of digital literacy of school heads in terms of ICT background.

**Table 2**

**Digital literacy of school heads in terms of ICT background.**

Statements	Mean	Description
1. I have basic knowledge of computers.	3.47	Average
2. I have knowledge about computer terminologies	3.27	Average
3. I understand the technical aspects of computers	3.20	Average
4. I feel secure about the ability to interpret a computer manual	3.30	Average
5. I feel confident about using computers	3.23	Average
6. I know there are different Internet research tools (Google, Yahoo, etc.) available to use.	3.27	Average
7. I can turn on and shutdown a laptop or computer appropriately.	3.57	Excellent
8. I can differentiate a hardware from a software.	3.47	Average
9. I know how to print and photocopy a document in a printer	3.53	Excellent
10. I can name the different parts of a computer.	3.37	Average
11. I can determine the basic functions of each computer hardware.	3.27	Average
12. I understand the difference between closing/minimizing/hiding windows and quitting a program	3.37	Average
13. I know how to start and exit computer programs.	3.37	Average
14. I can name all the storage devices.	3.2	Average

15. I have the knowledge on how to navigate computer programs (Microsoft, Google and WPS programs etc.)	3.47	Average
<b>Overall Weighted Average</b>	<b>3.35</b>	<b>Average</b>

The overall weighted average of the school heads in terms of ICT background obtained an overall weighted average of 3.35. Furthermore, the table also presents two indicators that obtained the highest mean ratings of 3.57 and 3.53, excellent, the school head can turn on and shutdown a laptop or computer appropriately and the school heads know how to print and photocopy a document in a printer respectively. This means that school heads are outstanding and can-do tasks like printing and photocopying documents. The rest of the tasks related to ICT background of the school heads got a mean ranging from 3.2 to 3.47 and have a descriptive equivalent of average. This means that school heads have enough knowledge and skills in these features.

The overall mean is 3.35 with a descriptive equivalent of average. This means that the level of digital literacy of school heads in terms of ICT background is satisfactory as shown in Table 2. This implies that school heads were most familiar and had excellent literacy in just the basic function of the computer which is turning it on and off as well as printing and photocopying documents.

**School heads level of knowledge in using electronic technology and computer programs.** Shown in Table 3 is the level of knowledge in using electronic technology and computer programs.

**Table 3**

**School Heads' Knowledge in Using Electronic Technology and Computer Programs**

Indicators	Mean	Description
1. I can name and rename files/folder in my computer.	3.57	Excellent
2. I can encode document using the Microsoft Word	3.60	Excellent
3. I can use spread sheet using the Microsoft Excel	3.47	Average
4. I can create presentation using the Microsoft Power Point	3.43	Average
5. I can create and edit photos using the Graphics Program	2.63	Average
6. I can do Video Production using Moviemaker	2.49	Below Average



7. I can do virtual meeting/conferencing using online communication platform such as zoom, google meet and others	3.33	Average
8. I can send and receive e-mail using Google mail	3.63	Excellent
9. I can send and attach documents and photos using messenger	3.73	Excellent
10. I can search and collect information from the internet using the web browsers	3.5	Excellent
11. I can download applications using phone or laptop.	3.43	Average
12. I can install application in my phone or laptop.	3.53	Excellent
13. I can download images and videos from the internet	3.63	Excellent
14. I can retrieve lost files in my computer	2.77	Average
15. I can transfer a file from a hard drive to a USB drive.	3.6	Excellent
<b>Overall Weighted Mean</b>	<b>3.48</b>	<b>Average</b>

The level of knowledge of school head in using electronic technology and computer programs shows that the school heads are outstanding when it comes to sending and attaching document and photos using messenger because it has a highest rank with mean of 3.73 and with a descriptive equivalent of excellent. Items that include naming and renaming files/folder in my computer, encoding document using the Microsoft Word, sending and receiving e-mail using Google mail, sending and attaching documents and photos using messenger, searching and collecting information from the internet using the web browsers, installing application in phone or laptop, downloading images and videos from the internet, and transferring a file from a hard drive to a USB drive have the means ranging from 3.5 to 3.63 with a descriptive equivalent of excellent also. This means that school heads are competent enough to perform these tasks.

On the other hand, task of school heads like using of spread sheet or Microsoft Excel, creating presentation using the Microsoft Power Point, creating, and editing photos using the Graphics Program, doing virtual meeting/conferencing using online communication platform such as zoom, google meet and others, downloading applications using phone or laptop, and retrieving lost files in a computer have the mean ranging from 2.63 to 3.47 with a descriptive equivalent of average. This means that school heads have average knowledge and that they are familiar with the task stated.

Lastly, the item with a lowest rank is doing video production using moviemaker with the mean 2.49 with a descriptive equivalent of below average. This means that school heads' knowledge when it comes to video production is fair. It can also observe that school heads have excellent job when it comes to using computer programs but have only average knowledge in the basic computer background. This depicts that school heads know how to use these computer programs but have only minimal idea when it comes to knowing its names and terminologies.

The overall mean is 3.48 with a descriptive equivalent of average. This means that the level of knowledge in using electronic technology and computers is satisfactory as shown in Table 3.

#### Level of School Heads' Performance

This section presents the result to the second statement of the problem that examines the level of school heads performance as measured by their teacher's evaluation.

**Table 4**  
**Teachers' Evaluation to their School Heads**

Indicators	Mean	Description
1. Able to use technology effectively and efficiently whenever it is needed	3.48	Often
2. Engage ICT in providing intervention programs and innovations to teachers for continuous professional growth	3.5	Always
3. Demonstrate awareness of current technology in education	3.4	Often
4. Provide technical assistance to teachers with regards to different ICT teaching and learning, school operations and professional development	3.05	Often
5. Assign teacher-related online task only to teachers	2.85	Often
6. Work on his/her own reports using technology effectively and efficiently without asking help from the teachers	3.5	Always
7. Maintains, complete, and submits all reports online or in hardcopy form and record	3.5	Always





accurately, in a timely and professional manner		
8. Accomplish the school projects in each allotted period	3.6	Always
9. Exhibit virtual/online etiquette and guidelines	3.53	Always
10. Supervise and direct all personnel using messenger, and other online communication apps	3.6	Always
11. Provide sound leadership and management in integrating learning technologies across the curriculum	3.4	Often
12. Work on his/her personal documents on his/her own without bothering the teachers	3.48	Often
13. Attend administrators meetings/conference online capably.	3.6	Always
14. Establishes and maintain effective interpersonal relationships and communication with teachers	3.58	Always
15. Does not rely so much to teachers in terms of accomplishing reports and other required documents	2.75	Often
<b>Overall Weighted Average</b>	<b>3.35</b>	<b>Often</b>

The level of performance of the school heads reveals that accomplishing the school projects in each allotted period, supervising, and directing all personnel using their messenger, and other online communication apps, and attending administrations` meeting/ conference via online capably have the highest rank with the mean of 3.6 with descriptive equivalent of always. Aside from that task like engaging ICT in providing intervention programs and innovations to teachers for continuous professional growth, maintaining, completing, and submitting all reports online or in hardcopy form and record accurately, in a timely and professional manner, exhibiting virtual/online etiquette and guidelines, establishes and maintaining effective interpersonal relationships and communication with teachers have a mean ranging from 3.5 to 3.58 with a descriptive equivalent of always also. This means that the school heads have

excellent performance when it comes to accomplishing the tasks mentioned above. Furthermore, it also shows that duties like using technology effectively and efficiently, demonstrating awareness of current technology in education, providing technical assistance to teachers with regards to different ICT teaching and learning, school operations and professional development, assigning teacher-related online task only to teachers, providing sound leadership and management in integrating learning technologies across the curriculum, working on his/her personal documents on his/her own without bothering the teachers, and not just relying so much to teachers in terms of accomplishing reports and other required documents have the mean ranging from 2.75 to 3.48 with a descriptive equivalent of often wherein the task that has the lowest mean is not relying so much to teachers in terms of accomplishing reports and other required documents . This means that these tasks are often performed by the school heads in their respective schools and that teachers were able to notice it as well.

The overall mean is 3.35 with a descriptive equivalent of often. This means that the level of performance of the school heads as measured by the teacher`s evaluation is satisfactory as shown in Table 3.

#### Summary on the level of Digital Literacy of School Heads and Their Level of Performance

The Summary on the level of digital literacy of school heads in terms of ICT background, level of knowledge in using electronic technology and computer programs and the level of their performance as measured by the teacher`s evaluation is presented in Table 5.

**Table 5**  
**Summary on the level of Digital Literacy of School Heads and Their Level of Performance**

Indicators	Mean	Description	Indicator	Mean	Description
ICT Background	3.35	Average	Teachers` Evaluation	3.35	Often
Knowledge in using electronic technology and computer programs	3.48	Average			
<b>Overall Mean</b>	<b>3.42</b>	<b>Average</b>	<b>Overall Mean</b>	<b>3.35</b>	<b>Often</b>

The level of digital literacy of school heads shows that the highest rank is the level of knowledge in using electronic technology and computer programs with the mean of 3.48 with the descriptive equivalent of average, followed by the level of school heads ICT background with the mean of 3.35 with descriptive equivalent of average.



The overall mean score for is 3.42 posted at with the descriptive equivalent of average. This shows that the level of digital literacy is satisfactory. It can be observed that although computer technology is accessible to the school heads on average as most of them now own laptops but some of the school heads do not know how to manipulate further the devices.

On the other hand, table 4 also shows that teacher's evaluation to their school head has an overall mean of 3.35 with a descriptive equivalent of often. This only means that most of the school heads satisfactorily complied and perform task that involve ICT in managing and supervising their teachers. Moreover, it also depicts behavior of the school heads towards their teachers especially knowing the fact that most school head rely so much on their teacher in accomplishing their own report. It reveals that school heads who have minimal idea on digital literacy tend to assign teachers in accomplishing paper works since most of the reports are submitted in a softcopy or hardcopy form. Thus, providing the school heads with digital literacy development program is highly needed for the school heads to perform ICT related tasks at work.

#### Relationship between Digital Literacy and Teachers Performance

Using excel program is computing the correlation between computer literacy and teacher's performance, Table 6 below presents the relationship between digital literacy and teachers' performance.

**Table 6**

**Relationship between Digital Literacy and Teachers Performance**

	Pearson's r	P-value	Degree of Freedom
School Heads' Digital Literacy	0.967	< .001	SIGNIFICANT STRONG RELATIONSHIP
School Heads Performance			

Correlation was conducted to test the relationship between the school heads' digital literacy and school heads performance. The result reveals that the p-value 0.967 is less than 0.001 which means that there is a strong significant relationship between school heads digital literacy and school heads performance. Looking into the results presented, it appeared that the digital literacy of the school heads influences their performance as evaluated by their teachers. Moreover, the result also shows that there is essential task of the school heads that is not often performed due to lack of digital knowledge and skills. As a result, they rely so much on their teachers when it comes to accomplishing ICT related task works as shown on the data presented in Table 4.

After the data were analyzed and interpreted, the following discussions were made:

1. The level of digital literacy in terms of ICT background of school heads is 3.35, average. The result revealed that the school heads have enough knowledge when it comes to basic ICT background. However, the study also shows that among the 30 school heads there were still few of them who have fair knowledge when it comes to some basic functions of the computer, which means they need trainings on the basic of ICT. Thus, even school heads have excellent remarks when it comes to turning on and off the computer, they still need to learn and go beyond the basic function to effectively accomplish their ICT related tasks and reports in school.

A study proved that ICT in education has become vital in carrying out task in a more convenient way. However, there were still glitches in the implementation of ICT education due to some reasons like lack of ICT knowledge, no resources to be used and resistant to change. Teachers tend to stick to their old way of teaching because they are not familiar with using electronic technologies. Principals were under pressure to understand computer terminology like bytes, gigabytes, RAM, and ROM most specifically understand the software and hardware alternatives when acquiring supplies for their schools. Learning the basics of computers and knowing the ICT terminologies is the key to understand the significance of ICT in education. Through this, educators and administrators feel at ease utilizing technology and realizing its potential applications in education, they can help facilitate and incorporate ICT into the curriculum (Caldwell & Spinks, 2008).

Principals must be able to incorporate ICT into their everyday practices and cater to students' needs and ensure that technology is used effectively and consistently in the teaching-learning process. Principal should technologically pioneer. Hope, Kelly, and Guyden (2000) claim that technological leadership entails both having knowledge of the technology and how to use them to do jobs. An investigation made to administrators' contributions to the use of technology in three American schools' instructional environments districts, Gibson (2002) asserted that school administrators must concentrate their efforts on 10 areas of technology: existing practice, curriculum, resources, challenges, communications, support, staff development, and implementation. Principals must, therefore, have a firsthand understanding of the capabilities of new technology the ability to develop a school culture that stimulates the discovery of new approaches in their application and competency in their use. educating, training, and managing (Schiller, 2003). Schools thus require leaders who can encourage change, approach and assistance for a community learning about integrating technology.

Nowadays, it is not just only important to have computer skills, but it is necessary to all students, professionals, and entrepreneurs to remain competent and confident in this



technological age. At the very least, everyone must have basic computer abilities (Sharma, 2021).

2. The level of digital literacy of school heads in terms of using electronic technology and computer programs is 3.48 or average. The result shows that most school heads have satisfactory knowledge when it comes to computer programs. Having knowledge of the different computer programs is very vital in the work of administrators knowing that all reports and documents submitted in print or through online. Therefore, there is no way to neglect and reject ICT because whether we agree or not, we are already in the computer age where everything is run through technology. Levy (2018) emphasized that even though computer literacy is essential, does not mean that all school administrators need to be computer experts. To improve the standard of their supervision and successfully support their instructors, they should possess certain competencies. These competencies must include the following:; the capacity to read and write basic computer programs; the capacity to use computer programs and documentation that are educational in nature; the capacity to use computer terminologies, especially as it relates to hardware; the capacity to identify educational problems that can and cannot be solved using the computer, the capacity to locate information on computing as it relates to education; the capacity to discuss the moral and human-impact issues as they relate to the societal use of computers as well as the educational use of computers.

In addition to this, it was revealed in the study conducted by Stuart that the ICT proficiency and frequency of use in administrative and instructional activities are high among principals who consider themselves to be technology leaders. The ability to use software and operate a computer effectively really enables school principals to be proficient in the fundamentals of ICT, such as how word processing, spreadsheets, and presentation software work (Attaran & Vanlaar, 2001). Along with that, school leaders must also be familiar with using the internet to connect with their workers and the larger community, since email, messenger, and other communication platforms are used most frequently for communication,

It is important that school heads know and learn how to use new technologies in education. If these school leaders embrace it and understand its benefits for education, then technology adoption in schools is more likely. Anderson and Dexter (2005) suggested that professional development opportunities should be provided for principals to promote their levels of ICT use and to increase their productivity. In fact, effective training programs really assist the principals in learning how to use computers to get information and acquire new skills. Additionally, it aids in the development of decisionmaking and problem-solving procedures that ultimately lead to better accountability. Computer technology proved to be able to markedly improve the role of principals in the educational process. Therefore, it is very

important for principals to know how to use new and existing technologies.

3. The level of school heads' performance according to teachers' evaluation is 3.35, average. The study revealed that the school heads often perform some ICT related tasks and that they rely so much to their teachers in accomplishing those tasks. This may result in workload intensification among teachers that will probably affect their commitment at work. In addition, teachers need to feel that they are being supported by their school heads in the ICT implementation in education. Thus, school heads must also consider digital literacy development training not just for school heads' benefit but also for the good of the institution where he/she is affiliated.

According to Serhan (2007) school principals must understand the real setting of 21st century education. It is no longer limited to the traditional and bookish style where in all the context to be learned by the learners can only be found in the book or teacher.

Hence, principals should play a role in encouraging teachers' ICT use in shaping more meaningful learning. This phenomenon is because principals are the most influential individuals, and the rise of a school organization depends heavily on their hands. Thus, school heads must incorporate ICT in their way of supervising, administrating, and instructing a certain school. School heads are considered as one of the decision makers in school and must ensure that quality education is being served to the clientele. Part of this job is providing the teacher the professional development opportunities to increase their ability through the integration of ICT for formative learning assessment, individual instruction, accessing online resources and for fostering students' interaction and collaboration. Such training in ICT should positively impact teachers' general attitude towards ICT in the classroom but it should also provide specific guidance on ICT teaching and learning within each discipline. Without support from the administration, teachers tend to use ICT for skill-based applications which limit their capability to teach in a wider scope at a very creative way and the proficiency of the teachers in terms of passing the reports will be affected as well. To support teachers as they continue to embrace the new era of education, it is also essential for education managers such as supervisors, principals, and other decision makers to be trained in ICT.

4. There is a significant strong relationship between digital literacy skills of school heads and their performance as school heads. Looking into the results presented, it appeared that the digital literacy of the school heads influences their performance as evaluated by their teachers. Moreover, the result also shows that there is essential task of the school heads that was often perform due to lack of digital knowledge and skills. As a result, they rely so much on teachers when it comes to accomplishing ICT related task works.





This finding is aligned with those of prior findings such as Makewa, Meremo, Role and Role (2016), presenting the school heads' importance of using ICT in school administration. In fact, according to their study it emphasizes the importance of ICT in supervision, instruction, and students' administration that includes influencing and leading the staff to integrate ICT in their ways of teaching. The findings of this study are also supported by other studies and theoretical assumptions emphasizing that the leadership of a school can predict teachers' motivation, dedication, and teaching practice.

## CONCLUSION

Based on the findings of the study, it reveals that there were maximum number of school heads who are already equipped with ICT knowledge however there were also who have only minimal idea with regards to this equipment. The Department of Education provided great number of laptops, desktops and other electronic technology to all schools for the past years that is why school heads have their own ICT equipment for them to use at work. Yet, there were still few of them who were not familiar with the usage of these gadgets. It is true that school heads were already familiar with the basic functions of these ICT equipment however they lack knowledge on how to manipulate further the device especially when it comes to using it in accomplishing reports and other documents needed. According to the result as shown in table 4, school heads were resistant to change and does not want to learn this equipment because they rely most to their teachers in accomplishing ICT related task which may result to workload intensification among teachers, backlogs of projects and reports and learners will be affected as well. As a conclusion, school heads digital literacy definitely influences their performance as school leaders. Thus, providing ICT training program to all school heads and motivating them to embrace change as it is part of their work in leading ICT integration into school teaching.

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