

# School Heads Digital Competency amidst COVID-19 Crisis

Analiza B. Tanghal <sup>1</sup>, Jerwin S. Tanghal <sup>2</sup>

<sup>1</sup> Faculty, Nueva Ecija University of Science and Technology, Philippines

<sup>2</sup> Head Teacher 3, Sto. Niño Elementary School – Deped Cabanatuan City

## Abstract

The school head plays a vital role in school, education and learning processes. A well-informed school leader with a vision will work hard to find a solution to the many challenges or problems that their school faces. This study focuses on the digital competency of school principals in the Cabanatuan City Division during the first quarter of the 2020–21 school year. Profiles of school principals included variables such as age, gender, years of service, position and educational attainment. The Jeong-Bae Son questionnaire was modified and used in this study to assess the digital competency of school principals. According to the findings, school leaders from various backgrounds are digitally competent. That their competence was beneficial to the school and the entire school community, and that it was very important in carrying out the duties of a school principal. As recommended by this study, school principals should expand their digital competency training and skill set. As a result, they must continue to develop provisions that will provide teachers with opportunities to improve their digital technology skills.

**Keywords:** School Head, Digital Competency, Technological Skills

## 1. Context and Rationale

The school head plays a vital role in school, education and learning processes. A well-informed school head who has vision, will strive to find solution to the many challenges or problems encountered at their school.

Effective management of the school lies squarely on the school head; whose main task is to implement education policies. The school head should be aware of the education system goals that are to be achieved based on teaching and learning. The school is a place where the students are expected to learn.

Digital literacy requires certain skill sets that are interdisciplinary in nature. Warschauer and Matuchniak (2010) list three skill sets, or [21st century skills](#) that individuals need to master in order to be digitally literate: information, media, and technology; learning and innovation skills; and life and career skills. Avira *et al.* assert that in order to be competent in Life and Career Skills, it is also necessary to be able to exercise flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility. Digital literacy is composed of different literacies, because of this fact that there is no need to search for similarities and differences. Some of these literacies are media literacy and information literacy.

Aviram & Eshet-Alkalai (2010) contend that there are five types of literacies that are encompassed in the umbrella term that is digital literacy: Photo-visual literacy: the ability to read and deduce information from visuals. Reproduction literacy: the ability to use digital technology to create a new piece of work or combine existing pieces of work together to make it your own. Branching literacy: the ability to successfully navigate in the non-linear medium of digital space. Formation literacy: the ability to search, locate, assess and critically evaluate information found on the web and on-shelf in libraries, and Socio-emotional literacy: the social and emotional aspects of being present online, whether it may be through socializing, and collaborating, or simply consuming content.

Today, the said roles, functions and duties as school head is not easy to do because of the COVID-19 pandemic which is the global problem of the educational leaders. It is not easy to conduct meetings, seminar, trainings and workshop to help and enhance the ability of teachers and provide technical assistance in order to ensure the delivery of the quality education to learners.

Philippines is one of the third world country. Maybe, the digital competence of the school head in our country is not better compare to other country. Now, it is a big challenge to the school head to run the school using the digital world.

According to President Rodrigo R. Duterte, “face to face is not possible until we have vaccine”. As a school, they need to improve or enhance their digital skills because of the new normal. The school will not stop because of the pandemic. It needs to operate and run the school even in the digital way or process, and not compromise the health and safety of teaching and non-teaching personnel in the school.

According to Kelly and Guyden (2000) school head must be a technology leader. It involves both understanding the technologies and how they can be applied to accomplishing tasks. Furthermore, Gibson (2002) stated that school principals must focus their energies on ten technology categories: existing practice, planning, curriculum, resources, staff issues, communications, support, obstacles, staff development, and implementation. In this way, principals need to understand the capacities of the new technologies, to have a personal proficiency in their use, and be able to promote a school culture which encourages exploration of new techniques in teaching, learning and management.

The main purpose of this study is to determine the digital competency of the school heads in the Division of Cabanatuan City. The result of the study will help our administrator to organized and conduct interventions to address the problems faces by the school heads in terms of digital competencies.

## 2. Review of Related Literature

Digital competency plays very important role to teachers and specially to all school heads. Being digital literate will help the school head to communicate, make a report and do important functions as instructional leader and school manager.

According to Adeyemon, (2009) Digital competence is the most recent concept describing technology-related skills. During the recent years, several terms have been used to describe the skills and

competence of using digital technologies, such as ICT skills, technology skills, information technology skills, 21st century skills, information literacy, digital literacy, and digital skills. These terms are also often used as synonyms; e.g. digital competence and digital literacy

Moreover, Krumsvik, (2008) digital competency are narrow to internet skills, referring only to a limited area of digital technology, and some of them widen the content to media and literacy, e.g., media literacy skills or digital literacy. In addition, Weigel as cited by David (2015) investigated the necessary digital skills through participatory cultures; they speak about 21st century literacy, emphasizing social skills instead of individual skills.

According to Prof. Eshet, as cited by Reyes (2013) "Digital literacy is the ability of users to operate digital environments (such as the computer, digital camera, modern car) intuitively the performance of subjects from different age groups was tested in specific tasks that required the utilization of these specific skills. He revealed his study in the three groups were 20 high school students aged 15-16; 20 university students aged from 20-28; and 20 adults aged 30-40, who had B.A. degrees. They were asked, for example, to decipher software they had never seen before, in a test of photo-visual skills and to critically evaluate the same piece of news that was published in a number of different internet news sources in a test of information literacy. Results indicate that digital literacy is not equally shared among all age groups. Though the young participants performed better in the photo-visual and lateral tasks, they were much worse than the adults in the more cognitively demanding tasks of reproduction and information thinking skills

Digital literacy is a concept that is discussed in different contexts – for example, in education or information studies – and has acquired different nuances, according to various viewpoints. In an article written at the beginning of this century, Bawden connected digital literacy with the competences to read and understand hypertextual and multimedia texts. He stated that information literacy and digital literacy were central issues for lifelong learning, knowledge management, and the growth of the information society. More recently, in a review of the concept, Littlejohn, Beetham, and McGill described digital literacy as “the capabilities required to thrive in and beyond education, in an age when digital forms of information and communication predominate”. The definitions proposed by ALA (2011) in the context of documentation and information sciences and by Future lab (2009), with a focus on education, also offer a special relevance. As expressed by ALA, digital literacy involves the competence not only to use technologies appropriately, namely to communicate and collaborate with peers and colleagues, but also to understand the relationship between technology and lifelong learning. The implications for the school context and for school leaders concerning their role on the integration of technologies in teaching and learning are significant because it puts attention on the social dimensions of digital literacy and on the importance of a long-term perspective.

Digital literacy is linked with critical thinking and we have to consider that it is an essential life skill in the actual circumstances where the digital environment enlarges its sphere of influence. Taking into account these new challenges, Future lab claims that “learners and teachers need to make sense of how technologies can be used within subjects and to understand how such technologies affect what we know about those subjects.” With this perspective in mind, the authors affirm that digital literacy means “knowing how technology and media affect the ways in which we go about finding things out,

communicating with one another, and gaining knowledge and understanding”. They consider that it is important to understand “how technologies and media can shape and influence the ways in which school subjects can be taught and learnt”. In this context digital literacy is a decisive element for schools and a determining factor for those who work in education.

### 3. Theoretical / Conceptual Framework

This study is anchored on two theories such as theory of social cognitive and social learning.

The theory of social cognitive was proposed by Albert Bandura. Human can learn everything by using observations. They can learn without limitations even they have no theoretical knowledge on the things that they observed. People learn by observing others, with the environment and peers.

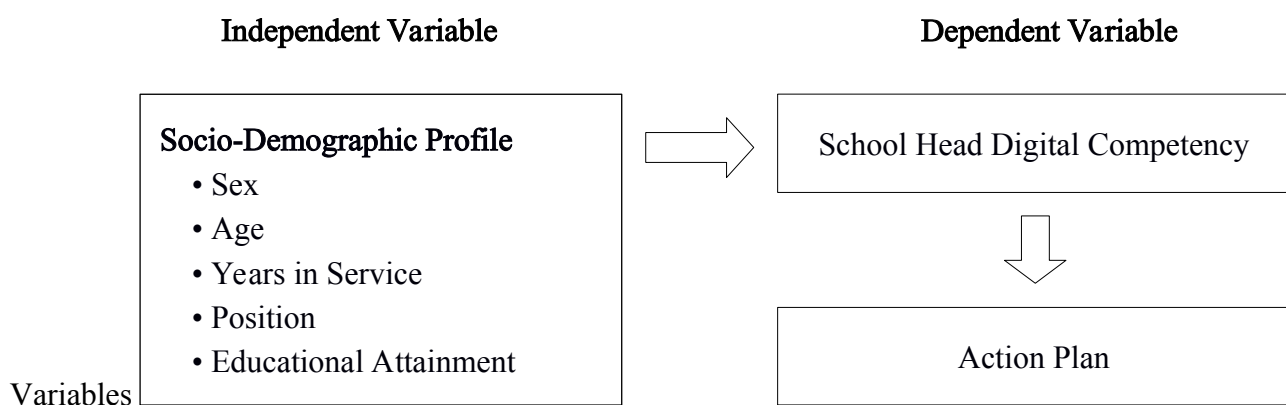
Social learning theory shows that people learn from the social context and by interaction from others like peers, teachers and other experts (Vygotsky 1962). Teachers can create a learning environment that can develop social interaction through discussion, collaboration and feedback.

The two theories support this study that the individual digital competency of school head is greatly influenced by the environment.

Figure 1 illustrates the conceptual paradigm showing the independent and dependent variables. The independent variable is the socio-demographic characteristics such as sex, age, years in service, position and educational attainment. The dependent variable is the digital competency of the school head.

#### Conceptual Paradigm

Figure 1. The Conceptual Model Showing the Relationship between the Independent and Dependent



### 4. Research Question

In general, this action research aims to address the digital competency of school heads amidst COVID-19 crisis.

In particular, it answers the following questions:

1. How may the socio-demographic profile of the school head be described in terms of:
  - 1.1 Sex

- 1.2 Age
- 1.3 Years in Service
- 1.4 Position
- 1.5 Educational Attainment
2. How may the digital competency of the school heads be described?
3. Is there a significant relationship between the socio-demographic profile and the digital competency of the school head respondents?
4. What recommendations are possible based on the findings of this study?

## 5. Hypothesis

Based on the statement of the problem, the following hypothesis is tested in the study:

1. There is no significant relationship between the socio-demographic profile and the digital competency of the school head respondents.

## 6. Significance of the Study

The research is significant to the following:

**School Administrators** – The findings of the research can be a basis to improve the digital competency of school head in the light of COVID-19 pandemic.

**Division Human Resource Development** – The result of study will help to plan a program to train school heads in using the digital platform in conducting doing their job as a school manager.

**Future Researchers** – The study is a reference for those who wish to conduct similar or the same study in the future.

## 7. Scope and Limitation

This study covers the digital competency of school heads in the Division of Cabanatuan City during the first quarter, school year 2020-2021. The respondents of this study are the elementary school heads of the Division of Cabanatuan.

School head respondents' profile consisted of variables such as their age, gender, years in service, position and educational attainment. Jeong-Bae Son questionnaire was adapted and used in this study in identifying the digital competency of the school heads.

## 8. Type of Research

This study is a one-group quantitative descriptive type of research which is primarily anchored from using online and internet based platforms in gathering data.

The descriptive method of research was used. The questionnaire as the main tool in gathering data.

Descriptive research is the purposive process of gathering, classifying, analyzing and tabulating data about prevailing conditions, practices and cause and effect relationship and then making accurate interpretation about such data with the aid of statistical method (J. F. Calderon 1993).

## 9. Respondents

There are a total of 50 selected elementary school heads participating in this research. The table below shows the distribution of the respondents who are assigned in the different district.

Table 1: School Respondents in the Study

District	Male	Female	Total
1	0	4	4
2	1	6	7
3	1	3	4
4	1	4	5
5	1	3	7
6	2	5	7
7	1	4	5
8	4	3	7
9	0	4	6
10	1	2	6
<b>Total</b>	<b>12</b>	<b>38</b>	<b>50</b>

## 10. Sampling Method

The sampling used in this study is purposive technique. As the topic of the research has singled out the school head as main subjects of the study, it was therefore proper to utilize the purposive approach. Purposive sampling is one way of achieving a manageable amount of data in a qualitative research (Ames, Glenton & Lewin (2019).

## 11. Instrument

In gathering data for this study, the researcher employed the questionnaire checklist by using Google Form as a tool to answer questions and yield to the desired results when properly and honestly filled up by the respondents.

Part 1 of the question solicited data as regards to the socio-demographic characteristic of the school head respondents.

Part 2 of the questionnaire contains the level of digital competency of the school heads:

- Beginner
- Basic
- Advance

The verbal descriptions of the arbitrary numerical guide: 1.00 – 1.75 – beginner, 1.76 – 2.25 – basic, and 2.26 – 3.00 – advance.

## **12. Proposed Innovation / Strategies / Intervention**

The proposed intervention/innovation in improving the digital skills of the school head is to create a simple manual/module which simplified and easy to understand. The module is composing of step by step process on how to use different important digital platforms like, Zoom, Google Meet, Google Forms, Google Drive and etc. The said intervention/innovation is anchored by the Total Person Experiential Learning framework where the individual learns through the cycle of four fundamental components such as concept, activity, reflection and integration.

This intervention will be done after the conduct of the study. It will serve as basis of the researcher on what particular digital platforms that the school head needed to learn.

## **13. Data Collection Procedure**

A letter of request to conduct the study is send to the Office of the School Division Superintendent of the Division of Cabanatuan City, Department of Education through the public elementary school head.

The researcher is personally administering the questionnaire to the school head respondents through online platforms of Google Form. When the questionnaires were collected, the researcher tallied and analyzed.

## **14. Ethical Considerations**

For the sake of the participants, complete secrecy of the personal data of the survey respondents maintained. Furthermore, only the PSDS will know and will be well-informed about the study and that of the results. Furthermore, the survey will not affect the administrative and supervision performance of the respondents.

## **15. Data Analysis**

The data of the study used descriptive analysis using statistical tools like mean/average, weighted means, percentages, and frequencies to described the demographic characteristics and the digital competence of the respondents.

Pearson Product Moment Correlation was used to test for the significant relationships among the socio-demographic characteristics and the digital competency of the school head respondents.

Analysis was conducted using Statistical Package for Social Sciences (SPSS). The level of significance was set at 0.05 level of significance.

## **16. Results and Discussions**

This chapter present the results and discussions of the study which are based on the problems undertaken.

### **A. The Profile of the Participants**

#### **A.1 Age of School Heads**

Results of the age of respondents were presented below.

Table 3: Distribution of Age of Respondents

Age	Frequency	Percentage
21 - 30	0	0
31 - 40	4	8
41 - 50	19	38
51 - 60	26	52
61 and above	1	2
<b>Total</b>	<b>50</b>	<b>100</b>

Table 3 shows that school heads whose age is within 31 - 60 are the most in numbers with 26 (52%). On the other hand, no one from among the respondents is aged 30 years and below. Results showed that the majority of the respondents are between 51 to 60 years age. Such finding is similar to what Mangulabnan, & Vargas (2021) found in their survey of school head leadership style in Central Luzon where “the age of the respondents ranged from 51 to 64 with a mean of 55.30 years old and a standard deviation of 3.46 years”.

Further, these figures tell us that school heads are most likely in their early old age. This denotes the level of maturity in reference to age that can be considered apt and parallel to their being managers of the school (Guiab & Gamal, 2014). The age of participants in this study also implies that they still have about a decade prior to retiring from work. This can further mean they were already familiar with the profession and system, as well as how to communicate with fellow school heads and teacher.

## A.2 Gender of School Heads

Table 4: Distribution of Gender of School Heads

Sex	Frequency	Percentage
Male	12	24
Female	38	76
<b>Total</b>	<b>50</b>	<b>100</b>

Table 4 shows that there were 38 (76%) female school heads and there were 12 (24%) male school heads who responded to the survey. Results revealed that there were more female school heads than male counterpart. This finding is similar to what Shaked, Glanz and Gross (2018) found in their study about gender differences among school heads. Authors have identified that there were 63% female school heads and 37% of school heads were male. Locally, the proportion in terms of sex distribution among school heads is either equal or the female getting the higher numbers more than the male counterpart (Panganiban, 2018).

In terms of numbers, the statistics on the gender of the respondents reveal even more inequality. The importance of recognizing multi-gender roles in school settings was deemed a necessary development in the 21st century human development track, as the country's educational system has intact rules and



policies on gender equality. This finding leads to feminism of leadership, where the significance of recognizing multi-gender roles in school setting was deemed a necessary development in the 21st century human development track (Gustafson, 2018).

Furthermore, gender equality is gaining traction in the Philippines, despite the country's history of being a masochistic and gender-biased society. In fact, the gender and development elements of all government agencies' legislation have already had an impact on all social structures. As a result, progressing toward empowering women, who have historically been underserved in terms of authority and influence, can be considered a key aspect in running the school and, at the same time, influencing the literacy of younger generations in the school. The latter ideas require additional research to prove their scientific legitimacy. Surprisingly, the female gender has the ability to control the communication process.

### A.3 Civil Status of School Heads

Table 5: Distribution of School Heads Civil Status

Highest Educational Attainment	Frequency	Percentage
Bachelor degree with units in MA	7	14
MA Graduate	17	34
With PHD Units	14	28
Doctoral Graduate	12	24
<b>Total</b>	<b>50</b>	<b>100</b>

Table 5 shows that there were 46 (92%) married school head and there was 3 (6%) who were single. There was also one (1) school head who is separated. Results revealed that almost all of the school heads were married.

The majority of the participants are married, according to the results. This finding is consistent with Mangulabnan, Dela Rosa, and Vargas's findings on conflict management strategies of school administrators in Central Luzon, Philippines (Mangulabnan, Dela Rosa, and Vargas, 2021). Domingo & Salva (2021) observed similar results in their study, where all of their respondents were married. Married school leaders were found to face greater difficulties in managing their schools in the areas of financial and communications with colleagues (Wise, 2015). Perhaps the epidemic has exacerbated these difficulties, given the unpleasant predicament of prioritizing family, work, and personal life, as influenced by societal rules. However, it can be argued that communication concerns would be much simpler and very accessible given to the availability of various norms of communicating.

### A.4 Highest Educational Attainment

Table 6: Distribution of Highest Educational Attainment of School Heads

Civil Status	Frequency	Percentage
Single	3	6
Married	46	92

Separated	1	2
<b>Total</b>	<b>50</b>	<b>100</b>

Table 6 shows that majority of the school heads are master's degree graduate as the highest educational attainment with 17 (34%) in numbers. The lowest in the educational attainment was bachelor's degree with units in masters. with 7 (14%) in number. Results showed that majority of the school heads have master's degree.

Results showed that majority of the school heads have already earned their master's degree program while there were only seven among them who has to complete their masters. The reset was either doctoral degree holder or currently taking their doctoral degree courses. These finding was similar to what Castaño & Litao (2021) found in their study of school heads in Metro Manila. In their research, majority have completed at least Master's Degree.

From the findings, two arguments can be established. First, post graduate studies like doctoral degree are pursued despite of the rigor and more difficulty requirements to succeed. Second, educational attainment is a significant component for promotion was those who are already in the position would like to further improve their rank.

In relation to digital competency, those who have higher degrees were more likely to easily learn and be competent due to their continuous exposure to learning.

#### A.5 Rank and Designation of School Heads

Results of the rank and designation of the school heads are presented below:

Table 7: Distribution of the Rank and Designation of School Heads

Highest Educational Attainment	Frequency	Percentage
Master Teacher 1	1	2
Head Teacher 1	3	6
Head Teacher 2	7	14
Principal 1	28	56
Principal 2	13	26
Principal 3	1	2
Principal 4	1	2
<b>Total</b>	<b>50</b>	<b>100</b>

Table 7 shows that most of the school heads have a rank of Principal 1 represented by 28 (56%) of the participants. Principal 3, Principal 4 and Master Teacher 1 were the lowest in number with 1 (2%) of the total number of respondents being represented respectively. Results showed that majority of the school heads in the Division of Cabanatuan City has a rank of Principal 1.

This ranking and designation of the school heads are normally inclined to the classification of the school as being practiced by DepEd. For instance, there is only one school in the division that is requiring a Principal 4 rank for its head. Therefore, even if the other principals would want to progress in their rank, the chance of being designated would be slim and limited.

### A.6 Years in Service

The results of the year in service of the school heads are presented below:

Table 8: Distribution of School Heads Years in Service

Years in Service	Frequency	Percentage
0 - 10	3	6
11 - 20	9	18
21 - 30	32	64
31 and above	6	12
<b>Total</b>	<b>50</b>	<b>100</b>

Table 8 shows that there 32 (64%) of respondents who have been in the service between 11 to 20 years. On the other hand, there were 3 (6%) of them who have just rendered between 0 (Zero) to 10 years as school heads.

Results revealed that majority of the school heads has been delegated as school head for more than ten years and less than 20 years. While it was also found that very few were new in the service. This means that attrition rate was low in terms of the school head position. Attrition rate could mean voluntary separation or mandatory separation due to retirement. It can also be noted that most of the participants has started being school head during the time that the K to 12 was adapted by the government. Consistently, the transition in the curriculum has required expansions in terms of school, thus requiring additional number of school heads to be assigned.

### B. School Heads Digital Competency

The competency of school heads was assessed using an assessment tool with a total of 40 items distributed randomly as delimited without identifying categories and n the specifications as per digital competence.

In interpreting the results, below was used to identify the mean range and be assigned with verbal descriptor.

Mean Range	Rating	Verbal Description
1.00 - 1.75	1	Beginner
1.76 - 2.25	2	Basic
2.26 - 3.00	3	Advance

Table 8: Mean Distribution of School Heads' Digital Competency

INDICATOR	Mean	Verbal Description
1. Basic functions of a computer.	2.56	Advanced
2. Hardware components of a computer and other digital gadgets	2.32	Advanced
3. Software tools installed in a computer or gadget	2.22	Basic
4. Specifications of digital gadget like RAM, hard drive, memory	2.10	Basic
5. Office applications such as Word, Excel, PowerPoint, etc.	2.66	Advanced
6. Functions of a printer and its parts	2.2	Basic
7. Appropriateness of computer applications in reference to a task	2.5	Advanced
8. World Wide Web, browsing, navigating, surfing, etc.	2.6	Advanced
9. Basic terminologies like save, delete, copy, paste, send, download, upload, etc	2.2	Basic
10. Copyright infringement, plagiarism, cyber laws, etc.	2.56	Advanced
11. Skills in Utilizing Digital Technology	2.42	Advanced
12. Turning on and shutting down a computer	2.59	Advanced
13. Starting and exiting a computer program	2.14	Basic
14. Changing monitor brightness and contrast	2.94	Advanced
15. Minimize, maximize and move windows on the desktop	2.78	Advanced
16. Perform file management including deleting and renaming files, etc	2.64	Advanced
17. Use a 'search' command to locate a file	2.72	Advanced
18. Install a software program	2.76	Advanced
19. Scan disks for viruses	2.78	Advanced
20. Move a file from a hard drive to a USB drive	2.24	Advanced
21. Resize or crop a photograph	2.28	Advanced
22. Record and edit sounds	2.56	Advanced
23. Print a document using a printer	2.92	Advanced
24. Create a basic Word document	2.74	Advanced
25. Copy, cut and paste text in a document	2.7	Advanced
26. Change font style and size in a document	2.78	Advanced
27. Create a basic Excel spreadsheet	2.87	Advanced
28. Create a simple database using Access	2.76	Advanced
29. Create a simple presentation using PowerPoint	2.8	Advanced
30. Create a simple Web page	2.57	Advanced
31. Send and receive attachments through e-mail messages	2.89	Advanced
32. Search for information online using a Web search engine	2.89	Advanced
33. Use a video conferencing tool on the Web	2.68	Advanced
34. Download and save files from the Web (e.g., text, graphic, PDF files)	2.75	Advanced
35. Manage video conference/webinars/virtual meeting using zoom	2.57	Advanced
36. Manage video conference/webinars/virtual meeting using google meet	2.88	Advanced
37. Manage video conference/webinars/virtual meeting using Microsoft teams	2.67	Advanced
38. Upload and download google sheet, google docs and google slides	2.78	Advanced
39. Create a google form	2.57	Advanced
40. Create and share google link (google sheet, google docs, google slides and google form)	2.76	Advanced
<b>AVERAGED WEIGHTED MEAN</b>	<b>2.56</b>	<b>Advanced</b>

Table 8 shows the assessment of school heads as per their digital competency. The Averaged Weighted Mean was 2.56 which was verbally described as Advance. As per the items, total of 35 items were rated as Advanced as compare to 5 statements which were beginner. as basic, none of the items were assessed as beginner.

Results revealed that the school heads have an advanced digital competency as manifested in 35 items being rated as such. On the other hand, it was discovered that teachers have basic competency in terms

of installing software, RAM specification of computer, parts and functions of the printer, terminologies like delete, paste among others.

This finding was somehow contrary to reality. Common to all, the said items with basic rating were ordinary activities that a school head encounters each day. It could be that the school heads wanted to learn more. Or, on the other hand, it could be that those activities were delegated to administrative staff or technical support in the office, delimiting the school heads to perform the tasks by themselves.

### C. Correlations of Profile of School Heads and their Digital Competency

To further determine the digital competency of teachers, the correlations of their profile and with their digital competency was dealt using Analysis of Variance or ANNOVA. Results are presented below:

Table 9: Significant Relations of Profile and Digital Competency

		DIGITAL COMPETENC
Age	Correlation Coefficient	-0.088
	Sig. (2-tailed)	0.287
	N	148
Sex	Correlation Coefficient	-0.136
	Sig. (2-tailed)	0.098
	N	148
CStat	Correlation Coefficient	.201*
	Sig. (2-tailed)	0.015
	N	148
EducAtt	Correlation Coefficient	0.098
	Sig. (2-tailed)	0.234
	N	148
Rank / Designation	Correlation Coefficient	0.023
	Sig. (2-tailed)	0.784
	N	148
Years In Service	Correlation Coefficient	-.216**
	Sig. (2-tailed)	0.008
	N	148
RegHealthScreen	Correlation Coefficient	-0.147
	Sig. (2-tailed)	0.074
	N	148

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 9 shows the significant correlations of the profile of the respondents and the digital competency. Findings are as following:

Civil status was positively correlated with digital technology ( $r = -0.201$ ). This meant that the married school heads were more advanced when it comes to their competency in digital technology. Perhaps, the school heads have immediate significant others to whom they can right away

Years in service was negatively correlated with coping mechanism as to emotional-oriented coping ( $r = -0.388$ ). This meant that the shorter the age the respondents have the better the coping mechanism as to emotional-oriented. The hypothesis of no significant relationship is rejected. This means that school heads that are younger are likely to have a better coping skills management as per emotional-related perspective.

## 17. Summary, Conclusions and Recommendations

### Summary

The pandemic has challenged everyone including those who are in the educational sector. The shift to online learning and work from home activities prompted the school heads to gear up with the use of digital technology as part of embracing the new normal. This study has sought to assess the digital competency of all school heads of the Division of Cabanatuan City and eventually provide them with intervention that would make them more knowledgeable and skills.

A total of 50 school heads have participated in the research by providing information about themselves and their assessment of their own digital competency. A survey tool checklist was administered to achieve this goal. Results revealed that the school heads belong to early adult stage of age such as 51 to 60. In terms of gender, majority were female and were married. In terms of their educational attainment, majority of them have completed masters' degree and the next majority were already in doctoral studies, and some were done with it. IN terms of their ran, majority were principal 1 with not less than 10 years of serving the education sector as school head.

In terms of their assessment of digital competency, it was found that 35 items were rated as advanced as compared to only 4 items which were rated as basic.

In terms of relations of the profile to digital technology, only the civil status and years in teaching were found correlated. This suggested that school heads who were married were more digitally competent and those who have stayed longer in the organization were also competent.

### Conclusion

Based on the findings, the following conclusions are made:

1. The school heads coming from different backgrounds were found to be digitally competent.
2. That their competency was beneficial to the school and the entire school community.
3. That the digital competency was very significant in carrying out the tasks of a school head.
4. That additional intervention strategies be conducted for enriching the competency of school heads.

### Recommendations

Based on the proceedings of the research, the following are hereby recommended:

1. The school heads have to further attend training and skill capability in terms of their digital competency.
2. The educational leaders should continue to craft provisions that will provide the teachers with opportunities for digital technology enhancement.
3. That the government has to be updated and sincere in providing digital gadgets to the school heads.

## References

1. Earnestine Adeyemon (2009). Integrating Digital Literacies into Outreach Services for Underserved Youth Populations. *The Reference Librarian*, 50 (1), 85–98.  
<https://doi.org/10.1080/02763870802546423>
2. Ames H. M., Glenton C., Lewin S. (2017). Parents' and informal caregivers' views and experiences of communication about routine childhood vaccination: a synthesis of qualitative evidence. *Cochrane Library*. <https://doi.org/10.1002/14651858.CD011787.pub2>
3. Aviram R., Eshet-Alkalai Y. (2006). Towards a theory of digital literacy: Three scenarios for the next steps. *European Journal of Open, Distance E-Learning*. <https://old.eurodl.org/?p=archives&year=2006&halfyear=1&article=223>
4. Castaño K. M. N, Litao R. A. (2021). Reflective Inquiry Practices of Instructional Leaders in Public Schools in Manila, Philippines. *GATR Global J. Bus. Soc. Sci. Review*, 9 (1), 10 – 22.  
[https://doi.org/10.35609/gjbssr.2021.9.1\(2\)](https://doi.org/10.35609/gjbssr.2021.9.1(2))
5. Gibson I. W. (2002). PT3 and T3L—Teaching tomorrow's technology leaders: Preparing school leaders to use technology. *Proceedings of SITE 2002: Society for Information Technology & Teacher Education International Conference*. Nashville, Tennessee, USA
6. Haim Shaked, Jeffrey Glanz, Zehavit Gross. (2018). Gender differences in instructional leadership: how male and female principals perform their instructional leadership role. *School Leadership & Management*, 38 (4), 417-434. <https://doi.org/10.1080/13632434.2018.1427569>
7. Kelly B., Guyden J. (2000). Technology Standards for School Administrators: Implications for Administrator Preparation Programs. *Proceedings of SITE 2000: Society for Information Technology & Teacher Education International Conference*, Waynesville, North Carolina, USA
8. Krumsvik R. (2008). The emerging digital literacy among teachers in Norway (The story of one digital literate teacher). In R. Kobayashi (Ed.), *New Educational Technology*, New York: Nova Science, 105–125
9. Beverly Mangulabnan, Rhodora Dela Rosa, Danilo Vargas. (2021). Transformational Leadership Styles of School Principals in Central Luzon, Philippines, <https://doi.org/10.2139/ssrn.3804879>
10. Panganiban A. C. (2018). Practices and techniques of school heads of region IV-A (CALABARZON) in influencing people: Towards school leader program/course design. *KnE Social Sciences*, 4th International Research Conference on Higher Education. 98–117.  
<https://doi.org/10.18502/kss.v3i6.2376>
11. Warschauer M., Ware P. (2008). Learning, change, and power: Competing frames of technology and literacy. In J. Coiro, M. Knobel, C. Lankshear, D. J. Leu (Eds.), *Handbook of research on new literacies*, New York: Lawrence Erlbaum, 215–240