

# DIGITAL LEADERSHIP OF SCHOOL HEADS AND DIGITAL CITIZENSHIP SELF-EFFICACY OF TEACHERS

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**Abstract:** This study is aimed to find out the relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers. This study utilized the non-experimental quantitative research design using descriptive technique involving teachers in Davao Occidental Division, Philippines. The study was conducted on the second semester of School Year 2025-2026. Research instruments on digital leadership of school heads and digital citizenship self-efficacy of teachers were used as source of data. Using mean and pearson-r as statistical tools to treat the data, the study showed the following results: The study found to exhibit a high level of digital leadership of school heads. This means that the provisions relating to digital leadership of school heads is oftentimes observed. The study revealed a high level of digital citizenship self-efficacy of teachers. This indicates that the provisions relating to digital citizenship self-efficacy of teachers are embodied in the item is oftentimes observed. The results of the study also confirm that there is a significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers. This implies that the higher the digital leadership of school heads, the higher is the digital citizenship self-efficacy of teachers. Thus, the null hypothesis of no significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers was rejected.

**Keywords:** digital leadership of school heads, digital citizenship self-efficacy of teachers, school administration and supervision, quantitative research.

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## I. INTRODUCTION

Digital citizenship self-efficacy refers to a teacher's confidence in their ability to teach, model, and promote responsible, ethical, and effective use of digital technologies among students. It blends two key concepts: digital citizenship and self-efficacy. This promotes responsible digital behavior in students as teachers with strong self-efficacy can better educate students to recognize fake news and misinformation, respect intellectual property, interact respectfully online, and use social media wisely (Connolly & Miller, 2022).

In as much as education setting transformed into digital environment, some teachers need skills to better teach students utilizing online platforms. In Lebanon and surrounding Arab region, a study examining Lebanese educators found that nearly all teachers rated their ability to teach digital citizenship below 5 out of 10, with most scoring far lower. Teachers attributed their low self-efficacy to several key factors: lack of knowledge as many were only familiar with cyberbullying and unaware of broader digital citizenship components such as privacy, identity, digital footprint. There is also insufficient training to teachers which means there is no professional development around digital citizenship was available. Additionally, there is a limited authority as teachers felt powerless to manage students' digital behaviors, especially outside

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school, including time constraints since the packed curriculum left little room for integrating digital citizenship topics (Aldosari, Aldaihan & Alhassan, 2020).

In the Philippine setting, a study involving 154 elementary school teachers in Sumilao and Impasug-ong, Bukidnon, found that digital self-efficacy skills are moderate, especially in familiarity with digital terms and literacy and teachers still need to improve in problem-solving and learning skills. A gaps persist in elementary teachers, especially in rural areas who face challenges with digital terminology and broader digital knowledge as well as media creation and higher-level digital literacy skills also need strengthening. This indicates a clear gap in both preparedness and support for educators tasked with fostering digital responsibility in students (Lloren & Chavez, 2025).

In the local context, teachers especially ages 50 and above have double time to keep up with the need to upgrade their digital citizenship skills. As the department embrace utilization of online and other digital learning formats, these teachers find navigating the platform quite challenging. It takes them time to follow the interface of the various digital formats and how much more in integrating it in instruction. Hence, the digital leadership of school heads is seen to help address this growing concern.

This study seeks to underscore the relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers to ascertain the relationship between the two variables. Today, the researcher has rarely come across with a study on the study regarding these two variables. It is in this context that the researcher prompted to conduct this study to address population or sample gap.

## II. BODY OF ARTICLE

### Statement of the Problem

This study is aimed to find out the relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers. Specifically, this study sought to answer the following objectives:

1. What is the level of digital leadership of school heads in terms of:
  - 1.1 Strong Digital Literacy Skills;
  - 1.2 Growth and Experimental Mindset;
  - 1.3 Ability to Foster Collaboration;
  - 1.4 Ability to Promote a Digital Culture, and
  - 1.5 Ability to Demonstrate Digital Adaptiveness and Resilience?
2. What is the level of digital citizenship self-efficacy of teachers in terms of:
  - 2.1 General Self-Efficacy;
  - 2.2 Applying Self-Efficacy;
  - 2.3 Critical Perspective, and
  - 2.4 Networking Agency?
3. Is there a significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers?

### Hypothesis

Ho1. There is no significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers.

## III. METHODOLOGY

**Research Design**

This study employed non-experimental quantitative research design utilizing correlational technique. A substantial proportion of quantitative educational research is non-experimental because many important variables of interest are not manipulable. Because non-experimental research is an important methodology employed by many researchers, it is essential to use a classification system of non-experimental methods highly descriptive of what we do, and which also allows us to communicate effectively in an interdisciplinary research environment.

Correlational research designs evaluate the nature and degree of association between two naturally occurring variables (Johnson, 2012). This study will find out the significance of the relationship between digital leadership of school heads and digital citizenship self-efficacy of teacher.

**Statistical Treatment**

The following statistical tools were used in the analysis of data.

**Mean.** This was used to determine the level of digital leadership of school heads and digital citizenship self-efficacy of teacher.

**Pearson r.** This was used to determine the significance of the relationship between digital leadership of school heads and digital citizenship self-efficacy of teacher.

**IV. RESULTS AND DISCUSSION**

**Level of Digital Leadership of School Heads**

Shown in Table 1 is the level of digital leadership of school heads with an overall mean of 4.11 with a descriptive equivalent of very high indicating that all enumerated indicators were oftentimes observed. The overall mean was the result obtained from the mean of the indicators for the specific items from the questionnaire intended for this particular indicator which was appended in this study.

Among the enumerated indicators, ability to promote a digital culture, has the highest mean rating with a mean score of 3.78 or high, ability to foster collaboration, 3.68 or high, growth and experimental mindset, 3.64 or high, strong digital literacy skills, 3.62 or high, and ability to demonstrate digital adaptiveness and resilience, 3.62 or high.

**Table 1. Digital Leadership of School Heads**

<b>Indicators</b>	<b>Mean</b>	<b>Descriptive Levels</b>
Strong Digital Literacy Skills	3.62	High
Growth and Experimental Mindset	3.64	High
Ability to Foster Collaboration	3.68	High
Ability to Promote a Digital Culture	3.78	High
Ability to Demonstrate Digital Adaptiveness and Resilience	3.62	High
<b>Overall</b>	<b>3.66</b>	<b>High</b>

The result of the study corroborates the statement of Tanucan, Negrido & Malaga (2022) who verifies that digital leadership of school heads refers to the ability of school leaders to effectively guide, manage, and promote the use of digital technologies to enhance teaching, learning, and school operations. It involves creating a vision for technology integration, supporting teachers in adopting digital tools, and ensuring that the school community develops the digital skills needed in modern education. School heads who demonstrate strong digital leadership help transform schools into innovative learning environments where technology supports collaboration, creativity, and improved educational outcomes.

The result of the study reinforces the statement of Suksai, Suanpang & Thangchitharoenkhul (2021) who validates that an important aspect of digital leadership is the strategic integration of technology into teaching and learning. School heads must encourage teachers to use digital platforms, educational applications, and online resources that improve student engagement and learning effectiveness. They also provide professional development opportunities that help teachers

strengthen their digital competencies and confidence in using technology in the classroom. By supporting continuous learning and innovation, digital leaders ensure that technology is used meaningfully rather than simply as an additional tool.

### Level of Digital Citizenship Self-efficacy of Teachers

Shown in Table 2 is the level of digital citizenship self-efficacy of teachers with an overall mean of 4.12 with a descriptive equivalent of high indicating that all enumerated indicators were oftentimes observed. The overall mean was the result obtained from the mean of the indicators for the specific items from the questionnaire intended for this particular indicator which was appended in this study.

**Table II. Digital Citizenship Self-efficacy of Teachers**

Indicators	Mean	Descriptive Levels
General Self-Efficacy	4.15	High
Applying Self-Efficacy	4.10	High
Critical Perspective	4.14	High
Networking Agency	4.11	High
<b>Overall</b>	<b>4.12</b>	<b>High</b>

Among the enumerated indicators, general self-efficacy has the highest mean rating with a mean score of 4.15 or high, critical perspective, 4.14 or high, networking agency, 4.11 or high, and applying self-efficacy, 4.10 or high.

The result of the study resonates with the statement of Kocoglu, Oguz-Hacat & Gocer (2023) who verifies that Digital citizenship self-efficacy of teachers refers to a teacher's belief in their ability to use digital technologies responsibly, ethically, and effectively while guiding students to do the same. It reflects the confidence teachers have in their skills to model appropriate online behavior, promote digital safety, and encourage responsible participation in digital environments. Teachers with strong digital citizenship self-efficacy are more capable of integrating digital ethics, online responsibility, and safe technology use into their teaching practices.

The result of the study corresponds with the statement of Meekaew & Jongnimitsataporn (2023) who validates that an important aspect of digital citizenship self-efficacy is the teacher's ability to promote safe and ethical online practices among students. Teachers must be confident in guiding learners about issues such as digital privacy, respectful communication, responsible information sharing, and protection from online risks. By demonstrating responsible digital behavior and teaching students how to navigate online platforms safely, teachers help develop students' awareness and accountability in digital spaces.

### Significance on the Relationship between Digital Leadership of School Heads and Digital Citizenship Self-efficacy of Teachers

Illustrated in Table 3 were the results of the test of relationship between variables involved in the study. The overall correlation had a computed value of 0.103 with a probability value of  $p < 0.01$  which is significant at 0.05 level. Hence the null hypothesis which states that there is no significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers is rejected.

**Table III. Significance on the Relationship between Digital Leadership of School Heads and Digital Citizenship Self-efficacy of Teachers**

Pair	Variables	Correlation Coefficient	p-value	Decision on Ho
IV and DV	Digital Leadership of School Heads and Digital Citizenship Self-efficacy of Teachers	0.103	0.000	Reject

The result of the study resonates with the statement of Rahman & Hamid (2025) who reports that The relationship between digital leadership of school heads and teachers' digital citizenship self-efficacy is increasingly recognized as pivotal in shaping effective technology integration in schools. Digital leadership refers to the capacity of school leaders to envision, implement, and sustain the strategic use of digital tools to enhance teaching, learning, and school management. School heads who demonstrate strong digital leadership set clear expectations, provide necessary resources, and model responsible and innovative technology use. Their leadership directly influences teachers' confidence in their ability to promote digital citizenship, as supportive leaders foster an environment where teachers feel empowered to explore, experiment, and implement digital practices responsibly.

The result of the study corresponds with the statement of Omar & Ismail (2021) who emphasizes that teachers' digital citizenship self-efficacy is strengthened when school leaders actively support professional development, encourage collaboration, and model ethical online behavior. A digitally competent school head can guide teachers in integrating safe online practices, critical evaluation of digital information, and ethical use of technology into their classrooms. By providing mentorship, resources, and opportunities for peer learning, school heads create a culture that reinforces teachers' belief in their ability to teach and model responsible digital behavior. Consequently, teachers are more likely to feel confident addressing issues such as cyberbullying, digital privacy, and responsible social media use, enhancing the overall digital literacy and ethical engagement of students.

## V. CONCLUSION

Based from the findings of the study, conclusions are drawn in this section. The study found to exhibit a high level of digital leadership of school heads. This means that the provisions relating to digital leadership of school heads is oftentimes observed. The study revealed a high level of digital citizenship self-efficacy of teachers. This indicates that the provisions relating to digital citizenship self-efficacy of teachers are embodied in the item is oftentimes observed.

The results of the study also confirm that there is a significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers. This implies that the higher the digital leadership of school heads, the higher is the digital citizenship self-efficacy of teachers. Thus, the null hypothesis of no significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers was rejected.

## VI. RECOMMENDATIONS

The study found to exhibit a high level of digital leadership of school heads. The researcher recommends that the school heads may improve in the area of strong digital literacy skills as this obtained the lowest rating among all the indicators. The researcher recommends that school heads may prioritize continuous professional learning in educational technology. This can include attending webinars, conferences, or workshops focused on emerging tools, following reputable education technology publications, and joining professional networks or online communities; principals may implement a structured evaluation process. This can involve piloting new tools with a small group of teachers and students, collecting feedback on usability and learning outcomes, and measuring alignment with school goals; may develop a data-driven approach to leadership by systematically collecting and analyzing information on student performance, teacher effectiveness, and operational efficiency, and Principals may establish clear policies and protocols to protect sensitive information and ensure compliance with privacy regulations.

The study revealed a high level of digital citizenship self-efficacy of teachers. The researcher recommends that teachers may improve in the area of applying self-efficacy as this obtained the lowest among all the indicators. The teachers may use advanced search techniques and trusted educational websites; join online teacher forums and professional communities for curated ideas; explore app stores and educational tech websites for relevant apps; apply laptops, tablets, and smartphones for lesson creation, assessments, and communication; track how technology helps achieve teaching and learning objectives; familiarize with multiple devices to work seamlessly in different environments, and participate actively in online teacher communities and discussion groups.

The results of the study also confirm that there is a significant relationship between digital leadership of school heads and digital citizenship self-efficacy of teachers. The researcher recommends teachers may actively engage with these opportunities, collaborate with peers, and apply digital skills in classrooms to build confidence in promoting responsible digital behavior among students.

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School principals may model effective and ethical technology use, provide ongoing professional development, and create a supportive environment for experimentation with digital tools.

District supervisors may support principals by providing resources, training, and policies that foster digital leadership, ensuring a coherent strategy that enhances teachers' capacity to teach and model safe, ethical, and effective technology use.

The researcher also recommends to future researchers to conduct similar study and explore some indicators that are not included in this study in another setting in order to uncover new knowledge relevant to the topics presented in this study.

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