

# Access of Public Elementary Teachers in Malasiqui District II-B, Division of Pangasinan I in Information Technology

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## Abstract

This study was conducted to determine, the extent of access of the teachers to different areas of technology during the school year 2025 – 2026.

The salient findings of this study were as follows: All the dimensions of the access to computer technology were rated: Moderate in access to internet, digital technology: moderate, online activities, moderate. Educational content moderate, and expanding opportunities; There was no significant difference expanding learning opportunities were moderate in all areas of concerns; The responses of the two (2) respondent was the same; The proposed plan of action was significant and was recommended for use.

The teachers generally made a strategic implementation of the findings to push down the areas of the aspects of computer technology such as internet, digital technology, online activities, educational content, and expanding opportunities. The perception of the two (2) groups did not affect each other and Proposed plan of action was recommended to the principals and teachers to stabilize the use of the areas of information technology.

**Keywords:** *Access, Public Elementary School Teachers Information Technology*



## I. THE PROBLEM

Aedia videos, browsing the internet, using the internet to find knowledge for schoolwork, searching for various websites such as sports, online news, games, and shopping online.

The demographic variables of students are assumed to impact internet use and academic performance as a result. A demographic comparison found that adult males were more commonly approved for internet use than females (Akande & Bamise, 2017). A subsequent comparative assessment showed that male college students spent more time on the internet (Ellore et al., 2014). The cell phone, recognized by Rabi, Muhammed, Umaru, and Ahmed (2016) as one of the devices used to access the internet, appears to affect academic success. They found that smartphones significantly influence academic performance among senior school students, both male and female. Again, Kim (2011) investigate the impact of internet usage on intellectual satisfaction and behavioural improvement among South Korean teenage girls, finding that girls are more likely than boys to use the internet to watch online educational coaching and blogs. Kim found that boys typically use the internet to play sports.

Similarly, a study of the socio-economic context, internet access, and performance of learners found no strong association between the socio-economic background of learners and internet access (Adegoke, 2013). According to the reports, learners from low-income families use their friends' phones to access the internet, their friends pay for them at cyber cafes, and in certain situations, and they could afford to pay for themselves at the cybercafé. However, according to some other studies, teacher's would pay for internet access (Osunade, 2003). Adegokea (2013) discovered that socio-economic records have a substantial impact on a student's satisfaction, while internet usage does not affect a student's academic achievement. Instead, the two combined socio-economic backgrounds and internet usage contributed significantly to educational outcomes.

### **Time Spent on the Internet**

Studies now show that adolescents use the internet for different purposes stem from an adolescent interest in leisure activities (Bragdon & Dowler, 2016; Ogedebe, 2012; Singh et al., 2013). There is abundant evidence demonstrating that internet use has significant repercussions for everything from school grades to personal relationships (Rickert, 2001). The teachers who spend most of their time using technology for academic and work-related purposes are the upper class. The ones who spend slightly more time using cellphones, online chatting, and social networking are the lower class. Research conducted by Bragdon and Dowler (2016) showed that the use of technology and academic achievement varies according to class status. According to Olatokun (2008), about four-fifths of secondary school students in Nigeria have been regularly using the internet in their daily lives for the previous four to five years. Tertiary students in Nigeria (according to Ogedebe, 2012) check the internet after hours, preferring it to be done at night rather than during the day. It is a widely accepted fact that most students spend about 42.8 hours a week on their electronics (Bragdon & Dowler, 2016).

An analysis of Facebook and academic success was carried out by Krichne and Karpinski (2009). Facebook users, however, have reported lower GPAs and often spend fewer hours per week learning than non-users. According to Singh et al. (2013), students tend to waste time on the internet due to a non-focused approach (mailing, gaming and social networking). Despite significant problems with internet addiction, Siraj et al. concluded that high internet use has more



significant academic consequences because senior high school students can enter the world of information.

### **Impact of the Internet**

Ngoumandjoka (2012) divided internet uses into heavy and moderate users. Academic work, he believes, is the primary reason students and teachers use the internet on campus. The more scholarly work is shared online, the more it will positively affect academic grades. People who engage in safe social activities with friends and teachers or use internet tools for route work tend to achieve more excellent academic performance (Torres – Diaz et al., 2016). Aitokhuehi et al. (2014) discovered that internet savvy students perform better than those who are not. Samuel (2010) found similar results when studying influence of internet use among Nigerian secondary students. In comparison to their counterparts in other parts world, his research discovered that internet use among public colleges in Lagos is low. The Internet has now become a familiar object in most people's lives. However, because of its addictiveness, someone who uses it frequently is at risk of negative repercussions. The main risk of utilizing the internet for social networking and emailing, according to Singh et al. (2013), is psychological difficulties.

Turel and Muhammet Toraman (2015) reported that as teachers academic performance improves, their internet addiction decreases. This suggests that students' use of the internet has an impact on their academic success. Austin and Totaro (2011) grouped internet users into light, common, and extreme categories. They discovered that university students who use the internet at school at home (moderate use) earn higher grades than those do not (Aitokhuehi et al., 2014; Kakkar, 2015). Despite the many issues surrounding extreme internet usage, Siraj et al. (2015) concluded that internet use leads to increased academic performance because students can enter the world of information to boost their knowledge. Students' social skills and academic success are protected by their use of the internet (Mami and Hatami-Zad, 2014). The general internet dependency degree of male, vocational school, and verbal discipline college students were more significant than more academically clever students. This lends credence to the notion that how students use the internet might substantially impact their academic achievement (Aitokhuehi et al., 2014; Turel & Muhammet Toroman, 2015). Thus, students should be taught how to use computer tools to double-check their understanding of their academic work.

### **INTERNET ACCESS**

**Internet access** is not universally available, with significant disparities existing based on factors like location, socioeconomic status, and age. While internet penetration rates have increased globally, a substantial portion of the world's population, particularly in developing countries, still lacks access to the internet.

Research on Internet Access showed the:

- **Factors Affecting Access:**  
Research explores various factors influencing internet access, including infrastructure, affordability, digital literacy, and government policies.
- **Impact on Education:**  
Studies examine the impact of internet access on academic performance, access to educational resources, and the effectiveness of online learning.
- **Socioeconomic Impacts:**



Research investigates the relationship between internet access and socioeconomic outcomes, including employment, income, and social participation.

- **Access and Inequality:**

Studies analyze how internet access contributes to or exacerbates existing inequalities based on factors like income, race, and geographic location.

## DIGITAL TECHNOLOGY

Research indicates that access to **Digital Technology** varies significantly based on socioeconomic factors, leading to a digital divide that impacts educational outcomes and social inclusion. While digital tools can enhance learning, challenges like limited access, lack of skills, and insufficient support hinder effective utilization. Addressing this divide requires focusing on both access to technology and the development of digital literacy skills.

Key Findings and Research Areas:

- **Educational Impact:**

Limited access to digital technology can negatively affect academic performance, particularly for students from disadvantaged backgrounds, hindering their development of essential 21<sup>st</sup> – century skills.

- **Beyond Access:**

Research emphasizes that access alone is not enough; factors like quality of resources, digital literacy skills, and supportive environments are also crucial for maximizing the benefits of digital learning.

- **Factors Influencing Access:**

Studies identify various factors influencing digital access, including socio-demographic characteristics, socioeconomic status, personal factors, social support, technology type, digital training, infrastructure, and large-scale events.

- **Specific Populations:**

Research also focuses on the digital divide among specific populations, such as older adults, women, and individuals with disabilities.

- **Motivation Access:**

Studies explore motivational factors influencing teachers' willingness to integrate digital technologies into their teaching, highlighting the importance of both external and internal motivations.

- **Benefits of Digital Technologies:**

Research demonstrates the potential of digital technologies to enhance student engagement, motivation, and academic performance.

- **Challenges and Limitations:**

Challenges include technical difficulties, limited access to resources, insufficient training, and the potential for digital tools to exacerbate existing inequalities.

- **Addressing the Divide:**

Research suggests that strategies to address the digital divide should focus on improving access to technology, developing digital literacy skills, providing adequate technical support, and promoting equitable access to quality digital resources.

- **Future Research:**

Further research is needed to explore the impact of emerging technologies, the role of



digital literacy in promoting social inclusion, and the development of effective interventions to bridge the digital divide.

### ONLINE ACTIVITIES

Research indicates that access to **Online Activities** significantly impacts learning outcomes and engagement, but challenges related to access and digital literacy persist. Studies show a complex relationship between online engagement, internet addiction, and academic performance, particularly among students. Limited access to digital resources, both in terms of physical availability and affordability, can hinder students' ability to participate fully in online learning and research.

Key Findings from Research;

- **Positive Impact:**

Digital tools can enhance student engagement, motivation, and academic performance. Online learning, when effectively integrated, can offer a valuable alternative or complement to traditional classroom settings.

- **Challenges and Barriers:**

- **Digital Divide:** Financial constraints, lack of internet access in certain areas, and concerns about online privacy and safety create barriers for some students.
- **Digital Literacy:** Insufficient training and support for both students and educators can hinder the effective use of online learning platforms and resources.
- **Internet Addiction:** Studies have shown a correlation between excessive online engagement and potential negative impacts on academic performance and mental health.

- **Impact on Learning:**

- **Learners Engagement:** Research explores how access to digital learning resources at home influences student participation and engagement in classroom activities.
- **Teacher Practices:** Teachers' perception of disparities in student access to online resources can influence their instructional decisions.

- **Online Gaming**

Studies indicate that excessive online gaming can negatively impact academic performance, with factors like time spent playing, age, and internet access playing a role.

- **Social Media Use:**

Research examines the impact of social media use on students' sleep patterns, social interactions, and academic performance.

Further Research Needs:

- More studies are needed to understand the long-term impact of online learning on students and how it affects their participation and achievement both inside and outside the classroom.
- Research should focus on the specific types of online activities that are most beneficial or detrimental to student learning and well-being.
- Investigating the role of digital literacy and the development of effective strategies to address the digital divide are crucial areas for future research.

### RESEARCH MATERIALS

Access to **Research Materials** varies widely, with factors like location, funding and the type of materials influencing availability. Open access initiatives aim to make research freely



available, while traditional academic publishing often requires subscriptions or fees. Limited access in developing countries and the need for enhance data sharing are also key considerations.

Factors Influencing Access:

- **Open Access:**  
Open access (OA) aims to make research findings freely available online, removing barriers like subscriptions and fees. This benefits researchers, practitioners, and the public.
- **Traditional Publishing:**  
Journals often require subscriptions or pay-per-view access, creating barriers for those without institutional affiliations or funding.
- **Location:**  
Access to research materials can be limited in developing countries due to factors like infrastructure, funding, and internet connectivity.
- **Funding:**  
Research funding models can influence the type of access offered, with some funders requiring open access publication.
- **Type of Material:**  
Access to different research materials (e.g., journal articles, books, datasets) may vary depending on the publisher, repository, or format.

**Open Access Initiatives:**

- **Gold OA:**  
Research articles are immediately available for free upon publication, often funded by article processing charges.
- **Green OA:**  
Researchers archive a version of their work in an open repository, allowing for free access.
- **Repositories:**  
Online repositories (e.g., PubMed Central, arXiv) store and make research outputs freely available.

**Challenges to Access:**

- **Digital Divide:**  
Unequal access to technology and internet connectivity can create barriers to accessing online research.
- **Language Barriers:**  
Research publications are often in English, limiting access for researchers and practitioners who primarily work in other languages.
- **Lack of Awareness**  
Researchers may not be aware of open access options or how to access free resources.
- **Data Sharing**  
Sharing research data can be challenging due to ethical concerns, intellectual property rights, and lack of infrastructure.



### Ensuring Access:

- **Promoting Open Access:**  
Encouraging open access publishing and supporting initiatives that make research freely available.
- **Building Infrastructure:**  
Investing in infrastructure (e.g., internet connectivity, computing resources) to improve access in underserved areas.
- **Providing Training:**  
Educating researchers and the public about open access options and how to find and use research materials.
- **Promoting Data Sharing**  
Developing guidelines and infrastructure to support the responsible and ethical sharing of research data.
- **Accessibility for All:**  
Ensuring that research materials are accessible to individual with disabilities.

### EDUCATIONAL CONTENT FROM INSTITUTIONS WORLDWIDE

Access to **educational content from institutions worldwide** varies significantly, with both opportunities and challenges. While the internet and digital platforms have expanded access to learning materials, disparities remain in access to technology, internet connectivity, and digital literacy, particularly in low-income countries and among marginalized populations.

#### Positive Developments:

- **Increased Availability of Online Resources:**  
The internet has led to a dramatic increase in the availability of online courses
- **Growth in Higher Education Enrollment:**  
Higher education enrollment has grown globally, with a notable increase in the number of students in tertiary education, particularly in middle-income countries.
- **Rising Female Participation:**  
There has been a positive trend of increased female participation in higher education, with women now surpassing men in some regions.
- **Open Access Initiatives:**  
Initiatives like open access publishing are making research findings and educational resources freely available to the public, further expanding access to knowledge.
- **Digital Literacy Programs:**  
Organizations like UNESCO are actively working to develop digital literacy and competencies among teachers and students, which is crucial for effective utilization of online resources.

### Theoretical Framework

The study was anchored in the idea of expanding learning through the use and access to the internet and digital world.

### EXPANDING LEARNING OPPORTUNITIES

**Expanding learning opportunities** involves increasing access to educational resources



and experiences, both within and beyond traditional settings. This includes leveraging technology, promoting flexible learning pathways, and ensuring equitable access to quality education for all, regardless of socioeconomic status, location, or other barriers.

Here's a breakdown of key aspects:

1. Expanding Access through Technology
  - **Online and Blended Learning:**  
Technology enables access to a wider range of educational resources and learning opportunities, including online courses, digital libraries, and virtual tutoring.
  - **Flexible learning Pathways:**  
Online and blended learning formats offer flexibility in terms of time, location, and pace of learning, making education more accessible to diverse learners.
  - **Bridging the Digital Divide:**  
Efforts are needed to ensure equitable access to technology and internet connectivity, especially for those in remote or underserved communities.
2. Ensuring Equity and Inclusion:
  - **Addressing Socioeconomic Barriers:**  
Recognizing that socioeconomic status impacts access to resources like textbooks, technology, and safe study spaces, it's crucial to provide support for students from low-income backgrounds.
  - **Gender Equity:**  
Addressing gender-related barriers, such as unequal access to internet and technology, particularly in low-and middle-income countries, is vital.
  - **Inclusive Learning Environments:**  
Creative inclusive learning environments that foster a sense of belonging is crucial for student engagement and success.
3. Beyond Traditional Settings:
  - **Formal, Non-formal, and Informal Learning:**  
Recognizing that learning occurs in various settings, including schools, workplaces, and communities, efforts should be made to integrate and formalize learning across these domains.
  - **Expanded Learning Opportunities:**  
These opportunities, such as after-school programs and community-based initiatives, can provide access to enriching experiences and support academic success.
  - **Authentic Learning Experiences:**  
Integrating real-world applications and project-based learning can enhance student engagement and prepare them for future careers.
4. Importance of Quality:
  - **Competency-Based System:**  
Shifting towards competency-based education, where learning is focused on demonstrating mastery of specific skills and knowledge, can improve the quality and relevance of learning experiences.
  - **High-Quality Resources:**  
Providing access to high-quality learning materials, including Open Educational Resources (OER), is essential for effective learning.





### Statement of the Problem

This investigation determined the extent of access of Public Elementary Schools in Malasiqui District II-B Division of Pangasinan I School Year 2025 – 2026.

Specifically, it sought answers to the identified questions below.

1. What is the extent of access of the Public Elementary School Teachers as perceived by the teachers and the school administrators along?
  - a. internet,
  - b. digital technology,
  - c. online activities,
  - d. research materials,
  - e. educational content from institution worldwide, and
  - f. expanding their learning opportunities?
2. Is there a significant difference between the perceptions of the teachers and their school administrators on the areas of information technology aforcited above?
3. What can be proposed to enhance/improve the extent of access of Grade 6 learners of Biba Elementary School in information technology?

### Research Hypothesis

The hypothesis will be tested at .05 level of significance.

1. There is no significant difference between the perception of the teachers and the school administrators on the extent of access of Public Elementary School Teachers in Information Technology?

### Significance of the Study

This investigation was significance to curriculum planners, school administrators, teachers, students, parents, researcher herself, and other researcher.

**Curriculum Planners.** The results of the study could guide the curriculum grade planners to on how to conduct the study. It could make the by lovelier, exciting due to the abilities fund in the textbook.

**School Administrators.** Findings of the study could give the principal/heads and teacher important might on how to make the activities relevant.

**Teachers.** The results of their study could create an atmosphere of contextment fulfilment. The condition should create a fulfilling results as well.

**Students.** The students from this point of twier could give a learn remain on the combat the issue.

**Parents.** The results of the study could serve as a guiding port on how to study be accomplished. They can cooperate in extending support the explorative to grow in knowledge and in the realm.

### Scope and Delimitation

This study was focused on the extent of access of public elementary school teachers in Malasiqui District II-B along the above mentioned dimension such as access on the internet, digital technology online activities, research materials, educational content from institution worldwide, and on expanding their learning activities.

There were 173 teachers and 14 school administrators taken from 14 elementary schools in District II-B taken in complete enumeration.



### Definition of Terms

To facilitate clear understanding of the findings the following terms and phrases are define lexically and operationally.

**Internet.** In this study, it refers to the growth to access the data to expand their access.

**Digital Technology.** In this study it refers to the significant social networking in the growth for gathering information.

**Online activities.** It refers to use of different online activities as to the use of internet.

**Research Materials.** It refers to the materials gathered to the analysis of teachers that continues to prolifiet.

**Educational Content.** In this research, it refers to the substance collected through the use of internet.

**Expanding Learning Activities.** In this study it refers to the different activities of learning using the technology.

## II. RESEARCH METHODOGY

This chapter presents the research design, the procedure the data gathering instruments used by the researcher, methods and statistical tools used in the analysis and treatment of the data.

### Research Design

This study employed the descriptive method of research considering the goal of the study was to determine the status of access of elementary school teacher in District II-B Division of Pangasinan I. This type of research describes and interprets “what is”, treating data collected with condition of relationship that exists, practices that prevail, beliefs, processes that are on, and effects that are being felt or trends that are developing.

This method according to Abulencia (2005) is a method of problem solving with adequate cross-section of information for interpretation. It is a general procedure employed in studies whose objective is to have detailed description on existing phenomena with the intent of employing the data to explain current conditions and practices and to make more intelligent plan for improving social, economics, educational conditions and process.

The researcher used this method because she wanted to describe the situation of the access of teachers in information technology subject.

### Locale and Population of the Study

This study was conducted in the Public Elementary Schools of District II-B Division of Pangasinan I in Information Technology.

The table below showed the exact-number of respondents coming from the 14 public elementary schools in Malasiqui District II-B School Division of Pangasinan I. Respondents consisted Grade 6 learners and 1 teacher.

**Table 1**  
**Distribution of Respondents by Schools**

Schools	Number of Teachers	School Heads
1. Biba Elementary School	9	1
2. Binalay Elementary School	12	1
3. BQJ Elementary School	11	1
4. Iba Elementary School	13	1
5. Talos Patang Elementary School	14	1
6. Mendoza Elementary School	11	1
7. Palapar Norte Elementary School	9	1
8. Canan Elementary School	12	1
9. Tobor Elementary School	14	1
10. Bongan Elementary School	14	1
11. Malimpec Elementary School	13	1
12. Palapar Sur Elementary School	12	1
13. Pamaranum Elementary School	13	1
14. Cabatling Elementary School	14	1
<b>Total</b>	<b>173</b>	<b>14</b>

### Data Gathering Instrument

The data required to answer the specific problems of the study were gathered with the use of questionnaire.

Part 1. Presents the extent of access of Grade 6 learners of Biba Elementary School in Malasiqui, Pangasinan.

Part 2. Shows the challenges and strategies in the local context in implementing the education for “Educational for all in relation to access to information technology in resources context, and quality education, access to remote areas, low enrolment rate, language barriers, guide desparitive, unfractures, teachers shortages, data collection, community engagement cultural sensitively and security concern. The internet was adopted from the research “The Impact of Internet Used to Students Success In Selected Senior High Schools In Cape Coast Metropoles, Ghane.

When permission was granted the researcher went from one school to the other to administer the instrument to all Grade I English teachers and school heads of the different schools. The floating and retrieving of the instrument lasted for 2 weeks. A 100% retrieval of the instrument was attained.

### Statistical Treatment of Data

To answer problem 1 on the extent of access of public elementary school teachers in internet average weighted mean was used and interpreted in terms of descriptive rating below.

Value	Weighted Mean	Descriptive Equivalent
4	3.26 – 4.00	High (H)
3	2.51 – 3.25	Moderate (M)
2	1.76 – 2.50	Low (L)
1	1.00 – 1.75	Very Low (VL)

To answer problem 2 on the significant differences between the perceptions of the teachers and administrators on the level of the competencies in Grade 6 learners in internet the t-test was used.

Formula for t-test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{SD\bar{x}}$$

where:

$\bar{X}_1$  = First Mean

$\bar{X}_2$  = Second Mean

$SD\bar{x}$  = Standard error of difference between the two means

### III. RESULTS and DISCUSSION

This chapter presents the discussion of the data gathered regarding the problem on the access of public elementary school teachers in District II-B in Malasiqui Division of Pangasinan I during the school year 2025 - 2026. The discussion was concentrated on the areas along internet, digital technology online activities, research materials, educational content from institution worldwide, and expanding learning opportunities. It also discuss the challenges and strategies in the local context in implementing education for all in relation to access in information technology along resources constraints, quality of education, access to remote areas, low enrollment rate, language barriers, gender disparities, infracture challenges, teachers strategies, data collection, community engagement, cultural sensitively, and security concerns.

#### Access to Internet

Table 2 presents the extent of access to internet of the learners as perceived by the teachers and learners.

**Table 2**  
**Access of Grade 6 Teachers to Internet**

A. Internet	Teachers		Administrators		Overall Average Weighted Mean	
	AWM	DE	AWM	DE	AWM	DE
1. Gathers various types of data that challenge learners.	1.73	VL	1.75	VL	1.73	VL
2. Learners ability to access data sites as social networking sites, online sports	1.75	L	1.76	L		L
3. Most learners have internet access on their mobile	2.51	L	2.53	M	2.52	L

phone.						
4. Learners expands their intellectual horizon on academic face-to-face conversation.	2.50	L	2.50	L	2.50	L
5. Laptop use on online resources accessibility is crucial to learners.	2.60	M	2.60	<b>M</b>	2.60	<b>M</b>
6. Learners felt the internet much better and accessible than their school libraries.	1.75	M				
7. Use the internet to improve their academic performance.						
8. Learners use internet for leisure activities instead of instructional ones.	3.10	M	3.12	M	3.11	M
9. Internet usage influencer intellectual satisfaction and behavior improvement	2.51	M	2.51	M	2.51	M
10. Substial impact on learners satisfaction and affect the academic achievement.	2.60	M	2.60	M	2.60	M

The Table revealed that two (2) indicators were rated very low extent such as use the internet to improve their academic performance (1.73) and learners use internet for leisure activities instead of instructional ones (1.75). The findings implied that the learners manipulate and use internet for pleasure instead of academic purpose. Teachers failed to instruct them about the use of internet for learning purposes.

It could also be noted in the table that the remaining indicator were rated low proven by their average weighted means like gather various types of data, ability to access data sites and data networking, have internet in their mobile phone, learners expands their intellectual horizon, laptop use on online resources and felt that internet much better and accessible to their school libraries.

As a whole, it could be synthesized that the learners failed to recognized the use of internet in making their intellectual process for their learning and professional growth in the future. This fact was proven by the overall total average weighted mean of (2.17) described as low.

### Digital Technology

Table 3 presents the access of teachers to digital technology as perceived by the teachers and learners.

Table 3 revealed that 6 indicators were rated as moderate access along digital technology such as access to digital technology such as access to digital technology can enhance learning (2.51), digital tools can develop digital literacy skills (2.61), influence teacher to integrate digital

technologies in their teaching (2.51), strategies to access digital problem should focus on providing technical support and equitable access to quality digital resources (2.51). promotes the role of digital literacy (2.51) and adequate support and access to technology for digital use (2.51). The findings implied that the teachers manifested promising aspiration to develop the use and importance of digital technology for learning.

**Table 3**  
**Access of Teachers and Digital Technology**

B. Digital Technology Access to digital technology can enhance learning .	Teachers		Administrators		Overall Average Weighted Mean	
	AWM	DE	AWM	DE	AWM	DE
1. Access to digital technology can enhance learning .	2.51	MH	2.51	MH	2.51	MH
2. Digital tools can improve learning and access to technology and development of digital literacy skills.	2.60	M	2.61	M	2.61	M
3. Digital technology can negatively affect academic performance particularly for learners from disadvantages backgrounds.	2.45	L	2.45	L	2.45	L
4. Digital literacy skills and supportive environment are crucial for maximizing benefits of digital learning.	2.51	M	2.52	L	2.52	L
5. Digital access influences socio-demographic characteristics, social support and personal factors.	2.52	M	2.53	L	2.53	L
6. Influence teachers willingness to integrate digital technologies into their teaching.	2.50	L	2.51	M	2.51	M
7. Enhances learners engagements, motivations, and academic performance.	2.40	L	2.40	L	2.40	L
8. Strategies to access digital problems should focus on providing technical support and equitable access to	2.50	L	2.51	M	2.51	M

quality digital resources.						
9. Promote the role of digital literacy social inclusion, and development of effective intervention.	2.51	M	2.51	M	2.51	M
10. Adequate technical support and access technology for digital use.	2.51	M	2.51	M	2.51	M
<b>Total Average Weighted Mean</b>	<b>2.51</b>	<b>M</b>	<b>2.51</b>	<b>M</b>	<b>2.51</b>	<b>M</b>

As a whole, it could be deduced that digital technology had been advocated by the teacher as important tool for teaching-learning engagement for learners preparation in the future. This was proven by the overall total average weighted mean of 2.51. This implied that they manifested promising appreciation in using digital technology to fit teachers in the environment of digital technology.

Table 4 showed the extent of access of teachers to information technology along internet as perceived by the teachers and the learners themselves.

**Table 4**  
**Extent of Access of Teachers on Online Activities**

C. Online Activities	Teachers		Administrators		Overall Average Weighted Mean	
	AWM	DE	AWM	DE	AWM	DE
1. Significantly impacts learning outcomes and engagement.	2.52	M	2.52	M	2.52	M
2. Allows learners and have more access to digital resources.	2.51	M	2.51	M	2.51	M
3. Promote availability and affordability to allow full participation on online learning and research.	2.53	M	2.53	M	2.53	M
4. Enhances learners engagement, motivation, and academic performance.	2.51	M	2.52	M	2.52	M
5. Effectively integrate alternative to traditional classroom sections.	2.52	M	2.52	M	2.52	M
6. Access to online resources influence instructional decision.	2.51	M	2.53	M	2.52	M
7. Control the use of online gaming to avoid negative impact and academic	2.50	L	2.50	L	2.50	L

performance.						
8. Impact of social media use on learner's sleep patterns, social interactions, and academic performance.	2.50	L	2.50	L	2.50	L
9. Understand the long-term impact of online learning on learners.	2.50	L	2.50	L	2.50	L
10. Focus on the specific types of online activities that are most beneficial to learners learning and well-being	2.53	M	2.52	M	2.52	M
<b>Total Average Weighted Mean</b>	<b>2.52</b>	<b>M</b>	<b>2.53</b>	<b>M</b>	<b>2.53</b>	<b>M</b>

Table 4 revealed the three (3) indicators as low access along online activities such as control the use performance (2.50), impact of social media use on learners (2.50) and understand the long term impact of online learning on learners (2.50). The findings implied that the learners had lesser access on online activities particularly on the aspect of academic performance and long term effect to the learners.

Considering the data as a whole, it could be said that the remaining indicators were rated and described as moderate access like significant impact on learning outcome and engagement (2.52) allows learners to have more access to digital resources (2.51) promote availability and affordability to allow full participation (2.53), enhance learners engagement motivation and academic performance (2.52) and effectively integrate alternative to traditional classroom setting (2.52). The findings implied that the learners and teachers believed that access to online activities could positively influence the positive academic performance of the teachers.

As a whole it could be gleaned that the online learning brings positive effect on the academic performance of the learners proven by the total averaged weighted mean of (2.53). The findings implied that the respondents believed that online learning activities were mind beneficial to learners learning and well- being.

### Research Materials

Table 5 presents the access on Research Materials as perceived by the teachers and administrators.

**Table 5**  
**Extent of Access of Teachers on Research Materials**

D. Research Materials	Teachers		Administrators		Overall Average Weighted Mean	
	AWM	DE	AWM	DE	AWM	DE
1. Research materials varies madely with factors like location, findings, and other	2.80	M	2.80	M	2.80	M

materials influencing availability.						
2. Makes research findings freely available online, removing barriers like subscriptions and fees.	2.90	M	2.90	M	2.90	M
3. Research activities are readily available for free upon pollution.	2.91	M	2.92	M	2.92	M
4. Research activities a version of works in an open repository to allow for free access.	2.95	M	2.95	M	2.95	M
5. Online repertories eg store and make research outputs freely available.	2.95	M	2.95	M	2.95	M
6. Equal access to technology and internet connectivity.	2.71	M	2.72	M	2.72	M
7. Research publications are often in English limiting access for researchers and practitioners who precisely work in other languages	2.80	M	2.80	M	2.80	M
8. Data sharing can be challenging due to ethics concerns, intellectual property rights and lack of infrastructure.	2.81	M	2.81	M	2.81	M
9. Encourage open access publicly and supporting initiative that make research fully available.	2.90	M	2.92	M	2.91	M
10. Insert infrastructure (eg. Internet, connectivity, computing resources/to improve access in underserved areas.	2.89	M	2.88	M	2.89	M
<b>Total Average Weighted Mean</b>	<b>2.86</b>	<b>M</b>	<b>2.86</b>	<b>M</b>	<b>2.86</b>	<b>M</b>

Table 5 showed the positive acceptance of general academic pictures of access to research of materials much as research materials varied widely with factors like location, funding, and other materials availability (2.80) makes research findings freely available online, remaining barriers like subscription and fees (2.90), research activities are readily available for free (2.92) equal access to technology and internet comentality (2.70). The findings implied that access to

internet, digital learning, and online activities, were essential to the successful conduct of research locally and punctuality.

As a whole it could be deduced that access to research particularly on the needed materials could be easily available anytime needed. It could be implied further that modern researches makes use of the data gathered through the use modern technology like the access to internet and digital activities to gain impact of the importance of the technology.

### Educational content from Institution worldwide

Table 6 presents the extent of access of teachers to educational constant from institution worldwide.

### Educational Content From Institution Worldwide

Table 6 presents the extent of content from institution worldwide as perceived by the teachers and school administrators.

**Table 6**  
**Educational Content from Institution Worldwide**

E. Educational Content from Instruction Worldwide	Teachers		administrators		Overall Average Weighted Mean	
	AWM	DE	AWM	DE	AWM	DE
1. Increase availability of online resources.	2.50	L	2.50	L	2.50	L
2. Higher educational online has grown globally with a notable increase in the number of students particularly in middle-income countries.	2.51	M	2.52	M	2.52	M
3. Open access initiative freely available to the public expanding access to knowledge	2.80	M	2.80	M	2.80	M
4. UNESCO are actively working to develop digital literacy and competencies among teachers and learners.	2.81	M	2.82	M	2.82	M
5. Rising female participation surpassing men in some regions.	2.81	M	2.82	M	2.82	M
<b>Total Average Weighted Mean</b>	<b>2.69</b>	<b>M</b>	<b>2.69</b>	<b>M</b>	<b>2.69</b>	<b>M</b>

Table 6 reveals two (2) indicators were rated low with their corresponding weighted

means such as increase availability of online research (2.50) and higher educational online has grown up globally with notable increase in the students particularly in middle income countries (2.52). The findings implied that the respondents failed to consider the number of students in the middle income countries and the availability of the online resources. The remaining factors were considered moderate with their respective weighted mean like open access instructive freely available to the public expanding access to knowledge (2.80), UNESCO and actively working to develop digital literacy and competitive among teachers and learners (2.82) and rising female participation surpassing, mean in source regions. The findings implied that the respondents manifested positive significance of the educational content of internet to the learners.

As a whole it could be deduced that the educating content from institutional world wide was rated moderate with a total average weighted mean of 2.69. It implied that the respondents considered the importance of internet in the formative literacy of the learners.

### Expanding Learners Opportunities

Table 7 presents the extent of access of learners to expanding teachers opportunities on internet as perceived by the teacher and learners.

**Table 7**  
**Access on Expanding Teachers Opportunities on Internet**

F. Expanding Learners Opportunities	Teachers		Administrators		Overall Average Weighted Mean	
	AWM	DE	AWM	DE	AWM	DE
1. Access to technology online and blended learning	2.50	L	2.50	L	2.50	L
2. Flexible learning pathways	2.45	L	2.45	L	2.45	L
3. Addressing socio-economic barriers	2.40	L	2.42	L	2.41	L
4. Gender equity	2.50	M	2.51	M	2.51	M
5. Inclusive learning environment	2.49	L	2.52	M	2.51	L
6. Formal, non-formal, and informal learning	2.50	L	2.51	M	2.51	M
7. Authentic learning experience	3.30	M	3.25	M	3.28	M
8. Computing-Based System	3.25	M	3.25	M	3.25	M
9. High Quality Resources	2.28	M	2.30	M	2.29	L
10. Teaching Training and Support	2.70	M	2.75	M	2.73	M
<b>Total Average Weighted Mean</b>	<b>2.64</b>	<b>M</b>	<b>2.64</b>	<b>M</b>	<b>2.64</b>	<b>M</b>

Table 7 showed that two (2) indicators were rated low in expanding learners learning opportunities with their respective weighted means. They were as follows access to online and blended learning 2.50, flexible learning pathway (2.52).

Considering the data as a whole it could be revealed that three (3) indicators were described as moderate such as addressing economic barriers (2.80), gender equity (2.82), inclusive learning environment (2.82) and Formal and informal learning (2.82). The findings implied that the extent of access the learners to internet was moderate proven by the total average weighted mean of 2.69. The findings implied that internet and other related mode of digital learning materials were essential to the acquisition of knowledge and skills of the learners in relations to the twenty first century skills.

#### **Summary of the Areas of the Access of the Learners to Internet.**

Table 8 presents the summary of the access of the teachers to information technology along the different areas.

**Table 8**  
**Summary of the Areas of the Access of the Teachers to Internet**

Dimension	Teachers		School Administrators		Overall Average Weighted Mean	
	AWM	DE	AWM	DE	AWM	DE
1. Internet	2.16	L	2.17	L	2.17	L
2. Digital Technology	2.51	M	2.51	M	2.51	L
3. Online Activities	2.52	M	2.53	M	2.53	M
4. Research Materials	2.86	M	2.86	M	2.86	M
5. Educational Content	2.69	M	2.69	M	2.69	M
6. Expanding Learning Opportunities	2.64	M	2.64	M	2.64	M
<b>Total Average Weighted Mean</b>	<b>2.56</b>	<b>M</b>	<b>2.7</b>	<b>M</b>	<b>2.57</b>	<b>M</b>

Table 8 presents the summary of the dimension of access of Public Elementary School Teachers to information technology. It revealed that the respondents rated the access in the internet low (2.17). It implied that they did not have opportunities to use the internet due to the availability of it and its location that may affect the opportunity of the learners to avail its use.

The remaining dimensions were rated moderate with their average weighted mean as follows: digital technology (2.51) online activities (2.53) research materials (2.86), educational content (2.69) and expanding learning opportunities 2 (2.64). The findings implied that the learners showed the aspirations to avail themselves on the use of the different areas of information technology to expand their intellectual horizon on academic face-to-face activities moderate.

The face-to-face classes could give opportunities to learners to discover their strengths moderate.

#### **Significant Difference Between the Perception of the Teachers and School Administrator on the Access of Information Technology**

Table 9 presented the significant difference between the perception of the teachers and the school administrators on the access to Information Technology.

**Table 9**  
**Differences Between the Perception of the Teachers**  
**and School Administrators**

Dimension	Teachers		School Administrators	
	AWM	DE	AWM	DE
1. Internet	2.16	L	2.17	L
2. Digital Technology	2.51	M	2.51	M
3. Online Activities	2.52	M	2.53	M
4. Research Materials	2.86	M	2.86	M
5. Educational Content	2.69	M	2.69	M
6. Expanding Learning Opportunities	2.64	M	2.64	M
<b>Total Average Weighted Mean</b>	<b>2.56</b>	<b>M</b>	<b>2.7</b>	<b>M</b>

The table showed the computed t-value: 1.21;  
 Alpha: 5%    Critical Value: 2.228  
 Decision: Accept the null hypothesis

Table revealed that the computed t-value of 1.21 is lesser than the critical value of 2.228. This meant that the null hypothesis was accepted. This indicated that there was no significant difference in the access of the learners to information technology. This implied that their perception did not affect each other.

### Proposed Action Plan

The proposed plan of action is purposely intended to improve the extent to which the learners improve their areas to information technology and their effects to academic performance. The dimensions were as follows internet, digital technology, online activities, research materials, educational content, from institution worldwide, and expanding learning opportunities.

The plan of action contained the following components.

1. Areas of Concern
2. Objectives / Targets
3. Activities / Strategies
4. Person / Agencies Involved
5. Time Frame
6. Success Indicator
6. Budget Estimate
7. Success Indicators

### Proposed Plan of Action

Areas of Concern	Objectives / Targets	Activities / Strategies	Person Involved	Time Frame	Success Indicator
1. Access to Internet	Provide opportunities for teacher / learners to have access to internet	Organize training activities on the explanation of internet use for academic	Teacher, administrator, learners	Year round	90% of the teachers shall have operational for internet.
2. Digital Technology	Shall have access to digital technology and tools	Discuss digital tools to improve learning  Module on digital activities  Strategies to access digital technical support.	Teacher / school administrator, learners Parents	Year round or as scheduled	90% of the teachers shall have under go training or digital materials.
3. Online activities	To allow teachers / learners to have more access to online learning and activities	Enhance learners engagement, motivation and academic performance  Integrate after effect on the use of online interaction  Workshop on specific types of online activities.	Teachers, Administrators, Learners	Year round / as scheduled	90% of the teacher and learners shall have attended integration of online activities in classes and subject areas.
4. Research Materials	Attach workshop on	Lecture on research	Teachers, Learners,	Year round	90% of the teachers and

	research using internet, digital materials, online activities	activities and proposed  Submission of title proposals.	Invited guest		learners shall have attended workshop on research using the internet, digital materials, etc.
5. Educational Content	Teachers and learners shall have inversed availability of online research and open access to availability materials in technology.	Lecture on educational content from institution worldwide  Submission of output / paper presentation	Teachers, Learners, Invited guest, Parents	Year round / as scheduled	90% of the teachers and learners shall have conducted / submitted papers for presentation on educational content.
6. Expanding Learning Opportunities	Avail of expanding learning opportunities with the use of the different areas of information technology.	Lecture on learning opportunities  The use of the different areas of modern technology  Submission of output	Teachers, Learners, School administrators	Year round	90% of the teacher and learners shall have availed of the activities expanding learning activities.



#### IV. SUMMARY of FINDINGS, CONCLUSION and RECOMMENDATION

This chapter presents the summary of findings conclusions, generated from the finding and recommendation made based on the findings and conclusions.

##### Summary

This study was conducted to determine, the extent of access of the public elementary school teachers to different areas of technology during the school year 2025 – 2026.

##### Findings

The salient findings of this study were as follows:

1. All the dimensions of the access to computer technology were rated: Moderate Access to internet, digital technology 2.51 moderate. Online activities, 2.53 moderate. Educational content 2.7 moderate, and expanding tears opportunities.
2. There was no significant difference in expanding learning opportunities moderate in all areas of concerns.
3. The responses of the two (2) groups of respondents was the same.
4. The teachers ideas did not contradict each other.
5. The proposed plan of action was significant proven by the total average weighted mean of 2.57.

##### Conclusions

The following conclusions were made.

1. The teachers generally made a strategic implementation of the findings to push down the areas to your aspects of computer technology.
2. Both the teachers and school administrators had the same perception of the use of computer technology on the access of the different areas of concerns.
3. The perception of the two (2) groups did not affect each other.
4. Proposed plan of action was formulated and recommended to the principals, teachers to stabilize the use of the areas technology.

##### Recommendations

The following, were recommended to the different schools officials, teachers, and learners to raise to a higher level their access on the use of the study.

1. The teachers and school administrators should constantly use internet, digital materials and attend seminar training and workshop on the responsible use of internet and digital materials to learn then diverse effect on there academic performance and teaching job or career.

2. Both the teachers and the school administrators should work together to promote the use of internet and information technology in their activities.

3. Use the proposed action plan as it is endorsed as recommended for use to improve and enhance their knowledge and skills on the challenges of internet, digital materials and more.

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