



# READINESS OF SELECTED SCHOOLS IN NORTHERN ILOILO, PHILIPPINES FOR VIRTUAL CLASS IMPLEMENTATION: AN ASSESSMENT OF LEADERSHIP, PERSONNEL, EQUIPMENT, AND IT INFRASTRUCTURE

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## **ABSTRACT**

*This study assessed the readiness of selected schools in Northern Iloilo, Philippines, to implement virtual classes in terms of leadership commitment, personnel capability, equipment availability, and IT infrastructure accessibility. A descriptive survey method was used, with data collected through a researcher-made questionnaire and online interviews involving 180 personnel, grouped into office staff and faculty. Results showed strong leadership commitment and personnel capability, with respondents agreeing on the adequacy of training and support for virtual operations. Equipment availability was generally sufficient, though smaller schools faced challenges in resource standardization. IT infrastructure was identified as an area needing improvement, particularly in internet connectivity and technical support. The findings shows the importance of continuous training, resource allocation, and enhanced IT infrastructure to ensure the successful implementation of virtual classes in the region.*

*Keywords: virtual classes, e-learning readiness, leadership commitment, IT infrastructure, personnel capability*

## **1. INTRODUCTION**

The rapid expansion of the Internet and the proliferation of Information and Communication Technology (ICT) have revolutionized the educational sector, affecting curriculum delivery, administrative functions, and student assessment (Austin & Mahlman, 2000). Internet-based learning, in particular, has been recognized for its ability to transcend traditional barriers such as time and location, offering flexibility and convenience to learners,



especially working adults who are increasingly present in higher education institutions (Ryan, 2001; Cooper, 2001). With technological advancements from the early use of radio in education to the current dominance of the Internet in post-secondary education delivery (Gunasekaran et al., 2002; Huynh et al., 2003), the role of technology in shaping the future of education has never been more prominent.

E-learning, as a pedagogical method, refers to the delivery of educational content through electronic technologies (Ong et al., 2004). The rise of virtual classrooms has further transformed the learning experience, allowing for interactive online collaboration between students and educators (Kaware, 2015). The benefits of e-learning include accessibility, cost-effectiveness, and the ability to learn at one's own pace and convenience (Borotis & Poulymenakou, 2004; Lewis, 2007). However, for virtual learning environments to succeed, learners and educators must be fully prepared and willing to embrace the e-learning model (Van Raaij & Schepers, 2006; Rozgiene et al., 2008).

While developed nations have rapidly adopted these innovations, technological barriers such as limited internet access and insufficient bandwidth continue to pose significant challenges in developing countries, particularly in rural areas (Clement, 2020). These barriers became particularly evident during the COVID-19 pandemic, which forced schools worldwide to transition to online learning. The pandemic revealed significant gaps in the e-learning readiness of many institutions, particularly in less-developed regions (UNESCO, 2020). Despite the potential of e-learning to provide continuity in education, its success largely depends on a range of factors including technological infrastructure, institutional preparedness, and the readiness of both students and teachers (Khan, 2005; Aydin & Tasci, 2005).

In the Philippines, efforts have been made to integrate ICT into education, particularly through initiatives aimed at equipping schools with digital tools. However, much of the focus has been on urban centers, leaving a gap in understanding the readiness of rural schools to implement virtual learning. For example, schools in Northern Iloilo face unique challenges related to infrastructure, leadership commitment, personnel capability, and resource availability, which have not been fully explored in existing literature. Thus, this study aims to assess the readiness of selected schools in Northern Iloilo to implement virtual classes, with a



specific focus on leadership commitment, personnel capability, equipment availability, and IT infrastructure accessibility.

## 2. LITERATURE REVIEW

### *The Role of Internet and ICT in Education*

The explosive expansion of the Internet has significantly affected various educational facets, including curriculum, administration, and assessment (Austin & Mahlman, 2000). Many educators now recognize that Information and Communication Technology (ICT) and Internet-based learning provide the flexibility and convenience necessary to overcome traditional barriers like time and place (Ryan, 2001). Online education supports working adults, an increasingly large demographic in college populations, by offering opportunities to meet their work schedules and learning needs (Cooper, 2001). Technological advances have transformed education, beginning with radio broadcasts in the 1920s and, more recently, the Internet's role in post-secondary education delivery (Gunasekaran et al., 2002; Huynh et al., 2003; Teo & Gay, 2006). These trends are making online education an ideal channel for delivering educational content.

### *E-Learning and Virtual Classrooms*

E-learning refers to instructional content or learning experiences enabled by electronic technologies (Ong et al., 2004). This method includes related terms like online learning, virtual learning, web-based learning, and distance learning (Panda & Mishra, 2007). E-learning is widely regarded as a solution for providing accessible, flexible, and cost-effective education (Borotis & Poulymenakou, 2004), and institutions are using it as a tool for recruitment and retention (Williams, 2008). Key benefits of e-learning include consistent content delivery, self-paced learning, and the flexibility to access materials anytime and anywhere (Lewis, 2007).

Virtual classrooms have emerged as a pedagogical innovation due to the diffusion of technology across various sectors (Khitam & Zuheir, 2019). These environments facilitate interactive online collaboration between students and educators (Kaware, 2015). However, the success of virtual classrooms depends on learner acceptance and readiness (Van Raaij & Schepers, 2006). Preparation is essential for both students and teachers to fully adopt e-



learning models (Rozgiene et al., 2008).

### ***Technological Barriers in E-Learning***

One major obstacle to e-learning in developing nations is the lack of Internet access and sufficient bandwidth, which is crucial for educational continuity (Clement, 2020). As Santos (2016) suggests, while the Internet provides access to quality education and supports interactive learning, not all content is suitable for educational purposes. The digital divide is highlighted by school closures during the COVID-19 pandemic, which exposed significant challenges in access to education (UNESCO, 2020c).

### ***E-Learning Readiness***

Readiness for e-learning encompasses various factors, including technological infrastructure, learner competency, and institutional preparedness. Successful implementation requires proper planning and preparedness of all stakeholders—management, teachers, and students (Khan, 2005). Several studies have explored e-learning readiness, focusing on different aspects such as technological readiness, human resource readiness, and learner competencies (Aydin & Tasci, 2005; Rahimidoost & Razavi, 2012).

Student readiness is a critical determinant of e-learning success. Key competencies for e-learners include technical skills, self-directed learning, communication, and time management (Seraji & Yar Mohammadi, 2010). Studies suggest that e-learning models will be successful if both learners and instructors are fully prepared (Akaslan & Law, 2011).

### ***COVID-19 and the Shift to Online Learning***

The COVID-19 pandemic forced many institutions to rapidly transition to online learning, revealing gaps in preparedness for virtual education (Mishra et al., 2020). E-readiness became essential, defined as the ability to adapt to new learning environments, technologies, and self-directed learning (Rosen et al., 2014). This transition underscored the importance of institutional infrastructure, including robust networks and software, to facilitate online learning environments (Daniels, 2016).

## **3. METHODOLOGY**

This study employed a descriptive method to assess the readiness of selected schools in



Northern Iloilo for the implementation of virtual classes. The primary data collection tool was a researcher-developed questionnaire, complemented by online interviews to clarify responses, verify answers, and gather additional information when necessary.

A total of 10 private schools located in the towns of Estancia, Balasan, Sara, and Barotac Viejo participated in the study. For confidentiality purposes, the schools were anonymized and referred to by letters of the alphabet (e.g., School A, School B). This approach ensured the privacy of the institutions involved while allowing for an accurate analysis of the data.

The study sample consisted of 180 selected personnel from these schools, divided into two groups: Office Personnel and Faculty. Office Personnel included individuals working in administrative and support roles such as Accounting, Registrar's Office, Library, Student Services, IT Support, Student Guidance, and other departments involved in assisting faculty and students. The Faculty group comprised all teachers employed at the participating schools.

The researcher-made questionnaire was divided into two main sections. The first section gathered demographic and personal background information from the respondents. The second section assessed the schools' readiness to implement virtual learning, focusing on four key areas: leadership commitment, personnel capability, equipment availability, and IT infrastructure accessibility. The instrument was validated and pilot tested to ensure its reliability.

## **4. RESULTS**

### ***Readiness of Selected Schools to Implement Virtual in terms of Leadership Commitment***

The findings presented in Table 1 reveal a generally strong commitment from school administrators towards the implementation of virtual classes in the selected schools of Northern Iloilo. With an overall factor average of 3.33 ("Strongly Agree"), both office personnel and faculty members acknowledge the proactive efforts of school leadership in preparing for the transition to virtual learning environments. This high level of leadership commitment is consistent with the literature, which emphasizes the pivotal role of administrative support in the successful adoption of ICT and e-learning initiatives (Austin & Mahlman, 2000; Ryan, 2001).



One notable aspect of the results is the recognition by both groups that administrators have formally acknowledged the necessity of virtual classes through official memos. While both office personnel ( $M = 3.14$ ) and faculty ( $M = 3.25$ ) agree on this point, the slightly higher agreement among faculty suggests that teaching staff may be more directly engaged or aware of these communications compared to office personnel. This aligns with Ryan (2001), who highlights the importance of clear and consistent communication from leadership to all stakeholders to ensure a unified approach to e-learning implementation. The perception among office personnel that communication could be more inclusive indicates a potential area for improvement, as effective leadership should encompass transparent and comprehensive dissemination of plans and intentions to all members of the educational community.

The development and communication of a detailed implementation plan received strong support from both groups, with factor averages of 3.37 for office personnel and 3.38 for faculty. This finding underscores the importance of strategic planning in overcoming traditional barriers to education, such as time and location constraints (Gunasekaran et al., 2002; Huynh et al., 2003). The robust agreement on the existence of a focused plan suggests that school administrators are not only recognizing the need for virtual classes but are also actively preparing to address the logistical and operational challenges associated with their implementation. This proactive stance is crucial for ensuring that the transition to online education is smooth and sustainable.

However, the dissemination of the implementation plan presents a slight discrepancy between office personnel and faculty, with the latter group showing a higher level of agreement ( $M = 3.40$ ) compared to office personnel ( $M = 3.23$ ). This difference may reflect the varying degrees of involvement and communication experienced by different staff groups. As Rozgiene et al. (2008) emphasize, the success of virtual classrooms hinges on the comprehensive involvement and readiness of all stakeholders, not just the teaching staff. The lower rating from office personnel suggests that while the plan exists, its communication may not be as effective across all departments, potentially leading to feelings of exclusion or lack of clarity among non-teaching staff.

The commitment to providing necessary support programs, facilities, and equipment



also garnered strong agreement, particularly among faculty ( $M = 3.36$ ) compared to office personnel ( $M = 3.14$ ). This indicates that while the overall support structures are in place, there may be gaps in how these supports are perceived or accessed by different groups within the schools. Ensuring that all personnel, including those in administrative and support roles, have access to the necessary resources is critical for the holistic success of virtual education initiatives (Borotis & Poulymenakou, 2004). The literature underscores that adequate support systems are essential for maintaining the quality and effectiveness of e-learning environments (Lewis, 2007).

Budget allocation for the readiness project received the highest levels of agreement from both groups ( $M = 3.34$  for office personnel and  $M = 3.40$  for faculty), reflecting confidence in the financial commitment of school administrators towards virtual class implementation. This financial backing is a fundamental component of e-learning readiness, as it ensures that the necessary technological infrastructure and resources can be secured and maintained (Khan, 2005). The strong agreement on budget allocation indicates that the schools are not only planning but also investing in the future of their educational programs, which is crucial for sustaining long-term virtual learning initiatives.

In general, the study's results indicate a strong leadership commitment to virtual class implementation, aligning with the broader literature that identifies leadership as a key determinant of successful e-learning adoption (Borotis & Poulymenakou, 2004; Van Raaij & Schepers, 2006). However, the slight variations in perceptions between office personnel and faculty indicates the need for more inclusive communication and engagement strategies. Ensuring that all members of the educational community are equally informed and involved in the planning and implementation processes will enhance the overall readiness and effectiveness of virtual education programs. Addressing these communication gaps is essential for fostering a cohesive and supportive environment that can fully leverage the benefits of ICT in education, as emphasized by previous studies (Clement, 2020; Santos, 2016).

**Table 1**

**Readiness of Selected Schools to Implement Virtual in terms of Leadership Commitment**

ITEM	Office Personnel	Faculty	Item Average
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	<b>M</b>	<b>Desc.</b>	<b>M</b>	<b>Desc.</b>	<b>M</b>	<b>Desc.</b>
1. The Administrators have recognized the need to be ready to face the new normal of virtual classes by way of having an official memo to that effect.	<b>3.14</b>	Agree	<b>3.25</b>	Agree	<b>3.23</b>	<b>Agree</b>
2. There is already a plan focused on the implementation of the virtual classes in the near and medium term.	<b>3.31</b>	Strongly Agree	<b>3.38</b>	Strongly Agree	<b>3.37</b>	<b>Strongly Agree</b>
3. The plan has already been cascaded to all personnel in the organization.	<b>3.23</b>	Agree	<b>3.40</b>	Strongly Agree	<b>3.36</b>	<b>Strongly Agree</b>
4. The Administrators have already planned the necessary support programs, required facilities and equipment for the project.	<b>3.14</b>	Agree	<b>3.36</b>	Strongly Agree	<b>3.31</b>	<b>Strongly Agree</b>
5. There is already a budget allocated for the implementation of the readiness project.	<b>3.34</b>	Strongly Agree	<b>3.40</b>	Strongly Agree	<b>3.38</b>	<b>Strongly Agree</b>
<b>Factor Average</b>	<b>3.23</b>	<b>Agree</b>	<b>3.36</b>	<b>Strongly Agree</b>	<b>3.33</b>	<b>Strongly Agree</b>

### ***Readiness of Selected Schools to Implement Virtual in terms of Personnel Capability***

Result shows the high level of personnel capability in the selected schools to implement virtual classes, with both office personnel and faculty rating various aspects of their preparedness positively. The overall factor average of 3.40 indicates a strong agreement that personnel are well-prepared for the transition to virtual operations.

The presence of a dedicated group assigned to oversee the training for virtual operations was consistently rated 3.45 by both office personnel and faculty, reflecting strong institutional efforts to ensure proper guidance and management of virtual education training.





This finding aligns with the work of Khan (2005), who emphasized the importance of a well-coordinated team to manage the training and operational readiness of personnel in e-learning environments.

Both office personnel ( $M=3.46$ ) and faculty ( $M=3.40$ ) also strongly agreed that they had undergone necessary briefing, orientation, or training for virtual operations, resulting in an item average of 3.41. This suggests that the schools have implemented effective training programs, which are crucial for personnel to adapt to virtual environments, as highlighted by Borotis and Poulymenakou (2004). However, the slight difference in ratings suggests that faculty may feel slightly less prepared than office personnel, potentially indicating that further focus on teacher training could be beneficial.

Similarly, the strong agreement regarding training in basic IT troubleshooting ( $M=3.38$ ) suggests that the schools have addressed one of the key challenges in virtual education—technical competency. As noted by Seraji and Yar Mohammadi (2010), technical skills are critical for the success of e-learning, and the results reflect an effort by schools to ensure that their staff can handle IT-related communication issues effectively.

The sufficiency of the training programs was also strongly agreed upon by both groups, with an item average of 3.39, indicating a positive assessment of the quality and scope of the training provided. This supports the findings of Aydin and Tasci (2005), who argue that thorough and well-designed training programs are essential for ensuring readiness for virtual learning environments.

Finally, the existence of support teams to assist personnel with technical issues was rated positively, with an average of 3.35, showing strong agreement that such assistance is in place. This reflects the schools' recognition of the need for ongoing technical support to facilitate the smooth functioning of virtual classes, as suggested by Rozgiene et al. (2008), who noted the importance of institutional support in the success of virtual education.

**Table 2**

**Readiness of Selected Schools to Implement Virtual in terms of Personnel Capability**

ITEM	Office Personnel		Faculty		Item Average	
	<i>M</i>	Desc.	<i>M</i>	Desc.	<i>M</i>	Desc.



1. There is a group assigned to oversee the training of personnel for virtual operations and classes.	<b>3.46</b>	Strongly Agree	<b>3.45</b>	Strongly Agree	<b>3.45</b>	<b>Strongly Agree</b>
2. Personnel involved in virtual operations and classes. have undergone briefing, orientation, or training.	<b>3.46</b>	Strongly Agree	<b>3.40</b>	Strongly Agree	<b>3.41</b>	<b>Strongly Agree</b>
3. Personnel involved have undergone the orientation or training in basic trouble shooting of Information Technology (IT) related communication problems.	<b>3.40</b>	Strongly Agree	<b>3.38</b>	Strongly Agree	<b>3.38</b>	<b>Strongly Agree</b>
4. The trainings conducted are sufficient for the personnel involved.	<b>3.37</b>	Strongly Agree	<b>3.40</b>	Strongly Agree	<b>3.39</b>	<b>Strongly Agree</b>
5. There is a group created to assist office personnel and faculty whenever technical issues arise.	<b>3.34</b>	Strongly Agree	<b>3.36</b>	Strongly Agree	<b>3.35</b>	<b>Strongly Agree</b>
<b>Factor Average</b>	<b>3.41</b>	<b>Strongly Agree</b>	<b>3.40</b>	<b>Strongly Agree</b>	<b>3.40</b>	<b>Strongly Agree</b>

### ***Readiness of Selected Schools to Implement Virtual in terms of Equipment Availability***

Result shows the strong availability of necessary equipment for the implementation of virtual operations and classes in the selected schools. Both office personnel and faculty rated this aspect of readiness favorably, with an overall factor average of 3.28, indicating a "strongly agree" response across most items.

The issuance of essential equipment such as computers, laptops, cell phones,



microphones, and speakers to personnel involved in virtual operations was rated 3.38, suggesting that the schools have made significant efforts to ensure that their staff are well-equipped for virtual teaching and support. This is a critical factor in the successful implementation of e-learning, as noted by Van Raaij and Schepers (2006), who stressed that the availability of appropriate tools is key to enhancing both the quality of teaching and the student experience in virtual classrooms.

Standardization of equipment for ease of maintenance was also strongly agreed upon, with an item average of 3.32. The use of a single brand of equipment, as indicated by this result, could streamline technical support and repairs, ensuring that staff face fewer obstacles related to hardware issues. This echoes Rozgiene et al. (2008), who emphasized the importance of a cohesive technological infrastructure for the smooth operation of virtual learning environments.

The agreement that computers, laptops, and cell phones are used exclusively for virtual operations received a slightly lower rating of 3.26, with faculty members agreeing at a slightly lower level than office personnel. This may reflect some variability in how faculty use their devices for both personal and professional purposes, which could introduce challenges in maintaining equipment for educational tasks. Ensuring that equipment is dedicated solely to virtual operations may require stricter policies or clearer guidelines from the administration.

The maintenance of equipment, although still positively rated, received an average score of 3.26, with office personnel rating this higher than faculty. The lower rating from faculty could suggest that more attention is needed in this area, particularly to ensure that regular check-ups and technical support are consistently available. As Clement (2020) noted, regular maintenance of technical infrastructure is crucial for preventing disruptions in virtual learning environments.

Finally, the provision of external storage devices such as USBs, memory cards, or external hard drives was rated 3.19, with faculty providing a lower rating compared to office personnel. This suggests that while external storage is generally available, there may be room for improvement in ensuring that all personnel have access to sufficient storage solutions, which are essential for managing large volumes of digital content and materials used in



virtual classes.

**Table 3**  
**Equipment Availability**

ITEM	Office Personnel		Faculty		Item Average	
	M	Desc.	M	Desc.	M	Desc.
1. The personnel involved in virtual operations and classes are issued with the necessary equipment for the job such as computers / laptops / cell phones with cameras or webcams, microphones, and speakers.	3.34	Strongly Agree	3.39	Strongly Agree	3.38	Strongly Agree
2. There is only one brand of computers / laptops / cell phones used (for standardization and ease of maintenance).	3.29	Strongly Agree	3.34	Strongly Agree	3.32	Strongly Agree
3. The computers / laptops / cell phones are used exclusively for school virtual operations and classes.	3.34	Strongly Agree	3.25	Agree	3.26	Strongly Agree
4. There is regular check-up or maintenance of the computers / laptops / cell phones by qualified technicians.	3.40	Strongly Agree	3.23	Agree	3.26	Strongly Agree
5. The personnel involved are issued external storage devices such as Universal Serial Bus (USB), memory cards, external hard drives, or other devices as secondary storage.	3.34	Strongly Agree	3.16	Agree	3.19	Agree



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<b>Factor Average</b>	<b>3.34</b>	<b>Strongly Agree</b>	<b>3.27</b>	<b>Strongly Agree</b>	<b>3.28</b>	<b>Strongly Agree</b>
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### ***Readiness of Selected Schools to Implement Virtual in terms of Information Technology (IT) Infrastructure Accessibility***

Result shows the accessibility of Information Technology (IT) infrastructure within the selected schools, specifically in relation to virtual operations. The overall factor average of 3.17, which indicates agreement from both office personnel and faculty, suggests that while IT infrastructure is generally accessible, there is still room for improvement, particularly in ensuring stronger and more reliable connectivity.

The availability of video communication tools like Google Meet, Zoom, and Viber was rated 3.21 on average, with office personnel rating this item higher (M=3.43) than faculty (M=3.16). This difference may reflect varying experiences in the frequency of use or familiarity with these tools, as faculty may face more challenges in integrating these into daily teaching activities. The importance of such tools is well-documented by scholars like Teo & Gay (2006), who emphasize the role of technology in enhancing communication and collaboration in virtual classrooms.

Internet connectivity, a critical factor for successful virtual learning, was rated 3.21 overall, with a slightly higher rating from office personnel (M=3.34) compared to faculty (M=3.18). While this score suggests that internet reliability is generally acceptable, the lower rating from faculty points to the potential challenges faced in live teaching environments, where strong and uninterrupted connectivity is crucial. This is consistent with findings from Santos (2016) and Clement (2020), who highlight the digital divide and its impact on the continuity of virtual education in developing areas.

The responsiveness of internet service providers (ISPs) to connectivity issues was rated 3.18, again with a higher score from office personnel (M=3.31) than from faculty (M=3.16). This may indicate that while ISPs are responsive to general technical issues, faculty members, who are more dependent on real-time connectivity for live classes, might experience delays in service recovery, impacting their teaching performance.



The adequacy of modems, routers, and WiFi extenders received a score of 3.12, indicating that both groups feel there is some room for improvement in boosting connectivity across the school. This suggests that while IT infrastructure is in place, the sufficiency of equipment to enhance connectivity across large areas or multiple users may need attention. As noted by Daniels (2016), adequate infrastructure is essential for supporting smooth virtual operations, particularly in environments where multiple users are relying on shared networks.

Finally, the availability of backup internet connections or providers was rated 3.13, indicating that while schools may have some contingency plans in place for connectivity issues, these could be further developed to ensure minimal disruption to virtual classes. In regions where internet reliability is a concern, having redundant internet sources can be critical, especially in maintaining the smooth operation of virtual classrooms (Mishra et al., 2020).

**Table 4**  
**Information Technology (IT) Infrastructure Accessibility**

ITEM	Office Personnel		Faculty		Item Average	
	<i>M</i>	Desc.	<i>M</i>	Desc.	<i>M</i>	Desc.
1. The computers / laptops / cell phones have video communication tools for remote work like Google Meet, Zoom App, Viber, and other applications.	<b>3.43</b>	Strongly Agree	<b>3.16</b>	Agree	<b>3.21</b>	<b>Agree</b>
2. Internet connectivity in the area is strong and reliable.	<b>3.34</b>	Strongly Agree	<b>3.18</b>	Agree	<b>3.21</b>	<b>Agree</b>
3. Internet service provider(s) respond immediately to connectivity problems.	<b>3.31</b>	Strongly Agree	<b>3.16</b>	Agree	<b>3.18</b>	<b>Agree</b>



4. There are sufficient numbers of modems, routers, and WiFi Extenders to enhance the connectivity.	<b>3.20</b>	Agree	<b>3.10</b>	Agree	<b>3.12</b>	<b>Agree</b>
5. The schools have other internet connections or providers as reserves in case of internet outage or connectivity issue.	<b>3.20</b>	Agree	<b>3.12</b>	Agree	<b>3.13</b>	<b>Agree</b>
<b>Factor Average</b>	<b>3.30</b>	<b>Strongly Agree</b>	<b>3.14</b>	<b>Agree</b>	<b>3.17</b>	<b>Agree</b>

## 5. CONCLUSIONS & RECOMMENDATIONS

The study reveal a generally positive outlook on the readiness of selected schools in Northern Iloilo to implement virtual classes, with strong support from leadership, competent personnel, adequate equipment, and accessible IT infrastructure. Leadership commitment was evident through the formulation of plans and budget allocation for virtual classes, but communication gaps between administrators and office personnel surfaced. While faculty seemed more informed, office personnel reported being less involved in key discussions. This suggests the need for improved communication and inclusive decision-making to ensure the successful implementation of virtual programs.

Personnel capability emerged as a key strength, with both office staff and faculty showing preparedness to handle virtual operations. The majority of respondents strongly agreed that they received adequate training, although a sizable portion had to rely on self-learning, particularly in smaller schools. This points to the need for standardized and more accessible training programs to ensure that all personnel, regardless of school size, are equally equipped to conduct virtual classes effectively.

In terms of equipment availability, schools largely demonstrated the capacity to provide essential tools, such as computers and external storage devices, for virtual learning. However, smaller schools faced challenges in ensuring standardized equipment distribution and consistent technical support. This signifies a potential inequality in resource availability that could hinder the seamless adoption of virtual classes across schools of varying sizes, requiring further investments to bridge these gaps.



Lastly, IT infrastructure accessibility remains a concern, especially with internet reliability and the sufficiency of modems, routers, and backup connections rated less favorably. Although most respondents acknowledged the availability of video communication tools and responsive internet service providers, inconsistent internet connectivity could disrupt virtual operations. Strengthening IT infrastructure, including securing reliable internet access and ensuring technical support availability, will be critical for sustained virtual learning success.

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