# Prior Experience To Online Learning, Digital Competence, And Managerial Support Of Public And Private Heis During COVID-19 Pandemic

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### Abstract

The aim of this study was to investigate the difference between public and private higher education institutions in Bohol in terms of the prior experience towards online learning and digital competence of the faculty, and managerial support received by the faculty from the institution. Intensive analysis revealed that there is no significant difference on the level of prior experience to online learning of faculty members in public and private institutions. However, faculty members from private institutions have higher digital competence and receive higher managerial support from the administration than those in public higher education institutions. Understanding these factors can help institutions identify strategies to improve and enhance the quality of flexible/remote classes.

Keywords: prior experience to online learning, digital competence, managerial support, public and private higher education institutions.

# Introduction

The global education sector has undergone a profound transformation due to the sweeping impact of the COVID-19 pandemic. Governments worldwide have implemented farreaching measures, such as lockdowns and social distancing protocols, in an attempt to curb the virus's spread. This has led to the closure of educational institutions in 192 countries, disrupting the education of approximately 1.725 billion learners (UNESCO, 2020). The province of Bohol in the Philippines, like many others, has not been immune to these effects, necessitating the temporary closure of all its public and private colleges and universities.

Amidst the daunting challenges presented by the pandemic, it has also created a silver lining by prompting educational institutions to harness the power of technology for learning. Institutions swiftly pivoted from traditional face-to-face classes to adaptable remote learning methods, ensuring a seamless continuation of education. This paradigm shift has exposed both educators and students to a plethora of new platforms and techniques, including Learning Management Systems, synchronous video conferencing tools, social networking platforms, and pre-recorded video applications.

Nonetheless, educators and school administrators encounter several obstacles when integrating technology into remote instruction. Among these challenges, the resistance to adopting technology stands out as a significant hurdle. Some educators may feel uneasy about incorporating technology into their teaching methods (Hu et al., 2003, as cited in Huang et al., 2011). Moreover, various barriers contribute to the limited success that educators experience when embracing technology, such as technology-related anxiety, insufficient training opportunities, inadequate consideration of curricular alignment, and a lack of familiarity with technological tools (Bustos & Nussbaum, 2009; Redman & Kotrlik, 2009; Vannatta & Fordham, 2004; Budin, 1999; Mumtaz, 2000; as cited in Aldunate & Nussbaum, 2013).

The primary objective of this study is to gain nuanced insights into the divergence between public and private higher education institutions in Bohol, with a specific focus on faculty members' prior exposure to online learning, digital competency, and the extent of institutional support received during the Academic Year 2020-2021. The study endeavors to shed light on the variations between these institutions, serving as a catalyst for the development of targeted interventions aimed at bolstering digital proficiency and enhancing managerial assistance. Ultimately, the study seeks to fortify the continuity of education during periods of crisis and foster the optimal utilization of technology in the realms of teaching and learning.

# Methodology

The primary aim of this study was to discern the distinctions between public and private higher education institutions in Bohol, particularly in terms of faculty members' previous exposure to online learning and digital competency, as well as the extent of managerial support they received from their respective institutions. To accomplish this objective, a descriptive survey research design was employed, involving a sample of 460 educators who were surveyed. This sample consisted of 318 participants from public institutions and 142 from private colleges and universities in Bohol. Non-probability sampling was employed with participants selected based on specific criteria. To mitigate the limitations inherent to this sampling approach, bootstrapping techniques were applied to obtain robust population estimates that would effectively address the research inquiries.

For data collection, an instrument was utilized, featuring three distinct scales: Prior Experience with Online Learning, Digital Competence, and Managerial Support. The Digital Competence scale utilized items derived from a validated questionnaire (Touron et al., 2018) designed to assess the digital competence of educators. Meanwhile, items for the Prior Experience with Online Learning and Managerial Support scales were meticulously crafted by the researcher following an exhaustive review of pertinent research literature.

Prior to initiating the survey, the instrument underwent rigorous evaluation for both face and content validity by an expert panel of university faculty members. Additionally, a pilot test was conducted with 75 faculty members hailing from both public and private institutions in Bohol. To assess the instrument's construct validity, exploratory factor analysis was employed, while the scales' reliability was determined using Cronbach's alpha coefficient. The Cronbach's alpha values for the Prior Experience with Online Learning, Digital Competence, and Managerial Support scales were calculated as 0.86, 0.93, and 0.93, respectively, indicating outstanding reliability as per the established criteria for instrument assessment.

Given the prevailing surge in COVID-19 cases, the data collection process was adapted to the circumstances. An online survey administered through Google Forms was chosen, aligning with recommendations from the Commission on Higher Education. Subsequently, the collected data was subjected to multiple regression analysis supplemented by bootstrapping techniques to ascertain the statistical significance of the findings.

#### **Results and Discussion**

The purpose of this study was to delve into the faculty members within both public and private higher education institutions during the COVID-19 pandemic. The research sought to illuminate insights regarding their previous exposure to online learning, level of digital proficiency, and the extent of managerial support they received. The gathered data underwent presentation in tabular formats, and the resultant findings were subsequently subjected to comprehensive interpretation.

In Table 1, a comprehensive breakdown of the faculty members within higher education establishments is furnished, incorporating diverse demographic and professional attributes. Notably, a considerable portion of the faculty is aligned with public colleges and universities, constituting a substantial 69.1% of the total respondents. This prominence is attributed to the significant presence of public educational institutions within the province of Bohol. The appeal of public schools is further underscored by the multifaceted benefits, incentives, and educational grants that often accompany teaching roles in these institutions.

The outcomes of this survey present noteworthy implications for both the educational sector and policymaking. The prevalence of faculty from public institutions underscores the extensive reach and impact of government-run colleges and universities within Bohol. This observation could serve as a basis for more targeted resource allocation and support for these institutions, which appear to be the primary anchors of higher education in the region. Furthermore, the appeal of public schools to educators due to incentives and benefits indicates the importance of crafting competitive compensation packages and professional growth opportunities for educators.

Private institutions might consider adopting similar strategies to attract and retain talented faculty members in their respective folds.

Table 1 Type of Institutional Affiliation of the Respondents N=460

	Frequency	Percentage
Type of Institutional Affiliation		
Public	318	69.1%
Private	142	30.9%

In Table 2, it becomes evident that a majority of the faculty members exhibit varying degrees of familiarity with online learning, ranging from moderate to high levels. Conversely, a mere 13.9% of the faculty indicated a limited history of engagement with online learning environments. This finding resonates with the contemporary educational landscape, where educators have encountered unprecedented prospects to engage in online course delivery or hybrid teaching models that seamlessly blend in-person and virtual learning realms.

In recent times, educators have found themselves presented with an array of opportunities to embrace this paradigm shift. These opportunities have manifested through the avenues of online and hybrid instruction. This shift, in turn, has encouraged many teachers to proactively seek out diverse training sessions and partake in professional development initiatives. These pursuits have enabled them to refine their pedagogical skills and expand their repertoire in the realm of online teaching, thus reflecting a proactive stance toward adapting to the evolving educational milieu.

The insights gleaned from Table 2 bear significant implications for the evolution of teaching methodologies within the digital era. The substantial percentage of faculty members with average to high prior experience in online learning underscores the agility and adaptability demonstrated by educators in response to the pandemic's challenges. Their readiness to engage with online teaching modes reflects not only a willingness to embrace change but also an inherent commitment to maintaining the quality of education despite disruptive circumstances.

The relatively smaller percentage of faculty with low prior experience highlights the imperative for continued professional development initiatives. Recognizing this need, educational institutions, both public and private, could fortify their efforts to provide comprehensive training programs that cater to educators at varying stages of technological adeptness. By offering tailored resources and mentorship, institutions can empower their faculty to traverse the digital terrain with confidence and efficacy.

**Table 2 Prior Experience to Online Learning of the Respondents** 

N = 460

	Frequency	Percentage
Prior Experience to Online Learning		
Low	64	13.9%
Average	193	42.0%
High	203	44.1%

In Table 3, a conspicuous trend emerges, revealing that a significant portion of the faculty exhibits commendable levels of digital competence, with the majority possessing skills that range from moderate to high proficiency. Notably, a mere 4.8% of the respondents indicated a lower degree of digital competence. This compelling data illustrates the faculty members' adeptness in navigating the multifaceted landscape of information literacy. This competence encompasses a broad spectrum of abilities, including the aptitude to locate, evaluate, structure, and employ information sourced from diverse channels and formats. Moreover, this proficiency extends to encompass the faculty's adeptness in harnessing digital tools technologies to facilitate communication collaboration. This capability equips them to effectively share information, fostering seamless engagement and efficient interaction with peers, students, and broader educational communities.

The insights gleaned from Table 3 hold profound implications for the present and future of education within a technology-driven era. The considerable percentage of faculty members exhibiting average to high levels of digital competence underscores the successful integration of technology into pedagogical practices. This points to an educational landscape where educators are not only embracing digital tools but also leveraging them effectively to enhance the learning experience. The minimal percentage of respondents indicating low digital competence underlines the general willingness of faculty to engage in continuous learning and skill enhancement. This aptitude for growth has implications for professional development initiatives. Institutions can capitalize on this receptiveness by offering targeted training sessions that cater to both advanced and emerging digital competencies, thus fostering a dynamic and technologically agile teaching community.

**Table 3 Digital Competence of the Respondents** 

N = 460

	Frequency	Percentage
Digital Competence		
Low	22	4.8%

Average	206	44.8%
High	232	50.4%
Total	460	100.0%

In Table 4, an illuminating panorama emerges concerning the degree of managerial support extended to the faculty by the institution's administration. Strikingly, a substantial 60.4% of the respondents reported receiving a robust level of support. This statistic serves as a poignant testament to the administration's proactive commitment to fostering an environment conducive to online teaching and course design. Evidently, the institution has channelled resources into facilitating training and professional development initiatives, underscoring its strategic approach toward equipping educators with the requisite skills for effective digital pedagogy. Beyond this, the administration's backing has extended to encompass initiatives that enhance the students' learning journey. By endorsing faculty members' endeavours to craft engaging and adaptable learning experiences, the administration manifests its dedication to preserving the quality of education in the midst of unprecedented challenges.

The insights garnered from Table 4 carry significant implications for the overarching educational ecosystem. The notable prevalence of high levels of managerial support paints a portrait of educational institutions that prioritize both faculty and student success. By proactively investing in training and development, institutions signal their recognition of the pivotal role that faculty members play in driving effective online education. This, in turn, fosters an environment conducive to innovative teaching approaches, thereby elevating the overall learning experience for students. The emphasis on flexible and engaging learning experiences showcases the administration's foresight in nurturing student-centered education. As institutions accommodate the evolving educational landscape, the support extended to faculty directly influences the creation of student-centric learning environments that align with contemporary pedagogical best practices.

Table 4 Managerial Support Received by the Faculty from the Administration

N = 460

		Frequency	Percentage
Managerial Support			
Low		22	4.8%
Average		160	34.8%
High		278	60.4%
	Total	460	100.0%

Table 5 takes center stage, elucidating the disparities that exist between public and private institutions concerning faculty members' historical engagement with online learning,

their digital prowess, and the support they receive from their respective administrations. The data therein sheds light on a compelling narrative, revealing intriguing insights that warrant closer examination. Remarkably, the data indicates that no significant distinction prevails between public and private institutions when it comes to faculty members' past involvement with online learning. This finding suggests that both sectors have made strides in incorporating digital elements into their teaching methodologies, bridging the gap between traditional and virtual education.

However, the disparities become pronounced when scrutinizing digital competence and the support extended by institutions. A notable divergence emerges, underscoring that private institutions boast a cadre of faculty members exhibiting higher levels of digital competence. This suggests that private institutions might be prioritizing or facilitating on-going digital skill development among their educators, potentially enabling them to navigate the digital landscape with more finesse.

Equally noteworthy is the discernible difference in managerial support received by faculty from their respective institutions. Here, the data echoes a resounding sentiment: private institutions tend to provide more robust managerial support. This divergence underscores the distinct strategies embraced by public and private institutions in responding to the challenges posed by the digital shift. It implies that private institutions might have adopted more proactive measures to empower their faculty members, thereby fostering a favourable environment for digital growth and innovation.

Table 5 Difference Between Public and Private Institutions in Terms of Faculty's Prior Experience to Online Learning, Digital Competence, and Managerial Support Received from the Institution

N = 460

Difference	Mann- Whitney U value	p-Value	Decision	Interpretation
Faculty's Prior Experience to Online Learning	20582.00	0.625	Fail to reject H₀	Insignificant
Faculty's Digital Competence	17963.00	0.010	Reject H₀	Significant
Faculty's Managerial Support Received from the Institution	18384.50	0.025	Reject H₀	Significant

Conclusion

In light of the study's findings, the following conclusions can be drawn:

The study reveals that faculty members across both public and private institutions exhibit comparable levels of prior experience with online learning. This parity underscores a shared foundation of familiarity with digital teaching modalities, suggesting that both sectors have effectively navigated the digital shift to some degree. However, a noteworthy distinction emerges when considering digital competence and managerial support. Faculty members within private institutions stand out with notably higher levels of digital proficiency. This suggests that private institutions might be placing a concerted emphasis on cultivating digital skill sets among their educators, potentially through tailored training and development initiatives.

Moreover, the data underscores a discernible divergence in the managerial support extended to faculty members by their respective institutions. Faculty within private institutions are more likely to benefit from heightened managerial support. This discrepancy underscores a proactive stance taken by private institutions in nurturing an environment that fosters digital growth and innovation among educators, potentially contributing to enhanced online teaching practices. In summary, the study's insights collectively reveal a nuanced panorama of the educational landscape during the COVID-19 pandemic. While both public and private institutions share a common foundation of prior experience with online learning, private institutions excel in terms of digital competence and receive elevated levels of managerial support. These findings underscore the multifaceted ways in which institutions are navigating the challenges of digital education and embracing strategies to ensure effective and innovative teaching practices in a changing educational landscape.

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