THE QUEST Journal of Multidisciplinary Research and Development
ISSN 1908-3211 (Online) | ISSN 1908-322X (Print)
P-ISSN: 1908-322X and E-ISSN: 1908-3211
Vol.2 No.3 (2023)
Received: 10-15/ Revised: 12-15/ Accepted:12-20-2023
https://neust.journalintellect.com/quest

Extent of Online Platform Utilization of the School of Industrial Technology Faculty Members

Cunanan, Mark Lester G.

Aurora State College of Technology
Zabali, Baler Aurora, 3200 Philippines
*Corresponding author's email: marklestercunanan@ascot.edu.ph

Abstract. This study delved into identifying the most frequently used online learning platform of ASCOT-School of Industrial Technology (SInT)along with their motivation of usage and challenges faced. The respondents were all 24 SInT faculty members, comprising 15 males and nine (9) females, respectively. The study used a survey questionnaire carried out through Google Forms. Results show that Google Meet is the most frequently used online learning platform by SInT faculty members followed by Facebook (Messenger and Groups), Google Classroom, Zoom, and YouTube, respectively. Accessibility was revealed to be the most important reason considered in the use of online learning platforms while issues on stable and limited network and internet connectivity are the most salient concerns. From the results of this study, it is recommended to a) sustain plans and programs intended for connectivity assistance (financial or devise-wise) for students and faculty members, b) integrate efficient online measures in the transition to full face-to-face classes, c) strengthen locally-developed (ASCOT or SInT-based) digital programs that would cater to the specific needs and challenges of the community, and d) equip faculty members with digital competency through skills training and workshops on computer and technology.

Keywords: ASCOT-School of Industrial Technology (SInT); Online learning platform; Faculty members; Accessibility; Network and internet connectivity; Connectivity assistance; Transition to full face-to-face classes; Locally-developed digital programs; Digital competency; Skills training and workshops

1. Introduction

History attests to the advent of technology and the huge significance it brought to the world and its people. From the first discovered cutting tools millions of years ago, the invention of steam engines, harnessing of electricity, invention of telephones, up until the big breakthrough of the world wide web. Since time immemorial, technology has been serving its prime purpose of

THE QUEST Journal of Multidisciplinary Research and Development
ISSN 1908-3211 (Online) | ISSN 1908-322X (Print)
P-ISSN: 1908-322X and E-ISSN: 1908-3211
Vol.2 No.3 (2023)
Received: 10-15/ Revised: 12-15/ Accepted:12-20-2023
https://neust.journalintellect.com/quest

alleviating daily life. And in this day and age of the ever-growing digital takeover, everything becomes even more "fluid and dynamic" (Baygi et. al., 2021).

Technology, especially with the aid of the internet, continues to become a pertinent part of every aspect of life. And one of the sectors where it plays a rather important role is education. As posited by Purdue University, "Technology has always been at the forefront of human education". The history of classroom technology can be dated back to the wall carvings and use of wooden paddles as learning tools. It was not until the 1870s that classroom technology witnessed a huge leap with the invention of the Magic Lantern that allowed the projection of images printed on glass slates. Such an event marked the beginning of further developments in classroom technology, leading to what is now a digitized education environment. As the globe strive to produce 21st century learners with pertinent skills on media, information, and technology, educational technology is no longer a "seat time" but an interactive and ongoing part of the sector (Christensen, 2019)

The above discussed is rather relevant with the current context of the COVID-19 pandemic. As schools were forced for closure during the initial part of the lockdown, education shifted from the traditional face-to-face to remote and online learning. As a result, there has been a significant increase in the use of online platforms for educational purposes. This was the central discussion of the study of (Jogezai, N. A., 2020) focusing on the use of Social Media (SM) as an online learning platform. However, challenges were also faced in the transition to online learning. In the context of (DeCoito, 2022), administration, students and teachers, pedagogy, and equity were found as key challenges. Meanwhile, the factors of learning and teaching activities (LTA), assessment and feedback, and digital platforms were addressed in (Peimani N, 2021).

In this regard, this study opts to delve into the said educational phenomenon in the local context. This paper seeks to identify the extent of utilization of online platforms of the School of Industrial Technology (SInT) faculty members at Aurora State College of Technology (ASCOT) Baler, Aurora. Through the use of survey questionnaires, this study will center on the frequently used online learning platform, reasons and motivations of utilization, and challenges encountered by the selected respondents.

THE QUEST Journal of Multidisciplinary Research and Development
ISSN 1908-3211 (Online) | ISSN 1908-322X (Print)
P-ISSN: 1908-322X and E-ISSN: 1908-3211
Vol.2 No.3 (2023)
Received: 10-15/ Revised: 12-15/ Accepted:12-20-2023
https://neust.journalintellect.com/quest

2. Methodology

The success of any academic inquiry hinges on the precision and rigor of its research methodology. In this study, we adopt a systematic and comprehensive approach grounded in descriptive statistical methods to delve into the intricacies of online learning platform usage among faculty members at ASCOT-School of Industrial Technology (SInT). This section outlines the meticulous steps taken to gather, analyze, and interpret data, emphasizing transparency and accuracy in our investigation. From the selection of participants to the ethical considerations guiding our research, the following sections elucidate the methodological framework employed to unravel the preferences, motivations, and challenges faced by ASCOT-SInT faculty members in the realm of online education.

2.1. Sampling Procedure

The sample procedure employed in this study aimed for a comprehensive representation of faculty members at ASCOT-School of Industrial Technology (SInT). The entire population of 24 faculty members was targeted to ensure inclusivity. The study achieved a notable 100% response rate, indicating a robust participation from the faculty. Demographic information, encompassing gender and age details, was systematically collected to contextualize the study.

2.2. Respondents

All 24 faculty members at ASCOT-SInT participated in this research, forming the core group of respondents. The sample includes a balanced representation of both genders, with 15 males (62.5%) and 9 females (37.5%). Age distribution was categorized into different brackets, reflecting the diverse range of participants. The survey questionnaire served as the primary means of data collection, strategically administered through Google Forms for its accessibility and efficiency

2.2.1 Research Site

The research was conducted at ASCOT-School of Industrial Technology (SInT), providing a specific and focused setting for the study. The choice of ASCOT-SInT as the research site allows for a targeted investigation into the preferences, motivations, and challenges of faculty members regarding online learning platforms within the unique context of this educational institution. The site's characteristics and faculty demographics contribute to the study's relevance and applicability within the ASCOT-SInT community.

THE QUEST Journal of Multidisciplinary Research and Development
ISSN 1908-3211 (Online) | ISSN 1908-322X (Print)
P-ISSN: 1908-322X and E-ISSN: 1908-3211
Vol.2 No.3 (2023)
Received: 10-15/ Revised: 12-15/ Accepted:12-20-2023
https://neust.journalintellect.com/quest

3. Results and Discussion

3.1 Demographic profile of the respondents

Upon the conduct of this study, a 100% response rate was achieved with all 24 targeted respondents having answered the provided survey questionnaire. In terms of the demographic profile, the participants consist of 15 males (62.5%) and nine (37.5%) females. Moreover, the respondents were composed mainly of young adults with 15 respondents (62.5%) aging from 20-30 years old. Meanwhile, 8 respondents (33.33%) are under the 31-50 years old age group while one (1) respondent is at 52 years old.

3.2. The Most Used Online Learning Platform

Delving into the variables of this study, the first part of the questionnaire intends to identify the most used online learning platform of the respondents. They were asked to rank 10 given online learning platforms (1 being the most frequent while 10 being the least) according to their frequency of use. And as presented in Figure 1, Google Meet is the most used online learning platform with an average ranking of 2.75. This finding is in consonance with the study of Septantiningtyas, et. al., (2021), positing that there is a significantly high usage of Google Meet as an online learning platform during the transition to remote online learning. It also discussed that the said usage is highly influenced by the teacher and learners' interest because of being "easy to implement, time flexible, and can be used in any location". Using the Technology Acceptance Model (TAM), Al-Maroof et. al. (2021) also found the same result, stating that Google Meet is "technically useful and enjoying, which helps in reducing the atmosphere of fear that is created due to the spread of Coronavirus."

Meanwhile, Google Meet was seconded by Facebook (Messenger/Group) with an average rank of 3.17. Such a finding is reinforced by the study of Ulla (2021) whose findings revealed that Facebook (especially groups) provides an avenue for student connection and an easy repository of lessons. Google Meet and Facebook were followed by Google Classroom (3.58), Zoom (3.71), and YouTube (4.42), respectively.

3.3. Reasons Behind Use of Online Learning Platform

Banking on the previous discussion on the most frequently used online learning platforms, this study also investigated the reasons or motivations behind the respondents' use of such. Figure 1 illustrates the percentage

THE QUEST Journal of Multidisciplinary Research and Development
ISSN 1908-3211 (Online) | ISSN 1908-322X (Print)
P-ISSN: 1908-322X and E-ISSN: 1908-3211
Vol.2 No.3 (2023)
Received: 10-15/ Revised: 12-15/ Accepted:12-20-2023
https://neust.journalintellect.com/quest

distribution of responses. Observably, the figure sorts the answers into five categories: accessibility, effectiveness and efficiency, affordability, adjusting in accordance to the needs of the students, and collaborations and interactivity. These were the top themes of motivation for the use of e-learning platforms, as derived from the study of Tauhidah, D. et. al., (2021).

The figure shows that the feature of being "easy to use or navigate" under the category of accessibility is the most salient motivation with the respondents' use of online learning platforms. This finding is in line with the study of E. Purwanto & H. Tannady (2020) stating that the ease of use in a certain online platform develops a positive attitude towards it. And this positive attitude towards online learning platforms influences the intent of individuals or groups to continue using it. Accessibility was also the dominant reason found by Tauhidah, D et. al., (2021).

Meanwhile, the enabling of 2-way communication (under Collaboration and Interactivity) and functionality of the platform in different devices (Adjusting in According to the Students' Needs) both come in second with 79.20%. The preference for a 2-way communication was also discussed in the study of Ulla (2021), emphasizing that apart from being a social network site, Facebook is considerably a learning platform for allowing interactions and academic discussions among its users (i.e., students and teachers). Meanwhile, functionality across different devices puts premium to the need of the students to use such platforms whether via laptop, phone, computer, etc.

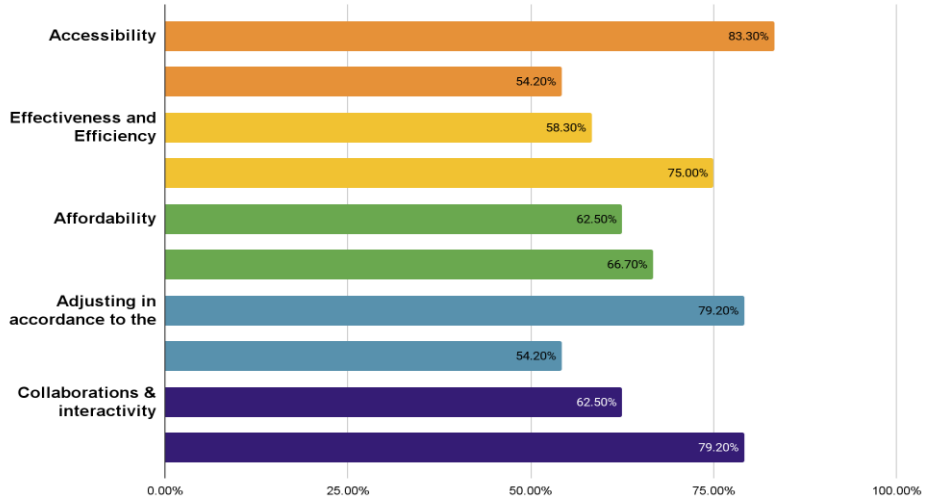

Figure 1. Reasons Behind Use of Online Learning Platform

THE QUEST Journal of Multidisciplinary Research and Development
ISSN 1908-3211 (Online) | ISSN 1908-322X (Print)
P-ISSN: 1908-322X and E-ISSN: 1908-3211
Vol.2 No.3 (2023)
Received: 10-15/ Revised: 12-15/ Accepted:12-20-2023
https://neust.journalintellect.com/quest

3.4. Challenges Encountered in the Use of Online Learning Platform

Along with the previously discussed preferences and reasons behind the use of online learning platforms, this study was also interested in identifying the challenges faced by the respondents during the process. Figure 2 below shows the percentage distribution of responses with regards to the challenges faced by the participants. It can be seen that the factor of unstable, limited network, and lack of internet quota is the most common concern. This category specifically encompasses the poor connectivity (both in the part of students and teachers) and the expensiveness of internet providers (refer to Table 2). Hermanto, Y. B., & Srimulyani, V. A. (2021) also engaged in the same line of inquiry, finding that lack of internet access in both parties is a major concern in online classes followed by difficulty in student discipline and lack of social interaction. Also parallel to this are the findings of Chogyel et al. (2021) that the lack of digital facilities, including gadgets and internet connectivity, negatively impacts learning. And contextualizing it to the experience of teachers and students, stable internet connectivity has become more of a privilege with the onset of the pandemic. Because generally, people have enjoyed free Wi-Fi or connections within the bounds of academic institutions. But when the lockdown was imposed, many students and teachers had to struggle for not having such access at home.

From the challenges on internet connectivity arises the second most prevalent problem of the respondents: technical difficulties. According to Chung E. (2020), technical problems are often encountered as students and teachers navigate online learning platforms at home, by themselves. Because of this, the burden of learning and gauging online platforms are rather imposed among its users through self-regulation (Barnard et. al., 2009)

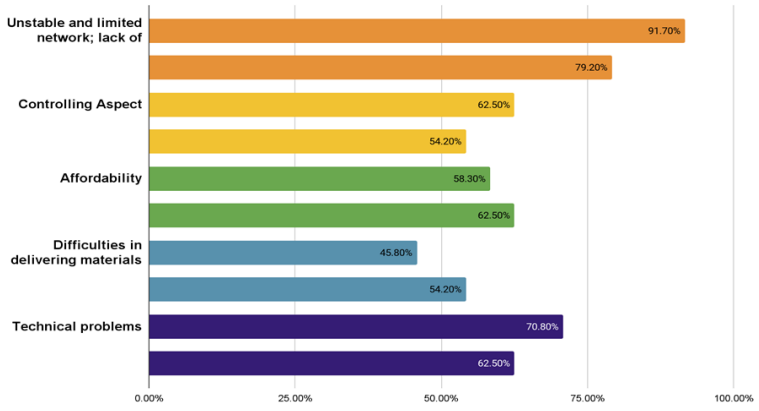

Figure 2. Challenges Encountered In The Use Of Online Learning Platform

THE QUEST Journal of Multidisciplinary Research and Development
ISSN 1908-3211 (Online) | ISSN 1908-322X (Print)
P-ISSN: 1908-322X and E-ISSN: 1908-3211
Vol.2 No.3 (2023)
Received: 10-15/ Revised: 12-15/ Accepted:12-20-2023
https://neust.journalintellect.com/quest

4. Conclusions

In conclusion, this study unveils crucial insights into the landscape of online learning platform usage among ASCOT-School of Industrial Technology (SInT) faculty members. The findings indicate a commendable level of awareness and proficiency among respondents in utilizing these platforms, highlighting a readiness for digital engagement in education. Google Meet emerges as the most frequently used platform, emphasizing its prominence in the academic setting, followed by Facebook (Messenger and Groups), Google Classroom, Zoom, and YouTube. Accessibility is identified as the paramount factor influencing platform choice, underscoring its pivotal role in the faculty's preferences. However, the study also sheds light on significant challenges, with stable network and internet connectivity issues topping the concerns. These findings contribute valuable insights to the understanding of faculty members' preferences, motivations, and challenges in the realm of online education, providing a foundation for targeted strategies to enhance the overall digital learning experience at ASCOT-SInT.

Acknowledgements

I am profoundly grateful to the faculty members of ASCOT-School of Industrial Technology (SInT) for their invaluable participation in this study. I extend my sincere appreciation to the administrative staff, colleagues, and my family for their unwavering support. Above all, I acknowledge the divine guidance and grace of God, without whom this research journey would not have been possible.

References

Al-Maroof, R. S., Alshurideh, M. T., Salloum, S. A., AlHamad, A. Q. M., & Gaber, T. (2021, March). Acceptance of Google Meet during the spread of Coronavirus by Arab university students. In Informatics (Vol. 8, No. 2, p. 24). MDPI.

Barnard, L.; Lan, W.Y.; To, Y.M.; Paton, V.O.; Lai, S.L. Measuring self-regulation in online and blended learning environments. Internet High. Educ. 2009, 12, 1–6. [Google Scholar] [CrossRef]

Baygi, R. M., Hultin, L., & Introna, L. (2021, March). EVERYTHING FLOWS: STUDYING CONTINUOUS SOCIOTECHNOLOGICAL TRANSFORMATION IN A FLUID AND DYNAMIC DIGITAL WORLD. MIS Quarterly, 45(1), 423-452.

Chogyel, N., Wangdi, N., & Dema, Y. (2021). Evaluating the challenges in online learning during the COVID-19 pandemic in a middle secondary school. International Journal of Didactical Studies, 2(2), 101459. https://doi.org/10.33902/IJODS.2021269731

Christensen, D. (2019, July 2). The history of the emergence of technology in education. Classcraft. Retrieved November 22, 2022, from https://www.classcraft.com/blog/the-history-of-the-emergence-of-technology-in-education/

DeCoito I, Estaiteyeh M. Transitioning to Online Teaching During the COVID-19 Pandemic: an Exploration of STEM Teachers' Views, Successes, and Challenges. J Sci Educ Technol. 2022;31(3):340-356. doi: 10.1007/s10956-022-09958-z. Epub 2022 Mar 28. PMID: 35369535; PMCID: PMC8958807.

Hermanto, Y. B., & Srimulyani, V. A. (2021). The challenges of online learning during the covid-19 pandemic. Jurnal Pendidikan Dan Pengajaran, 54(1), 46-57.

Jogezai, N. A., Baloch, F. A., Jaffar, M., Shah, T., Khilji, G. K., & Bashir, S. (2020, August 1). Teachers' attitudes towards social media (SM) use in online learning amid the COVID-19 pandemic: the effects of SM use by teachers and religious scholars during physical distancing. Heliyon.

Purwanto, E., & Tannady, H. (2020). The factors affecting intention to use Google Meet amid online meeting platforms competition in Indonesia. Technology Reports of Kansai University, 62(06), 2829-2838.

Peimani N, Kamalipour H. Online Education and the COVID-19 Outbreak: A Case Study of

Online Teaching during Lockdown. Education Sciences. 2021; 11(2):72. https://doi.org/10.3390/educsci11020072 The Evolution Of Technology In The Classroom | Purdue Online. (n.d.). Purdue Online. Retrieved November 22, 2022, from https://online.purdue.edu/blog/education/evolution-technology-classroom