

## ATTRIBUTES OF LECTURER READINESS ON VIRTUAL LEARNING AS A TOOL OF TEACHING

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### ABSTRACT

*This study aims to propose a research framework on lecturer readiness on virtual learning that comprises of demographic variables, course design development, course communication design, and time management. Data is collected through a literature search on lecturer readiness on virtual learning. Literature analysis is done by referring to Scopus list journals. Keywords of lecturer readiness, virtual learning, and online learning are used in the literature search. In terms of limitation, since this study focuses on Malaysian lecturers, further study should be conducted in other countries as well.*

Keywords: Lecturer, Readiness, Virtual learning, COVID-19, Research Framework.

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### INTRODUCTION

Virtual learning is the learning method that could provide teaching and learning experiences to the students in the absence of a traditional classroom environment (Simonson & Schlosser, 2006). It utilised both the computer and internet from outside or inside the university ground and helped the education to be transferred to the students without geographical barrier and time limit (Racheva, 2017; Shanmugam, Zainal, & Gnanasekaran, 2019). When the COVID-19 global pandemic affects almost all industries including educational services, universities are still able to provide teaching and learning process digitally throughout the remainder of 2019 until now (Torres, Acal, El Homrani, & Mingorance, 2021). In response to the COVID-19 pandemic, online learning has been carried out in many countries with different types of online learning models being promoted and implemented. As the global pandemic continues, the education environment is forced to change from the traditional classroom or blended teaching mode to the online learning teaching model.

This pandemic has affected educational institutions as is evident the transition from face-to-face learning to online learning methods. University preparation was put to the test in this situation, as dealing with a crisis necessitates the use of advanced technology, such as hardware and software, in order to provide successful online learning. In previous studies, it was noted that, during the COVID-19, the use of online learning increased dramatically, but the true efficacy and completion rate did not improve significantly (Van Wart et al., 2020; Yang et al., 2020). This also demonstrates the possible difficulty that online learning during a pandemic has an inadequate implementation due to a lack of resources. The students' ability as well as lecturers' ability to dedicate time and energy to familiarising themselves with online teaching platforms, determining how to boost students' readiness to switch to virtual learning while also reducing learning shocks are important elements to consider due to the pandemic's impact (Junus, Santoso, Putra, Gandhi, & Siswantining, 2021).

With the increase in the use of online modalities during COVID-19, it is necessary to assess their effectiveness concerning teaching and learning from various stakeholders. Additionally, only a few lecturers are well equipped to conduct fully virtual learning (Reyes-Chuaet al., 2020). In order to prepare for virtual learning, the lecturer needs to formulate different communication styles, summative assessments as well as content delivery to motivate, and encourage student participation (Moreno-Guerrero, Aznar-Díaz, Cáceres-Reche, & Alonso-García, 2020). Therefore, this study aims to propose a research framework on lecturer readiness on virtual learning that comprises of demographic variables, course design development, course communication design, and time management.

### LITERATURE REVIEW

#### Transformation of Learning Method due to Pandemic

The present COVID-19 pandemic has created an extraordinary economic and societal disruption, causing tremendous transformation (Krishnamurthy, 2020). Globally, governments have imposed social isolation, lockdowns, and a ban on personal contact outside of the immediate family. The epidemic is so greatly affecting educational activity. The whole education system, from primary to higher school, had to change in a couple of weeks (Flaxman et al., 2020). According to UNESCO, 185 nations will have closed all higher education institutions by April 2020, affecting over a billion students (Marinoni, Van't Land, & Jensen, 2020).

The shift to virtual learning has been expedited because of the disruption brought about by the COVID-19 scandal. The current situation has resulted in a quick movement in pedagogy from traditional to online class sessions, from personal to virtual instruction, and from seminars to webinars, among other things (Flaxman et al., 2020). As universities are forced to rethink and redesign their educational offerings in order to adapt to this new environment, COVID-19's disruptive effects have created not only fertile ground for transformation in higher education institutions but also difficulties and challenges in the transformation process (Marinoni et al., 2020).

### **Benefits of Virtual Learning**

Online education relies on the internet to deliver the class content and provide continuous interaction between lecturer and student. It is an electronically assisted learning that helps to ensure the class delivered even during the pandemic. These prompt technical advances have made distance education possible (McBrien, Cheng, & Jones, 2009). "Most of the words (online learning, virtual learning, web-based learning, computer-mediated learning, mixed learning, m-learning, for example) have in common the ability to use a networked computer which offers the possibility of learning from anywhere, at any time, at any rhythm, by any means" (Cojocariu, Lazar, Nedeff, & Lazar, 2014). As we are aware, virtual learning has its difficulties and lectures have shifted classes online as the pandemic engulfed the world in the first half of 2020.

However, during the previous decade, there has been a substantial increase in the usage of virtual learning in education, as well as a wide range of benefits (Allen & Seaman, 2017). The fact that a large number of students are taking their courses online has prompted educators to develop online courses that would boost student learning and instructional effectiveness (Bocken, Short, Rana, & Evans, 2014). A large number of studies have found that online learning can boost student involvement, improve the quality of discussions, and encourage online interactions. By assisting students in resolving challenging challenges, the discussion forum has the potential to increase learning.

Virtual learning has the potential to provide several benefits to students, including redirecting students' attention away from less important information and enabling them to participate in collaborative learning activities. A significant and favourable relationship was found between collaborative learning and peer discussions, as well as engagement rates. The formation of virtual communities may have a positive impact on the outcomes of virtual learning (Panigrahi, Srivastava, & Sharma, 2018).

### **Virtual Learning Competencies**

Competencies for virtual learning have been classified at various levels in the literature, and a variety of classification methodologies have been used to categorise and rank them. Salmon (2003), divides and categorises the characteristics or abilities of e-moderators into five categories, which include: understanding the online process, technological skills, online communication skills, content expertise, and personal qualities are all factors to consider. Understanding the online process is the first step. The International Society for Technology in Education (ISTE) guidelines for technology facilitation assembled competencies that assist technology facilitators in the performance of their jobs. Among the competencies covered are: (a) technology operations and concepts; (b) planning and designing learning environments and experiences; (c) teaching, learning, and developing the curriculum; (d) assessment and evaluation; (e) productivity and professional practise; (f) social, ethical, legal, and human issues; (g) procedures, policies for technology environments; and (h) vision, leadership, and management. A wide range of online projects and studies have made substantial use of these standards.

Competencies for virtual learning have been classified at various levels in the literature, and a variety of classification methodologies have been used to categorise and rank them. As part of this study, we looked at three areas of online teaching competencies that were identified through a literature review: course design, course communication, and time management.

Course design development refers to the aspects of a course that influence the overall structure of the course, such as the learning activities, the sequencing of content and communication, and the layout of the assignment. The majority of the time, the instructional technique used in online courses is dictated by the course design (Yang, Etesami, He, & Kiyavash, 2017). The creation of an online course necessitates a significant degree of forethought. According to researchers, instructional resources are created in such a way that they can effectively support students in achieving the intended knowledge outcomes. In some cases, institutions may provide instructors with outlines or rubrics to use in assessing their own courses, but instructors must make decisions depending on the demands of their particular course. Regardless of instructor expertise, course topic, or student aptitude, the design of an online course is frequently one of the most significant elements influencing the effectiveness of online learning outcomes, particularly in the case of higher education (Baldwin & Trespalacios, 2017).

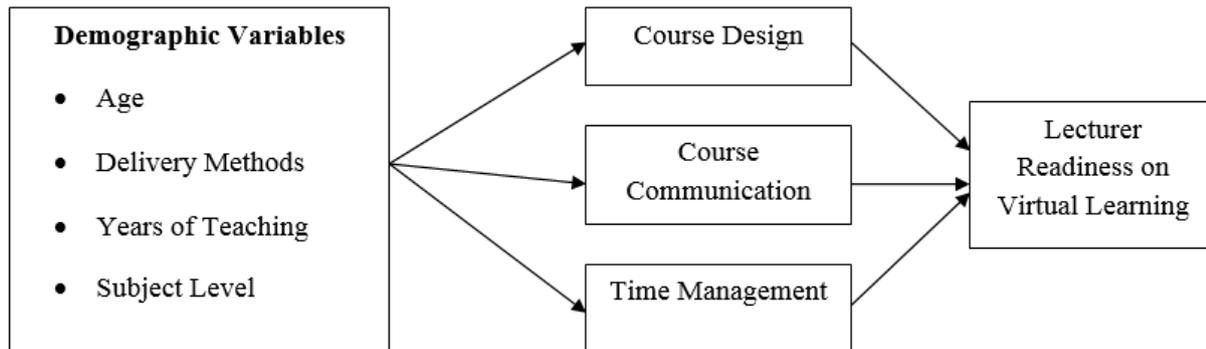
E-learning has several distinct advantages over traditional classroom settings, one of which is the absence of an actual physical classroom atmosphere, which would naturally stimulate communication. A constructivist approach to learning necessitates the development of online communities in which students can ask questions, challenge one another, and also construct new knowledge (Reid-Martinez & Grooms, 2018). An online course presents students with unique chances for community building. Effective educators serve as role models for good communication skills, and students learn to communicate effectively by imitating their example. In addition, research indicates that efficient online learning can be facilitated through communication (Lewis, 2019; Serdyukov & Sistik-Chandler, 2015).

In virtual learning environments, time management is critical to the process. When it comes to time management, according to Saunders et al. (2004), there is a new dimension that must be achieved when working with virtual learning environments. The management of subject courses might be time-consuming and need more hours for first-time instructors (Visser, 2000). In previous literature and studies, there has been no definitive and correct definition of time management. Time management, according to Elison-Bowers, Sand, Barlow, and Wing (2011), is essential for success in online learning environments. They discovered that teachers spend a disproportionate amount of time monitoring discussion boards and other forms of communication. Because it takes more time to prepare, implement, and run an online course, faculty members will need to learn new time management skills, as time management has been identified as a critical component of success in online teaching (Elison-Bowers et al., 2011).

## CONCEPTUAL FRAMEWORK

From the literature above, this research proposes a conceptual framework to identify the attributes of lecturer readiness on virtual learning as a tool of teaching by proposing the following competencies which are course design, course communication, and time management. Apart from the competencies, we also propose the demographic factors, to be included, such as age because it may affect teachers' technical level (Huet & Casanova, 2021). Research has shown that the higher the teaching age, the worse the teacher's competence to integrate information technology into teaching (Ko et al., 2020). Delivery methods are also included as different delivery methods will require different competencies (Huet & Casanova, 2021). Finally, the years of teaching and subject level such as undergraduate or postgraduate are also included as these two factors may affect the use and acceptance of information technology, as well as the integration of technology and teaching (Ko et al., 2020). All the variables will help in identifying lecturers' attributes for virtual learning. The proposed framework is as follows:

**Figure 1: Conceptual Framework**



## CONCLUSION

As we all know, ever since the pandemic, most lecturers have been reported to have offered innovative learning information to their students in addition to assigning tasks and providing feedback to them. However, challenges that necessitate the use of the following competencies, such as course design, course communication, and time management, must still be addressed. As a result, the purpose of this study is to present a research framework that will be used to determine whether lecturers are prepared to engage in virtual learning as a tool of teaching. Based on the study model depicted in Figure 1 above, lecturers will be better positioned than ever before to manage and master their virtual learning, since lecturers will serve as educators at the forefront of digital transformation. This research will also provide valuable information on how to improve the virtual learning behaviours of lecturers. It is crucial since it will aid in the process of students' "well development" to ensure high-quality learning, which is especially vital when using virtual learning.

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