



*Ushering in the Age of Endemic*

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**EXTENDED ABSTRACTS BOOK**



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## **ASSESSING THE DIGITAL LITERACY LEVEL DURING ODL AMONG FIRST-SEMESTER STUDENTS IN UITM PERAK BRANCH, TAPAH CAMPUS**

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### **ABSTRACT**

Online Distance Learning (ODL) is a mode of education that had been used in UiTM from the beginning of the pandemic to the endemic phase of COVID-19. This education mode gives flexibility to students and lecturers to conduct the learning and teaching process. Some might think about how prepared the students are. Are the students literate enough in computer skills? Thus, the aim of the study is to identify the level of digital literacy and the attitude towards the use of Information and Communications Technology (ICT) among the first-semester students in the Faculty of Computer & Mathematical Sciences (FSKM). By using the online questionnaires, all information was gathered on the level of digital literacy besides the attitude toward the use of ICT among first-semester students in FSKM. Many students were at an average level of literacy. Thus, the management of the faculty or university can confidently manage the e-examination or e-assessment for the future.

**Keyword:** ODL, COVID-19, literacy, questionnaire

### **1. INTRODUCTION**

The endemic phase of COVID-19 ensures the disease is consistently present, but it spreads at a predictable rate and can be managed by the communities globally. In this period, all sectors should sustain, or improve any input from the first phase of this disease to the end of the phase. Education sectors, especially play an important role because they bring and connect youngsters to the challenging world. In education, one should know that teaching and learning are connected.

Learning is the process of getting or extracting information from any sort of materials, books, humans or by just clicking using online sources. Nowadays, the methods of learning using online sources have become the leading method since the world has been struck by COVID-19. All individuals, especially students must adapt to this online method very fast because they did not have any choice but to select their preferred strategy. The knowledge of using technology has also become important to suit almost all fields in the modern era. The need for digital literacy has become a priority in the global scenario of online learning. This has become the first step when someone wants to work with digital. According to (Tabusum et al., 2014), digital literacy is a combination of two terms which are digital which refer to information and symbolic representation of data while literacy means the ability to be ready for knowledge, write coherently, and think critically about the written world.

In order to meet the demand for digital literacy among students, all institutions have to be prepared for the high stress of speed and flexibility (Phuapan et al., 2016). The skills in digital literacy which are also for learning include keyboarding and word processing, visual mapping, and online communication. Institutions like Universiti Teknologi MARA (UiTM) had used Open Distance Learning (ODL) since the government announced Movement Control Order (MCO). ODL is a mode of education that had been used in UiTM from the beginning till the endemic phase of COVID-19. This mode of education gives flexibility to students and lecturers to conduct the learning and teaching process. Basically, it is conducted with the help of students' timetables so that the sessions do not overlap.

Based on Yustika and Iswati, (2020), a higher level of digital literacy has positively affected the academic performance of students. They also stated that students feel anxious because they do not understand and are not comfortable with online classes especially for those who have limited computer skills. Majority of independent students score better compared for those who were not competent. They also found that years of internet usage and total hours spent online correlated weakly with digital skills. The formal internet skills and the operational are necessary but not most ideal condition for the performance of information skills and strategic skills in digital world. Systematic training of information skills is an urgent need for education sectors.

Awareness of digital literacy can be developed by practicing good skills to deal with appropriate digital tools and knowing variety of digital tools which can be used in digital literacy among students (Fazli Baharuddin et al., 2016). The usage level of digital resources should be increased in order to provide good infrastructure facility (Tabusum et al., 2014). Any organization can organize training programs on digital literacy and the library can take initiatives to subscribe free digital resources. These can help on improving the level of digital literacy. Most Indonesians do not have strong level of digital literacy (Eryansyah et al., 2019). Although they are digital natives, they lack knowledge and actual use of digital literacy.

The preparation of global citizens awareness of digital literacy is the right way for the development of the times (Yanzi et al., 2019). This requires competencies that can support the role of every citizen in the world. The ability to make use of digital media such as Internet of things, big data and robotically feature can help on increasing awareness.

During ODL in UiTM, both lecturers and students must explore rapidly to meet the requirement of online or digital work. They must process input from their lecturers or online sources and give output by conducting discussion, assessment or even the examination. All businesses are online. Therefore, some might think about how prepared are the students? Or are the students literate enough in computer skills? The main problem of this study is to know the level of computer literacy during ODL session among students in UiTM who must manipulate the computer to write their e-examination or e-assessment themselves. Thus, the main purpose of this study is to identify the level of digital literacy and the attitude in the use of Information

and Communications Technology (ICT) among first-semester students in Faculty of Computer & Mathematical Sciences (FSKM).

## 2. METHODOLOGY

All first-semester students from FSKM that were involved in ODL session in UiTM Perak Branch, Tapah Campus were the target population. Due to time constraint, only first-semester students from Diploma in Computer Science and Diploma in Mathematical Sciences programs were involved in this study since there was no student intake for Diploma in Actuarial Sciences and Diploma in Statistics from March to August 2022. The main reason for choosing the first-semester students was that they were fresh on involving themselves in the ODL session. The requirements of skills and knowledge were high. The results of the study would show how well they were experiencing ODL sessions. Convenience sampling technique was employed to select the sample. This method of sampling was easier and efficient to implement. According to Eryansyah et al., (2019), convenience sampling refers to a group of individuals who are conveniently available for study.

The data was collected with the aid of online questionnaires which were adapted from Tabusum et al., (2014). All information regarding the level of digital literacy besides the attitude in the use of ICT among first-semester students in FSKM was gathered. The questionnaire had three sections. The first section was on basic information of the respondents, the second section refers to skill rating in using the computer and internet applications while the final section rates their rating towards the use of ICT.

## 3. FINDINGS

A total of 74 questionnaires were distributed to all first-semester students from Faculty of Computer and Mathematical Sciences (FSKM). Out of that number, only 69 were returned. Thus, the response rate was 93.24%.

Variable	Category	Frequency (%)
<b>Gender</b>	Female	30 (43.5)
	Male	39 (56.5)
<b>Programme</b>	Diploma in Computer Science	54 (78.3)
	Diploma in Mathematical Science	15 (21.7)
<b>Usage Of Computer</b>	Daily	37 (53.6)
	Monthly	2 (2.9)
	Weekly	30 (43.5)
<b>Place Of Access Computer</b>	Home	58 (84.1)
	Institution	7 (10.1)

	Library	1 (1.4)
	Net centres	1 (1.4)
	Others	2 (2.9)
<b>Level (Proficiency) Of Digital/Computer Literacy (Knowledge)</b>	Beginners	14(20.3)
	Average	55(79.7)
	Expert	0(0)

**Table 1** Characteristics of the Sample

Based on Table 1, there was a 13% difference between male and female students. There are 39 (56.5%) males and 30 (43.5%) females among them. Most of them 54 (54.3%) are from Diploma in Computer Science, whereas only 15 (21.7%) from Diploma in Mathematical Sciences. 37 (53.6%) of them use the computer daily while 30 (43.5%) of them use the computer on weekly basis. Only 2 (2.9%) use the computer monthly. Next, the preferred places for students in accessing their computer is at their home with 84.1%. Only 7 or 10.1% assess their computer on campus, with little from other locations such as libraries or internet cafes or net centres. Furthermore, while determining the level (proficiency) of digital or computer literacy (knowledge), a substantial percentage of 55 respondents (79.7%) are of the average level. Only 14 (20.3%) are beginners, and none consider themselves to be literacy experts.

#### 4. CONCLUSION

The study aims to examine the level of digital literacy among first-semester students in FSKM. The findings can be applied to the body of knowledge, specifically for UiTM and all FSKM lecturers. A large number of the students were in average level for their literacy. Thus, the faculty management or university can confidently manage the e-examination or e-assessment in the future. Besides that, looking at the style of using the computer, majority of them use computer daily. This situation can automatically make themselves well prepared for any new applications or updates from the technologies.

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Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim  
Rektor  
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Cawangan Perak



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2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

**"BERKHIDMAT UNTUK NEGARA"**

Saya yang menjalankan amanah,

**SITI BASRIYAH SHAIK BAHARUDIN**  
Timbalan Ketua Pustakawan

*nar*

*Setuju.*

*27.1.2023*

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