

Knowledge, Attitude and Use of Information Communication Technology (ICT) Among Teachers at SK LKTP Tenang, Labis, Johor

Mohamad Amir Hamzah Abdullah¹, Noorulsadiqin Azbiya Yaacob^{1*}

¹School of Technology Management and Logistics,
Universiti Utara Malaysia, Bukit Kayu Hitam, 06010, MALAYSIA

*Corresponding Author

DOI: <https://doi.org/10.30880/emait.2023.04.01.002>

Received 22 June 2023; Accepted 20 July 2023; Available online 31 July 2023

Abstract: Over the years, the emergence of Information and Communication Technology (ICT) has resulted in significant benefits in the field of education. ICT is used to provide a synchronous and asynchronous teaching and learning platform for both teachers and students. The purpose of this study is to assess teachers' knowledge, attitudes, and use of information and communication technology at SK LKTP Tenang, Labis, Johor. It was carried out to assist teachers in implementing a variety of ICT supported methods and resources in the classroom to improve the teaching and learning process. Teachers at SK LKTP Tenang, Labis, Johor received a survey questionnaire with five sections. The study's findings indicate that the study respondents lack sufficient knowledge of how to use ICT. This is because, there are several challenges faced by teachers when implementing ICT in the teaching and learning environment.

Keywords: Information Communication Technology (ICT), teaching and learning, knowledge, attitude, use, challenges

1. Introduction

It is important to note that the teaching and learning processes can occur on this platform either synchronously or asynchronously, which means that ICT is a platform that meets the needs of both teachers and students. Distance learning, which happens when a teaching and learning process takes place without students or respondents being physically present in the classroom, is made possible by ICT. It is a reassuring technology created to encourage students to engage in independent learning through platforms that use electronic technology for student and teacher communication. (Beketova et al, the pandemic forced educators at SK LKTP Tenang to investigate the use of online technology and ICT in carrying out the teaching and learning process because it forced the closure of educational institutions. Recent advancements in Malaysian education have focused attention on the advantages of online learning over in-person interactions. Due to the unanticipated execution of the Movement Control Order, the Ministry of Education Malaysia had instructed educators to make use of accessible web-based learning tools to improve the teaching and learning process while schools were closed (MCO). Since Malaysia has not yet adopted ICT in education to a large extent, there are a number of factors and variables that can affect educator attitudes and ICT use in the classroom. ICT in education can be defined as a hierarchical process which involves teaching and learning with the support of certain medium and technology (Awang et al, 2018).

This study aims to investigate the level of knowledge, attitude and use of Information Communication Technology among teachers at SK LKTP Tenang, Labis, Johor. This research will also look into the difficulties that teachers face when utilising ICT as a teaching and learning platform. The transition from face-to-face teaching to online learning via Information Communication Technology (ICT) platforms has greatly facilitated the teaching and learning process. The goal of this study is to highlight the factors that limit teachers' use of ICT as a teaching and learning tool. In addition,

*Corresponding author: sadiqin@uum.edu.my

this study investigates teachers' perceptions of using ICT as a teaching and learning platform, teachers' knowledge of using ICT, teachers' attitudes toward using ICT, the use of ICT, and the challenges they face when using ICT for teaching. We recognise that in a rural institution, teachers will undoubtedly face some shortcomings or challenges when implementing ICT. As a result, the difficulties that teachers face are also highlighted in this study. The findings of this study show a significant relationship between teachers' knowledge, attitude, and use of ICT at SK LKTP Tenang.

2. Literature Review

There are several studies that highlight the significant of Information Communication Technology (ICT) in the field of education. Study conducted by (Venkateswar and at all 2020) looked into the attitude of teachers about the use of Information and Communication Technology in teaching and learning process.

2.1 Definition of ICT

Communication technology (ICT) includes broadcast media, intelligent structure of board frameworks, various media handling and transmission frameworks, organization-based controls, and overall observation capacity. Despite the fact that ICT requires a significant amount of time spent on data innovation. The scope is broader in some ways. Communication Technology (ICT) is a broad term that refers to a variety of advances and the use of common transmission channels to convey a large amount of information and new knowledge about ICT technology.

2.2 Benefit of Using ICT in Education

In the literature, the benefits of ICT in education have been praised. It has been discovered that the use of ICT can:

2.2.1 Assist Teachers and Students in Accessing Digital Information Efficiently and Effectively

Teachers at SK LKTP Tenang can use ICT as a tool to find learning points, manage issues, and provide answers to issues in the educational experience. ICT makes information more accessible, and ideas in the learning area are seen while interacting with students through the use of ICT.

2.2.2 Support Student-Centred and Self-Directed Learning

Students are now obligated to engage in the critical use of ICT. They generate new information by accessing, selecting, organising, and interpreting data and realities. Students who use ICT are better prepared to use information and information from a variety of sources, as well as evaluate the nature of learning assets fundamentally.

2.2.3 Offer More Opportunities to Develop Critical (Higher-Order) Thinking Skills

According to productive learning strategies, ICT assists teachers by focusing on higher-level ideas rather than lower-level tasks. There is a strong link between using technology to think and developing assertive reasoning skills. Longer exposure to ICT can aid in the development of more grounded assertive reasoning abilities in young people. Then, schools are strongly encouraged to incorporate innovation into all areas of learning and at all levels. When this is completed, students will be able to engage in innovative activities to achieve a higher level of awareness in ambiguous learning situations.

2.2.4 Improve the Quality of Teaching and Learning

Three important characteristics are required to create excellent teaching and learning among teachers and students: independence, limits, and creativity. Students who use ICT to take charge of their learning must be self-sufficient. Student become more willing to work independently and collaboratively as a result. Educators can also allow students to complete explicit tasks in assemblies or with cohorts. Through cooperatively familiarising they with ICT, students have more opportunities to add new data to their current information, and they gain confidence in facing challenges and profiting from their frustrations. ICT promotes self-reliance by allowing teachers to create their own material, allowing them to provide more instruction throughout the course with greater satisfaction than is possible in a traditional learning hall setting. In terms of competencies, when students are more confident in their educational experience, they can cultivate the ability to use and transfer information while implementing new innovations with productivity and adequacy.

3. Research Method

The research method refers to the tools and techniques used to conduct research. The term "research" refers to any type of investigation that seeks to uncover fascinating new truths. Adopting the appropriate approach for the specific

types of research, researchers will be able to persuade others that the research conclusions and new intellectual are valid. 2017 (Walliman)

Quantitative methodology was appropriate for this study because participants were given satisfaction scales, which served as quantitative measures. By determining the level of knowledge, attitude, and use of Information Communication Technology among teachers at SK LKTP Tenang, it is possible to gain an understanding of whether or not using ICT in learning should be improved. Participants will fill out a questionnaire prepared by the researcher.

3.1 Research Design

The research that was implemented in this study is the descriptive research design which is the survey method. This quantitative method was advantages as it can be conducted with a set of survey questionnaire and it is an ideal method to ask about opinions and attitudes of a particular population. Respondents consisted of all teachers from SK LKTP Tenang to answer the survey questions. Before I gave the survey questions to the respondents, I did a pilot test to 2 lecturers and 3 teachers who were randomly selected. This question consists of five sections, Section A: Demographic Profile, Section B: ICT Knowledge Level Processed by Teachers. Section C: Teacher’s attitude towards the use of ICT. Section D: Level of ICT use by teachers for teaching and learning purpose, and Section E: Challenges faced by Teachers in Using ICT for Teaching and Learning.

3.2 Research Respondent

A total number of 18 respondents; 6 male teachers and 12 female teachers participated in this study. The method of categorising a population into groups is known as stratification (Nickolas et al., 2021). This sampling method is used, to collect data from teachers at SK LKTP Tenang.

4. Data Analysis

The data were collected in the form of Google Form. The questionnaire link was provided to the research respondents to answer the questions. Using Google form helps the researcher to obtain the respond form the respondents more efficiently and the data which is being obtained can be kept orderly in the form of Google form.

The questionnaire data which were collected for the research respondents will be analysed and evaluated with the use of ‘Statistical Package for Social Science (SPSS)’. To obtain the data for the respondents’ background, knowledge level in using ICT, attitude towards ICT, use of ICT and the challenges while using ICT, descriptive analysis was conducted. Descriptive statistics are used to characterise the fundamental characteristics of data in the study. It is fundamental in quantitative data analysis. This analysis will help the researcher to obtain more concise summaries of the sample and the intended research questions.

4.1 Demographic Background

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	12	66.7	66.7	66.7
	Male	6	33.3	33.3	100.0
	Total	18	100.0	100.0	

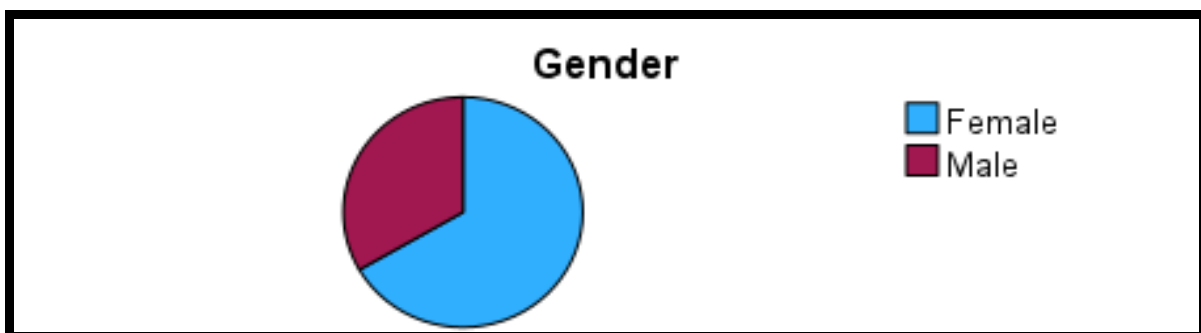


Fig. 1 - Gender of the respondent

Chart 1 shows the gender of the respondents of 18 teachers which includes 66.7% of female teachers and 33.3% of male teachers. This shows that the total number of female teachers is more than male teachers in the school.

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	3	16.7	16.7	16.7
	31-40	5	27.8	27.8	44.4
	41-50	4	22.2	22.2	66.7
	51-60	6	33.3	33.3	100.0
	Total	18	100.0	100.0	

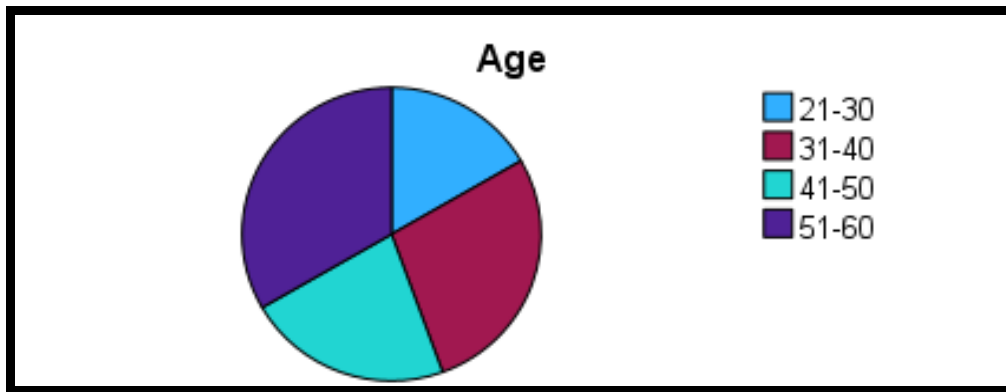


Fig. 2 - Age of respondent

Chart 2 shows the percentage of the number of teachers' ages. For ages 21-30, the total percentage of teachers is 16.7%. For teachers aged 31-40 it is 27.8%. For teachers aged 41-50, the percentage is slightly lower compared to those aged 31-40, which is 22.2%. And finally for teachers aged 51-60, it recorded the highest percentage of 33.3%. This shows that teachers aged between 51-60 are the most in the school.

Race					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	18	100.0	100.0	100.0

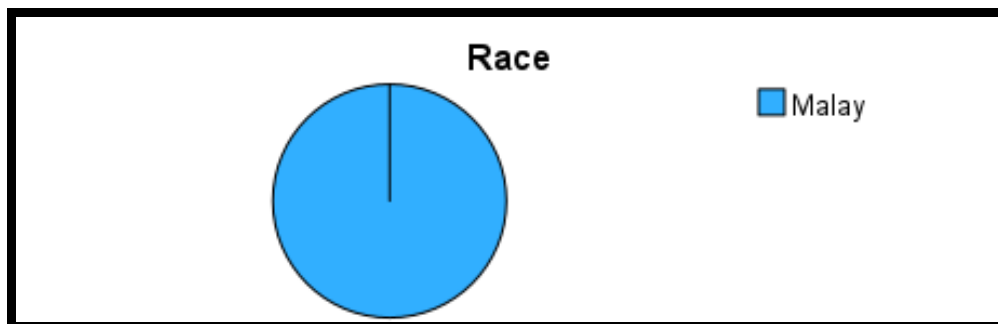


Fig. 3 - Race of respondent

Chart 3 shows the teachers. Based on the diagram above, it shows that all the teachers in the school are Malays where the percentage for Malays is 100%.

A1 A					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10 years	6	33.3	33.3	33.3
	More than 10 years	12	66.7	66.7	100.0
	Total	18	100.0	100.0	

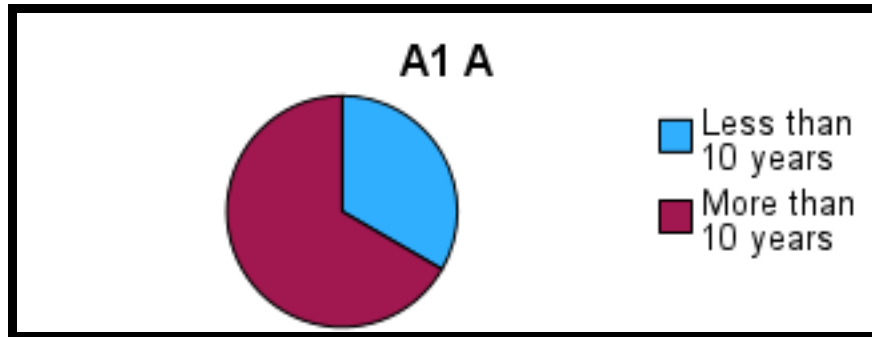


Fig. 4 - Teaching experience

Chart 4 shows the teaching experience of the teachers at the school. For this study, I only provide 2 answer options which are less than 10 years and more than 10 years for the current teaching period. Based on this chart, the highest percentage is 66.7% which includes more than 10 years of teaching. For less than 10 years, the percentage is only 33.3%. This shows that the school has teachers with more than 10 years of experience teaching more people.

A1 B					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2-3 times a week	2	11.1	11.1	11.1
	4-6 times a week	4	22.2	22.2	33.3
	Daily	12	66.7	66.7	100.0
	Total	18	100.0	100.0	

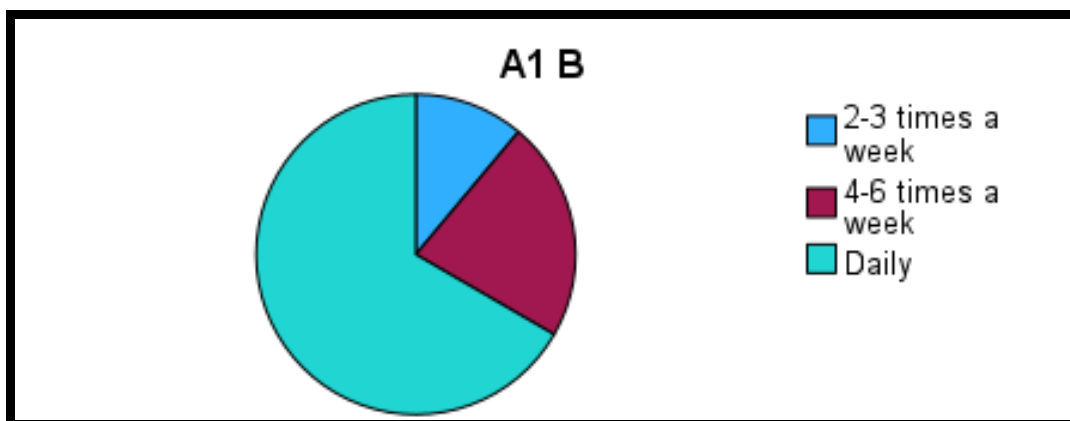


Fig. 5 - Frequency of computer use

Chart 5 shows the frequency of computer use. For daily, the percentage shows as much as 66.7% of computer use every day by teachers. For the use of computers 4-6 times a week, it shows as much as 22.2% percent. For 2-3 times a week, it recorded a percentage of 11.1%. While for once a week and less than once a week, it recorded 0% percent for both answers. This shows that the use of computers in the school is frequently used on a daily basis.

A1 C					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	15	83.3	83.3	83.3
	Yes	3	16.7	16.7	100.0
	Total	18	100.0	100.0	

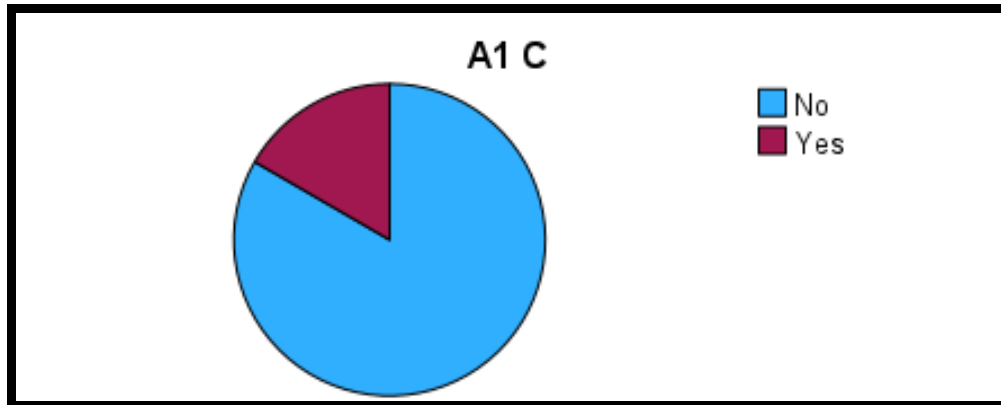


Fig. 6 - Formal training for ICT received

Chart 6 shows formal training for ICT received. According to the data obtained, only 16.7% of teachers received formal training for ICT at the school. And 83.3% did not receive formal training for ICT. This shows that the average teacher in the school does not receive formal training for ICT.

4.2 ICT Knowledge Level Processed by Teacher

Table 1 - ICT knowledge level processed by teacher

Statement	Fair	Good	Excellent
A) Knowledge of graphic application	1 (5.6%)	16 (88.9%)	1 (5.6%)
B) Knowledge of word processors	0 (0%)	16 (88.9%)	2 (11.1%)
C) Knowledge of Spread Sheet	1 (5.6%)	14 (77.8%)	3 (16.7%)
D) Knowledge of PowerPoint application	0 (0%)	10 (55.6%)	8 (44.4%)
E) Knowledge on E-mailing	0 (0%)	16 (88.9%)	2 (11.1%)
F) Knowledge of Internet Browsing	0 (0%)	13 (72%)	5 (27.8%)

Statistics						
	B1 A	B1 B	B1 C	B1 D	B1 E	B1 F
Valid	18	18	18	18	18	18
Missing	0	0	0	0	0	0
Median	2.00	2.00	2.00	2.00	2.00	2.00
Std. Deviation	.343	.323	.471	.511	.323	.461
Minimum	1	2	1	2	2	2

Table 1 shows the level of ICT knowledge by teachers. The study found that Knowledge of graphic application, fair and excellent knowledge has the same percentage of 5.6%. Meanwhile, good knowledge recorded the highest percentage of 88.9%. For Knowledge of word processor, the study found fair knowledge 0%, good knowledge 88.9% and excellent knowledge as much as 11.1%. For Knowledge of spread sheet, many respondents have good knowledge which is 77.8% followed by excellent knowledge 16.7% and fair knowledge 5.6%. For knowledge in using PowerPoint, all teachers have knowledge in using PowerPoint because fair knowledge recorded 0%, good knowledge 55.6% and excellent knowledge as much as 44.4%. Knowledge on E-mailing also recorded the highest good knowledge of 88.9% followed by excellent knowledge of 11.1% and fair knowledge of 0%. And the last one is knowledge in Internet Browsing. Fair knowledge recorded 0%, excellent knowledge 27.8% and good knowledge 72%. This shows that the average teacher at SK LKTP Tenang has knowledge in the field even though the school is located in a rural area.

4.3 Teachers Attitude Towards the Use of ICT

Table 2 - Teachers attitude towards the use of ICT

Items	1	2	3	4	5
A) I can comfortably use ICT as an educational and learning tool	0 (0%)	0 (0%)	2 (11.1%)	11 (61.1%)	5 (27.8%)
B) The use of ICT stresses me out	2 (11.1%)	3 (16.7)	8 (44.4%)	5 (27.8)	0 (0%)
C) If something goes wrong while using ICT, I do not know how to fix it	1 (5.6%)	4 (22.2%)	8 (44.4%)	5 (27.8)	0 (0%)
D) During this pandemic, ICT helps teachers to enhance their teaching and learning	0 (0%)	0 (0%)	3 (16.7%)	12 (66.7%)	3 (16.7%)
E) ICT is valuable in teaching and learning	0 (0%)	0 (0%)	1 (5.6%)	10 (55.6%)	7 (38.9)
F) ICT will change the way teachers teach in class	0 (0%)	0 (0%)	1 (5.6%)	9 (50%)	8 (44.4)
G) ICT is not useful for education and learning because it is not easy to use	0 (0%)	5 (27.8%)	5 (27.8%)	7 (38.9%)	1 (5.6%)
H) ICT is not a conducive platform for teaching because it is not easy to use	0 (0%)	6 (33.3%)	3 (16.7%)	7 (38.9)	2 (11.1%)
I) ICT helps teachers to convey their lesson and understand concepts in a more meaningful way	0 (0%)	0 (0%)	4 (22.2%)	11 (61.1%)	3 (16.7%)
J) ICT helps teachers to explore new synchronous and asynchronous platforms that can be used for teaching and learning	0 (0%)	0 (0%)	2 (11.1%)	12 (66.7%)	4 (22.2%)
K) ICT does not favour good teaching because it creates a technical problem	0 (0%)	5 (27.8%)	3 (16.7%)	6 (33.3)	4 (22.1)

Descriptive Statistics				
	N	Minimum	Mean	Std. Deviation
C1 A	18	3	4.17	.618
C1 B	18	1	2.89	.963
C1 C	18	1	2.94	.873
C1 D	18	3	4.00	.594
C1 E	18	3	4.33	.594
C1 F	18	3	4.39	.608
C1 G	18	2	3.22	.943
C1 H	18	2	3.28	1.074
C1 I	18	3	3.94	.639
C1 J	18	3	4.11	.583
C1 K	18	2	3.50	1.150
Valid N (listwise)	18			

Table 2 shows teachers’ attitude towards the use of ICT. For this study, the researcher used the likert scale answer options which are 1(Strongly Disagree), 2(Disagree), 3(Neutral), 4(Agree) and 5(Strongly Agree) to identify attitudes towards the use of ICT among teachers. The table shows 0% for Strongly agree and agree for Comfortably use ICT as an educational and learning tool. While Neutral recorded 11.1%, agree 61.1% and strongly agree 27.8%. This makes all teachers feel comfortable with the use of ICT. For The use of ICT stresses, me out data, strongly disagree recorded 11.1%, disagree 16.7%, neutral 44.4%, agree 27.8% and 0% for strongly agree. For this data, it can be said that the use of ICT makes teachers feel a little stressed. This may also be related to the lack of formal training for ICT. If something goes wrong while using ICT, I do not know how to fix it recorded the highest neutrality of 44.4% followed by strongly disagree 5.6%, disagree 22.2%, agree 27.8% and strongly agree 0%. For the ICT helps teachers to enhance their teaching and learning data, each strongly disagree and disagree recorded a percentage of 0%. Followed by the highest agree of 66.7%, neutral and strongly agree also 16.7% each. In the ICT is valuable in teaching and learning data, strongly disagree and disagree also recorded 0%, neutral 5.6%, strongly agree 38.9% and agree 55.6%. This also happens in ICT will change the way teachers teach in class, where strongly disagree and disagree are 0%, followed by neutral 5.6%, agree 50% and strongly agree 44.4%. For ICT is not useful for education and learning, 0% for strongly disagree, 27.8% for disagree and neutral. Considering 38.9% agree and 5.6% strongly agree. ICT is not a conducive platform for teaching as well, 11.1% agree, 38.9% strongly agree, 16.7% neutral, 33.3% disagree and 0% strongly agree. In addition, ICT help teachers to convey their lesson also recorded 0% for strongly disagree and disagree. While 22.2% were neutral, 61.1% agreed and 16.7% strongly agreed. ICT helps teachers to explore new synchronous and asynchronous platforms also recorded 0% for strongly disagree and disagree. Neutral recorded 11.1%, 66.7% for agree and 22.2% for strongly agree. And for the most recent data for this section, ICT does not favour good teaching recorded 0% for strongly disagree, 27.8% for disagree, 16.7% for neutral. While for agree and strongly agree, 33.3% and 22.1% respectively.

4.4 Level of ICT Use by Teachers for Teaching and Learning Purpose

Table 3 - Level of ICT use by teachers for teaching and learning purposes

Statement	Never	Seldom	Often
Teaching and learning for specific subjects	1 (5.6%)	15 (83.3%)	2 (11.1%)
Finding and accessing information and educational materials	1 (5.6%)	10 (55.6%)	7 (38.9%)
Doing presentations	1 (5.6%)	16 (88.9%)	1 (5.6%)
Preparing lessons	1 (5.6%)	11 (61.1)	6 (33.3%)
Communicating with students	1 (5.6%)	10 (55.6%)	7 (38.9%)
Communicating with colleagues	2 (11.1%)	12 (66.7%)	4 (22.2%)
Monitor, track, and assess student progress and performance	1 (5.6%)	12 (66.7%)	5 (27.8%)
As a dashboard to report student school based assessment level	2 (11.1%)	10 (55.6%)	6 (33.3%)

		Statistics							
		D1 A	D1 B	D1 C	D1 D	D1 E	D1 F	D1 G	D1 H
N	Valid	18	18	18	18	18	18	18	18
	Missing	0	0	0	0	0	0	0	0
	Median	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	Std. Deviation	.416	.594	.343	.575	.594	.583	.548	.647
	Minimum	1	1	1	1	1	1	1	1

Table 3 shows the level of ICT use by teachers for teaching and learning purposes. This section has 8 questions and was answered by all 18 respondents and the answer options for this data are Never, Seldom and Often. Teaching and learning for specific subjects recorded 5.6% for never, 83.3% rarely and 11.1% often. Finding and accessing information also recorded 5.6% for never, 55.9% rarely and 38.9% often. For the Doing Presentations data, seldom recorded the highest percentage of 88.9%, followed by never and often at 5.6% respectively. This makes seldom the highest. Preparing lessons recorded 5.6% for never, 61.1% seldom and 33.3% for often. Communicating with students on the other hand, never recorded 5.6%, rarely 55.6% and often 38.9%. Communicating with colleagues, the data recorded 11.1% never, 66.7% rarely and 22.2% often. Monitor, track and assess student progress and performance, 5.6% for never, 66.7% rarely and 27.8% often. And the last one is as a dashboard to report student school based assessment level is 11.1% never, 55.6% rarely and 33.3% often. Here we can see that many respondents chose rarely for this section and it is rarely used frequently in the learning process at the school.

4.5 Challenges Faced by Teacher in using ICT for Teaching and Learning

Table 4 - Challenges faced by teachers in using ICT for teaching and learning

Statement	Never	Seldom	Often
Lack of in house training / technical support	2 (11.1%)	9 (50%)	7 (38.9%)
Lack of time	1 (5.6%)	13 (72.2%)	4 (22.2%)
Limited knowledge of fully utilizing ICT	1 (5.6%)	13 (72.2%)	4 (22.2%)
Limited understanding of integrating ICT into teaching and learning	2 (11.1%)	14 (77.8%)	2 (11.1%)
Lack of synchronous and asynchronous learning platforms that support teaching and learning	1 (5.6%)	14 (77.8%)	3 (16.7%)

Descriptive Statistics				
	N	Minimum	Mean	Std. Deviation
E1 A	18	1	2.28	.669
E1 B	18	1	2.17	.514
E1 C	18	1	2.17	.514
E1 D	18	1	2.06	.416
E1 E	18	1	2.11	.471
Valid N (listwise)	18			

Table 4 shows Challenges faced by teachers in using ICT for teaching and learning. For the first point which is Lack of in house training/technical support, the percentage for never is 11.1%, rarely 50% and often 38.9%. Lack of time recorded 5.6% for never, 72.2% rarely and 22.2% often. Limited knowledge of fully utilizing ICT, seldom recorded a high percentage of 72.2% followed by often 22.2% and never 5.6%. Limited understanding of integrating ICT, it recorded a percentage of 11.1% for never, 77.8% rarely and 11.1% often. Lastly, the lack of synchronous and asynchronous learning platforms recorded the same percentage as before, which is 77.8% for rarely, followed by often 16.7% and never 5.6%. This is also the same as the previous section where it has the highest percentage in Seldom answer choices.

4.6 Infrastructure

To get more in-depth information about SK LKTP Tenang, the researcher interviewed one of the teacher representatives there to get information related to the infrastructure at this school. The researcher has asked several questions, one of which is related to the computer lab. At the school, they set up a computer lab with a capacity of 35 students including teachers. They also provide Slide Projectors to make it easier for teachers to give more information when they use the computer lab. In addition, the internet network is also not very good for students and teachers to use. This is because the school is in a rural area which causes the internet network to not be accessible stably. The next question asked by the researcher to the respondents is about formal training for the use of ICT. The Ministry of Education (MOE) in the area held a skills class on the use of ICT in schools, but only a handful of teachers were able to attend the workshop due to time constraints and being busy.

The findings of the study can be broken down into five categories are the demographic respondent, ICT knowledge level processed by teachers, teachers' attitude towards the use ICT, level of ICT use by teachers for teaching and learning purposes and challenges faced by teachers in using ICT for teaching and learning. For the demographic part, the total number of respondents is 18 teachers consisting of 12 female teachers and 6 male teachers. All respondents are Malays and not many teachers have undergone formal training in the use of ICT. Only 3 teachers received training in the use of ICT in learning.

In the ICT knowledge level processed by teachers' data shows that the majority of teachers in the school have good skills in knowledge of graphic application, word processors, spread sheet, PowerPoint, E-mailing and internet browsing. The quantitative study that respondents are very familiar with everyday use such as word applications and

internet browsing. Rogers' (2003) Diffusion of Innovations theory fits well with this research because knowledge in technology is viewed as an important variable that influences other variables such as attitude, perceived usefulness of ICT, and behavioural intention to use ICT.

The next finding answer research question the teachers' attitude towards the use ICT. The data obtained indicate that instructor have an optimistic attitude towards the use of ICT. The result acquired is in compliance with the research that has been carried out which demonstrated the majority of the respondent have positive and negative attitude. All the respondents' data was studied and found that it is divided into two categories where there are teachers who think the use of ICT is positive and there are also teachers who think negatively about ICT. For example, ICT helps teachers to convey their lesson and understand concepts in a more meaningful way, data recorded 61.1% agree, 22.2% neutral and 16.7% strongly agree. This can be seen from a positive point of view where many agree with the questions addressed. While from a negative point of view, for example, ICT is not useful for education and learning because it is not easy to use. The percentage recorded 38.9% agree, 27.8% neutral and disagree. While 5.6% strongly agree. This shows the highest percentage of agree which is 38.9%

The next study is related to the Level of ICT use by teachers for teaching and learning purposes. For this study, it was also found that many teachers who think rarely choose this answer option. The average teacher who answered rarely is a teacher who is over 40 years old. This can be said that they lack training and knowledge in this field of ICT. They only know a small number about ICT. And the last one is related to Challenges faced by teachers in using ICT for teaching and learning. For this answer as well, the percentage is almost the same as the previous question, which is that the highest percentage is rarely. This further explains that the teachers there are not very skilled in the use of ICT in learning.

5. Conclusion

In conclusion, education is an endeavour with a purpose, and educators play a crucial role in fostering future contributors to society and the nation. Rapid technological advancement has had a significant impact on online education. In response to dynamic changes in education, the availability of online teaching and learning platforms will increase. As a responsible educator, taking progressive and effective measures to provide effective teaching and learning should be a priority. In accordance with the goals of the National Education Development Plan 2013-2025, the use of ICT in the classroom during the online teaching and learning (T&L) process can also generate holistic human capital. Using technology and media in teaching and learning, teachers can create 21st century learning that has the credibility and skills to operate an efficient and effective teaching and learning platform. In accordance with the learning objective of the 21st century, which is to produce globally competitive students, ICT use in teaching and learning is crucial. Online teaching and learning facilitates the development of ICT skills in students. By incorporating ICT, the online teaching and learning environment will definitely meet the learning needs of the 21st century. The availability of online teaching and learning platforms will continue to increase in response to dynamic changes in the environment and education, it can be concluded.

This study focuses about on the knowledge, attitudes, and utilisation of ICT among teachers. Therefore, future research should concentrate more on the challenges teachers and students face when utilising synchronous and asynchronous ICT platforms. In addition, the scope of this study is limited to educators' use of ICT in general. This study recommends that future researchers concentrate on specific learning platforms that are widely used by teachers in order to obtain more accurate data that will aid policymakers at the Ministry level in identifying limitations and enhancing the education system. As well as educational platforms that are currently in use. This research was limited to SK LKTP Tenang. To generalise the study's findings, it is necessary to conduct additional research throughout Malaysia, particularly in rural schools.

References

- [1] Al-Munzir, A. (2015, July 12). ISU Semasa penggunaan aplikasi ICT Dalam Pengajaran Dan Pembelajaran. Retrieved June 27, 2022, from https://www.academia.edu/13947850/Isu_semasa_penggunaan_aplikasi_ict_dalam_pengajaran_dan_pembelajaran
- [2] Information and Communication Technology (ICT) in Education. (2021, July 13). Retrieved June 27, 2022, from <https://learningportal.iiep.unesco.org/en/issue-briefs/improve-learning/information-and-communication-technology-ict-in-education>
- [3] Portal, L. (2021, July 13). *Information and Communication Technology (ICT) in Education*. Information and communication technology (ICT) in education | Unesco IIEP Learning Portal. Retrieved July 12, 2022, from <https://learningportal.iiep.unesco.org/en/issue-briefs/improve-learning/information-and-communication-technology-ict-in-education>
- [4] Das, K. (2019, June 6). The Role and Impact of ICT in Improving the Quality of Education: An Overview. Retrieved July 13, 2022, from <https://ijissh.org/storage/Volume4/Issue6/IJISSH-040611.pdf>

- [5] Punie, Y., Zinnbauer, D., & Cabrera, M. (2018). *A Review of the Impact of ICT on Learning*. <https://doi.org/https://www.academia.edu/download/32688954/ICTlearning.pdf>
- [6] Hilgemeijer, M. (2019). *The: Importance of ICT in education*|. ICTE Solutions. Retrieved July 14, 2022, from <https://www.ictesolutions.com.au/blog/why-schools-should-invest-in-ict/>