Study of Teacher's Digital Technology Ability in Online Classroom Management

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Abstract

Teacher TIK competence is the ability of teachers to develop learning by utilizing TIK, such as planning, implementing, and innovating learning. Establishing TIK competence as one of the teacher competencies is a logical consequence of the significant positive influence of TIK on educational activities, especially since the pandemic era. This study aims to determine the awareness and competence of teachers to use digital technology in managing classes in this new average era. This research is fundamental and needs to be done to improve the readiness and mastery of high school teachers in the city of Kendari to use technology and classroom management competencies in the learning process. The method used in this research is a descriptive survey using a quantitative approach. The subjects of this study were 36 sample of teachers at SMA Muhammadiyah Kendari. The results showed that the technology skills of Senior High School teachers were good because the total average score and level of achievement of respondents (LAR) from four indicators of TIK ability (computer/laptop operation, use of computer software, internet, and website usage) had reached 4, 11/82.11%. Although it is in a suitable category, it is still necessary to improve specific skills so that they have a maximum impact on good classroom management and problems solving.

Key Words: Digital Technology, ICT Teacher, ICT competence

Introduction

The world has been shocked by the wave of the spread of COVID-19 since 2019. There has been an unprecedented crisis that has caused human suffering to the loss of lives. This pandemic affects people regardless of nationality, education level, income, or gender[123]. This also has an impact on various sectors, including the education sector[4]. It is estimated that 91.3%, or around 1.5 billion students worldwide, are unable to attend school due to the emergence of the Covid-19 pandemic. This number covers about 45 million students in Indonesia or about 3% of the globally impacted student population[5].

This fact forced the government to close schools and encourage distance learning at home. Many educational institutions worldwide have been forced to cancel their classes, tests, internships, and other events in favor of online delivery due to COVID-19 and the impending shutdown. As a result, teachers used various apps, including Zoom, Google Meet, Facebook, YouTube, and Skype, to conduct lessons live via video conference and assign homework to students[6]. However, some low-income students in a country like the United States still need help accessing broad bands and using computerized learning tools. The same thing occurs in rural areas worldwide, where not all students have access to high-speed internet and digital devices and thus suffer. Many educational institutions throughout the world are currently underequipped with digital tools to handle the abrupt shift from the traditional education setup to the online education system [7].

In Indonesia, The Minister of Education and Culture issued a policy in the form of Education and Culture Circular Letter Number 3 of 2020 concerning the Prevention of

[1] Andreas Schleicher, "The Impact of COVID-19 on Education: Insights from Education at a Glance 2020," *OECD Journal: Economic Studies* (2020): 4, https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf.
[2] Jena, Pravat Kumar, "Impact of Pandemic COVID-19 on Education in India", *International Journal of Current Research (IJCR),* 12, (2020)
[3] Chow, Eric J., Timothy M. Uyeki, and Helen Y. Chu., "The effects of the COVID-19 pandemic on community respiratory virus activity.", *Nature Reviews Microbiology* 21.3 (2023): 195-210
[4] Ratten, Vanessa. "The post COVID-19 pandemic era: Changes in teaching and learning methods for management educators." *The International Journal of Management Education* 21.2 (2023): 100777.
[5] Beby Masitho Batubara, "The Problems of the World of Education in the Middle of the Covid-19 Pandemic," *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences* 4, no. 1 (2021): 450.
[6] Starkey, Louise. "A review of research exploring teacher preparation for the digital age." *Cambridge Journal of Education* 50.1 (2020): 37-56.
[7] Tondeur, Jo, et al. "Teacher educators as gatekeepers: Preparing the next generation of teachers for technology integration in education." *British Journal of Educational Technology* 50.3 (2019): 1189-1209.

COVID-19 in Education Units, and Number 36962/MPK.A/HK/2020; this policy stipulates that the learning process which is usually carried out in schools is changed to online to avoid an increase in the number of patients seeking treatment due to Covid 19 [8]. However, several studies have shown that the unequal distribution of internet and connectivity in Indonesia, especially in rural areas, is due to Indonesia's topography of islands and mountains, which are still the main obstacles to distance learning in Indonesia. In addition, teachers in Indonesia are not evenly distributed throughout the region, resulting in a gap in teacher qualifications and a lack of ICT skills, especially in remote areas, which hinders student learning.

In this new average period, the government, through its policy, is reopening public activities to education because, after all, the world of education must continue to run and not stop. Subsequently, to support the efficiency of student-centered learning, teachers are directly forced to rethink the right approach and learning and have adequate competence, especially in terms of the use of learning technology[9]. However, according to existing research (Ripahiyah, 2020), the ability of teachers in Indonesia to use technology still needs to be improved, especially in the city of Kendari; high school teachers still rarely make learning innovations that utilize information and communication technology. As a result, many teachers are not able to operate computers or gadgets both face-to-face and in online learning effectively[10]. In addition, some teachers still need to use digital technology optimally and only use one type of application, such as WhatsApp, when teaching because they have not had time and adequate skills to edit the material. Many teachers constantly give students assignments until they pile up, and they are finally lazy to do them. According to [11], Today's teachers should have to keep up with the times by getting used to using complex online media and designing online learning that is packaged effectively, easily accessible, and understood by students.

[8] Ibid., 451.
[9] Kosmas Sobon and Manuel E Korompis, "Peluang Peningkatan Kompetensi Guru Di Masa Pademi Virus," *Jurnal Studi Guru Dan Pembelajaran* 4, no. 2 (2021): 287–296, https://www.e-journal.my.id/jsgp/article/view/589.
[10] Arman et al., "Peningkatan Kompetensi Guru-Guru SMA / SMK Di Kota Kendari Melalui Pembuatan Media Pembelajaran Web Blog Dan e-Modul Untuk Mendukung Pembelajaran Online," *Jurnal Pengabdian Masyarakat Ilmu Terapan* 2, no. 2 (2020): 196–204.
[11] Ardoyo Ardoyo, "Upaya Peningkatan Kompetensi Guru Dalam Menerapkan Pembelajaran Daring Masa Pandemi Covid 19 Di Sd Negeri 3 Sumberargo Sumbermalang Tahun 2020," *Consilium: Education and Counseling Journal* 1, no. 2 (2021): 255.

From the statement above, it has been shown that during this pandemic, teachers need to be severe and responsive to changes. Six things can support teachers to play an optimal role in teaching in this pandemic era: ICT, scientific updates, mastery learning, laboratories, research, and collaboration.". Apart from that, teachers also need to be constantly empowered to develop competencies that are relevant and currently needed in the world of education so that they can carry out their duties and roles professionally[12] Moreover, the consistency of the teacher to continuously explore knowledge is also crucial. One of the indicators of teacher competence that the author pays attention to is the competence of information and communication technology. ICT is a tool for manipulating, managing, and transferring information between the sender and the recipient. The components of basic ICT skills consist of word processing, spreadsheets, presentation sheet processing, browsing, and using search engines (information search engines), and communication (e-mail, chat, and blogs)[13].

Therefore, teacher ICT competence is the ability of teachers to develop learning innovations by utilizing ICT in planning, implementing, and evaluating learning, both in terms of pedagogical, personal, professional, and social competence aspects. Herman, quoted by Eni Setyomukti, stated that basic ICT skills include: operating computers, application software, the internet, and web pages. The indicators are presented in Table 1.1 below. The determination of ICT competence as one of the competencies of teachers is a logical consequence of the magnitude of the positive influence of ICT on educational activities, such as: accelerating teacher access to various learning resources, assisting teachers in explaining abstract and complex material as well as assisting teachers in managing offline and online classes[14].

Now, the need for the ability of teachers to combine various sources of learning materials, master sequential material, and use various methods such as blended learning, synchronous and asynchronous learning is very much needed. Although various obstacles, of course, often arise in the implementation of the learning process, especially in online classroom management, the ability of teachers to use digital technology-based

[12] Nelfi Alida and Mr. Jamilus, "Pelatihan Daring Sebagai Upaya Peningkatan Kompetensi Guru Di Era Pandemi," *JIRA: Jurnal Inovasi dan Riset Akademik* 2, no. 7 (2021): 1096–1106.
[13] Martinus Tekege et al., "Pemanfaatan Teknologi Informasi Dan Komunikasi Dalam Pembelajaran Sma Yppgi Nabire" 2, no. 1 (2017): 43.
[14] Delila Sari Batubara et al., "Kompetensi Teknologi Informasi Dan Komunikasi Guru SD/MI (Potret, Faktor-Faktor, Dan Upaya Meningkatkannya) INFORMASI ARTIKEL" 3, no. 1 (2017): 50–52.

learning media should be accompanied by good classroom management skills as well. This is because classroom management is complex, especially if learning is done online[1516]. Although teachers are limited by space and cannot see the condition of their students directly during the learning and teaching process, of course, teachers still need to create and maintain classroom conditions through supervision in such a way as teacher responsiveness, skills in giving instructions, skills in reprimanding students, skills in utilizing technological media, presenting planned and practical learning, encouraging collaboration between parents and the school and so on so that learning activities remain focused and can achieve goals[17]. Therefore, this again encourages teachers to continue to innovate by continuously improving the ability to use digital technology in online classroom management.

Effective learning is also supported by good classroom management. Time, instructional tactics, and student behavior are the three main components of classroom management in both face-to-face and online settings[18]. Teachers can effectively manage a class by regulating the circumstances and learning scenarios so that they can continue to run even if there are disruptions or problems throughout the learning process. Furthermore, technology integration and flexibility in the learning environment can be implemented in online classroom management so that learning proceeds as planned[19]. According to Allemano, the factors that influence effective learning are (1) internal support; (2) student characteristics; (3) Teacher behavior; (4) students' expectations; (5) Study time; (6) varied learning strategies; (7) Student assessment and feedback[20]. In this regard, teachers should include and pay attention to the above aspects of the existing learning system in online classroom management.

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[15] Mahmood, Samreen. "Instructional strategies for online teaching in COVID-19 pandemic." *Human behavior and emerging technologies* 3.1 (2021): 199-203.

[16] Purwanto, Agus. "COVID-19 pandemic and home online learning system: Does it affect the quality of pharmacy school learning?." *Sys Rev Pharm* 11.8 (2020): 524-530.

[17] Misnawati Misnawati, I Nyoman Karma, and Itsna Oktaviyanti, "Analisis Strategi Guru Dalam Pengelolaan Kelas Daring Di Kelas V SDN 35 Ampenan Tahun 2020/2021," *Jurnal Ilmiah Profesi Pendidikan* 7, no. 1 (2022): 178.

[18] Joyce McLeod, Jan Fisher, and Ginny Hoover, *The Key Elements of Classroom Management: Managing Time and Space, Student Behavior, and Instructional Strategies* (ASCD, 2003), 1.

[19] Zohra Lassoued, Mohammed Alhendawi, and Raed Bashitialshaaer, "An Exploratory Study of the Obstacles for Achieving Quality in Distance Learning during the COVID-19 Pandemic," *Education sciences* 10, no. 9 (2020): 232.

[20] Nanik Margaret Tarihoran and Wiputra Cendana, "Upaya Guru Dalam Adaptasi Manajemen Kelas Untuk Efektivitas Pembelajaran Daring," *Jurnal Persada* III, no. 2 (2020): 135.

The teacher is an organizer in the classroom and is accountable for classroom management. The definition and supporting components show how class management works. In face-to-face classrooms, classroom management refers to the teacher's efforts, which include a variety of methods and activities, to create classroom settings that enable congenial learning and help students meet their learning objectives[21]. Classroom management, according to Djumadi, is "an intentional activity that includes planning, organizing, implementing, and supervising the teaching and learning process in order to produce optimal activities."[22]. In this case, classroom management can be seen as a planning action that the teacher seeks to optimize effective learning and achieve learning objectives.

Based on the results of preliminary observations and interviews that the researchers conducted at SMA Muhammadiyah Kendari, Southeast Sulawesi, regarding learning media based on Information and Communication Technology in elementary schools, researchers observed already had Information and Communication Technology facilities provided by schools such as laptops, projectors, and school WIFI. However, the internet network is charged to the teacher who uses it. This is what makes researchers want to see how vital the role of teachers is and how teachers can use the facilities provided by the school in the form of learning media based on Information and Communication Technology in learning. This is because an excellent ability to use digital technology in the learning process can undoubtedly positively impact online classroom management and vice versa.

Several previous studies on teachers' digital technology capabilities in online classroom management have been conducted by several researchers, including Minttu Johler. An important finding of this study is that the role of leadership, collegial collaboration, good teacher-student relationships, and the ability of teachers to adapt and take on the role of learners are very important.[23] Multiple researchers, notably Minttu Johler, have done various previous studies on Teachers' Digital Technology Capabilities in Online Classroom Management. A significant discovery of this study is the crucial significance of leadership, collaborative collegiality, positive teacher-student

[21] Delita Gustriani et al., "Manajemen Kelas Di Sekolah Dasar" (2021).
[22] Dwi Tjahjo Purnomo, "Jurnal Riset Ekonomi Dan Bisnis," *Jurnal Ilmiah* 13, no. 1 (2021): 100–110.
[23] Minttu Johler et al., "Teachers' Perceptions of Their Role and Classroom Management Practices in a Technology Rich Primary School Classroom," in *Frontiers in Education*, vol. 7 (Frontiers, 2022), 841385.

interactions, and the capacity of teachers to adapt and assume the role of learners.[24] Third, Heggedal Moltudal's research discusses the more general implications of implementing ALT and LA in learning ecosystems at primary and secondary school levels and concludes that the conveniences and barriers of automated systems can create new challenges for teachers that exceed teachers' digital competencies and abilities to utilise certain real and perceived conveniences.[25]

Some of the above research is the basis for researchers to examine the study of teachers' digital technology ability in online classroom management with a research problem: how teacher competence in using digital technology to manage classes in this new average era. This research is fundamental and necessary to evaluate the readiness and mastery of high school teachers in Kendari City in the competence of using technology and classroom management competence in the learning process. Alternative solutions will also be discussed to improve the quality of education through the mastery of these two competencies, especially in this new average era.

Method

This study uses a quantitative descriptive research design survey method, so there is no need to formulate hypotheses.[26] Defines survey research as "research that obtains a sample from the population by using a questionnaire as a primary data collection tool." The researcher uses a questionnaire and interviews as research instruments. Questionnaires are several written questions used to obtain information from respondents regarding reports about themselves or things they know.[27]

The total population is 40 teachers, and the determination of the number of samples is based on the theory of Isaac and Michael with an error rate of 10%, so the total sample taken is 35 teachers. The sampling technique used is probability sampling with simple random sampling so that each member of the population has the same opportunity to be selected as a sample member. The data from the results of this study were obtained

[24] Akram Mahmoud Alomari, "Teachers' Digital Technology Competencies for Use in Distance Education in Schools.," *International Journal of Technology in Education and Science* 7, no. 1 (2023): 57–70.
[25] Synnøve Heggedal Moltudal, Rune Johan Krumsvik, and Kjetil Laurits Høydal, "Adaptive Learning Technology in Primary Education: Implications for Professional Teacher Knowledge and Classroom Management," in *Frontiers in Education*, vol. 7 (Frontiers, 2022), 830536.
[26] Dr Sandu Siyoto and M.Ali Sodik, *Dasar Metodologi Penelitian* (Literasi Media Publishing, 2015), 100.
[27] Arikunto, S. 2010. Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: Rineka Cipta, 194.

through a questionnaire distributed to 35 samples of SMA Muhammadiyah Southeast Sulawesi Kendari teachers on July 12, 2022.

The questionnaires that had been distributed to 35 samples of teachers were then returned to the authors with the same number of 25 questionnaires (100%). After the editing process and the questionnaires were filled out, the questionnaires could be processed. The questionnaires are used to obtain data on the ability of teachers to use Information and Communication Technology-based learning media at SMA Muhammadiyah, while interviews are conducted to receive additional information related to online classroom management constraints. The questionnaire used in this study is closed, namely a questionnaire that presents questions and answers choices so that respondents can only provide limited responses to the choices given. In this study, the research instrument used a questionnaire by filling out online via Google Forms. The questionnaire consists of four indicators to be studied: computer/laptop operation, computer/laptop software usage, internet usage, and website pages.

The data analysis technique in this study used descriptive quantitative data analysis techniques. The scale instrument used in this study used a Likert scale. The options used in the Likert scale consist of four: very good, good, not good, and very bad. This Likert Scale option will later describe teacher competence in ICT. Before distributing the questionnaire in this study, the instrument's validity will be tested first. The data analysis technique used a percentage description.

As for the interview, it used structured and open interviews aimed at two important people who had met the requirements as research resource persons, namely the principal and one of the schoolteachers at SMA Muhammadiyah Kendari.

Table 3.1 Likert Scale

Answer Form	Symbol	Scor
Very Capable	VC	5
Capable	C	4
Quite A Bit Capable	QC	3
Not Capable	NC	2
Not At All	NA	1

To find out the respondent used the following formula;

Level of Achievement of Respondents = Average Score x 100

Maximum Scor

Table 3.2 Classification of The Level of Achievement of Respondents

No	Achievement Percentage	Criteria
1.	85% - 100%	Best
2.	66% - 84 %	Good
3.	51% - 65%	Average
4.	36% - 50%	Bad
5.	0% - 35%	Worst

Validity and Reliability Test

Validity Test

The results of the validity test of the questionnaire regarding the mastery of information and communication technology are as many as 35 questions; all questions after being tested can be accounted for their validity as shown in Table 1.1. Statistically, the correlation figure obtained must be compared with the Product Moment r table for a sample of 30 people with a = 5% is 0.396. All statement instruments are declared valid if the calculated r has a result more significant than the r table. On the other hand, if the r count selects a result more minor than the r table, then the statement instrument is declared invalid.

From the calculation results of the correlation number of all questions is greater than the number r table, the question is significant (valid). This means that the questions asked in the questionnaire have construct validity or statistical terms that are internally consistent, which means that the questions measure the same aspect.

Table 4. Validity Test

Item No.	Calculated r value (Correlation Coefficient)	Value of r Table (Product Moment) N: 25a : 5%	Decision
1	0.875	0.361	Valid
2	0.761	0.361	Valid
3	0.709	0.361	Valid
4	0.708	0.361	Valid
5	0.834	0.361	Valid
6	0.713	0.361	Valid
7	0.851	0.361	Valid
8	0.743	0.361	Valid

9	0.822	0.361	Valid
10	0.707	0.361	Valid
11	0.803	0.361	Valid
12	0.838	0.361	Valid
13	0.888	0.361	Valid
14	0.825	0.361	Valid
15	0.779	0.361	Valid
16	0.828	0.361	Valid
17	0.802	0.361	Valid
18	0.818	0.361	Valid
19	0.743	0.361	Valid
20	0.853	0.361	Valid
21	0.868	0.361	Valid
22	0.767	0.361	Valid
23	0.879	0.361	Valid
24	0.765	0.361	Valid
25	0.887	0.361	Valid
26	0.857	0.361	Valid
27	0.886	0.361	Valid
28	0.89	0.361	Valid
29	0.868	0.361	Valid
30	0.887	0.361	Valid
31	0.852	0.361	Valid
32	0.734	0.361	Valid
33	0.786	0.361	Valid
34	0.752	0.361	Valid
35	0.763	0.361	Valid

Reliability Test

Reliability was measured using Cronbach's Alpha, which showed how highly the questions in the questionnaire were correlated and related. According to Malhotra, good reliability for the researcher's indicator is above 0.60. Tests are carried out on each variable so that it can be seen which variable constructs are not reliable. The following results from the reliability calculation with the help of SPSS v.26 on the variable, namely the importance of information and communication technology in education. Output table 1 below provides information about the number of samples or respondents (N) analyzed in the SPSS program, namely N, as many as 30 teachers. Because there is no open data, the valid number is 100%.

` From the second output table below, it is known that there are N of items 35 items with a Cronbach's Alpha value of 0.983. Because Cronbach's Alpha value is 0.983 > 0.60,

then as the basis for decision-making in the reliability test below, it can be concluded that the 35 questionnaire items are reliable or consistent. The third output table below provides an overview of the statistical values for the 30 items in the questionnaire. In the column "Cronbach's Alpha if Item Deleted," it is known that Cronbach's Alpha value for the 35 questions is more significant than 0.60, so it can be concluded that the 35 questionnaire items are reliable. The results of the calculation of the reliability level of the questionnaire can be seen in the following table.

Table 5. Reliability Test

Table 5.1. Case Processing Summary

		N	%
Cases	Valid	28	93.3
	Excluded[a]	2	6.7
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Table 5.2 Reliability Statistics

Cronbach's Alpha	N of Items
.984	35

Table 5.3 Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q1	265.86	3071.460	.872	.754
Q2	265.89	3086.173	.755	.755
Q3	266.50	3080.111	.700	.754
Q4	266.18	3087.337	.700	.755
Q5	266.14	3073.905	.829	.754
Q6	266.61	3073.655	.704	.754
Q7	266.39	3059.136	.846	.753
Q8	266.25	3073.009	.735	.754
Q9	266.07	3070.217	.816	.753
Q10	265.93	3084.661	.699	.755
Q11	266.04	3071.739	.797	.754

Q12	266.64	3057.794	.833	.752
Q13	266.71	3060.656	.885	.753
Q14	266.68	3055.485	.819	.752
Q15	267.21	3081.212	.773	.754
Q16	266.43	3060.180	.822	.753
Q17	266.57	3064.180	.795	.753
Q18	266.93	3069.624	.812	.753
Q19	266.89	3055.877	.732	.752
Q20	266.00	3069.778	.849	.753
Q21	266.46	3064.258	.864	.753
Q22	266.71	3080.656	.760	.754
Q23	266.54	3071.443	.876	.754
Q24	266.61	3070.470	.757	.754
Q25	266.50	3060.556	.883	.753
Q26	266.64	3065.868	.853	.753
Q27	266.68	3044.745	.881	.751
Q28	266.64	3048.238	.886	.752
Q29	266.75	3058.639	.864	.752
Q30	266.50	3053.444	.883	.752
Q31	266.89	3062.470	.847	.753
Q32	267.18	3078.300	.726	.754
Q33	267.21	3073.508	.780	.754
Q34	267.29	3079.323	.744	.754
Q35	267.25	3059.380	.754	.753
TOTAL	135.21	789.286	1.000	.984

Result and Discussion

The research results and discussion on the ability of SMA Muhammadiyah, Southeast Sulawesi, and Kendari teachers will be explained here. Overall, the four indicators show an average value and a good LAR (Level of Achievement of Respondents), with the first indicator being the ability of teachers to operate computers with an average LAR of 88.19% and showing the best category, followed by the second indicator, namely using a computer which shows the LAR. 83.03% in the excellent category, the third indicator is the ability of teachers to use the internet, with a LAR value of 82.46% in the excellent category, and the last one using the website with a LAR of 75.31% in the excellent category.

The results show that, in general, teachers' ability in the four indicators is good. However, sometimes there are still a few obstacles in the field, evidenced by the principal's statement, which states that teachers may be late in responding to the need for using digital technology because teachers need time. Adaptation and actualization space long enough to get used to online-based learning. The solution is that training to improve the ability of teachers in the use of ICT at the school, regional, and even national levels must continue to be carried out, teachers who are fast capable of using ICT are asked constantly to accompany, be ready to become peer tutors on an ongoing basis to teachers who are relatively slow, and teachers are routinely monitored regarding the use of android and the need for pulses. In this study, the writer wanted to know the ICT ability of teachers at SMA Muhammadiyah Southeast Sulawesi Kendari in classroom management.

Result Presentation

Table 6.1 Total Four Items

No	Question	Skor					TOTAL	SKOR	RATA-RATA	LAR	KATEGORI
		Very capable	Capable	Quite a bit capable	Not capable	Not at all					
1	Operating a computer or laptop	177	77	18	7	9	Total	1270	4.41	88.19 %	Best
2	Using Computer Software	198	113	46	25	14	Total	1644	4.15	83.03 %	Good
3	Using Internet	118	79	30	18	7	Total	1039	4.12	82.46 %	Good
4	Using Website	109	98	65	36	16	Total	1220	3.77	75.31 %	Good

The percentage of results referred to here is the extent to which the information literacy skills of SMA Muhammadiyah Southeast Sulawesi Kendari teachers are described in the following four aspects:

Table 6.2 Operating a Computer or Laptop

Question	Skor					TOTAL	Score	Average	LAR	Category
	Very capable	Capable	Quite a bit capable	Not capable	Not at all					
Operating a computer or laptop										
1	30	5			1	36	171	4.75	95.00%	Best
2	29	6			1	36	170	4.72	94.44%	Best
3	21	11	3		1	36	159	4.42	88.33%	Best
4	24	9	2		1	36	163	4.53	90.56%	Best
5	23	10	1	1	1	36	161	4.47	89.44%	Best
6	12	14	4	5	1	36	139	3.86	77.22%	Good
7	17	10	6	1	2	36	147	4.08	81.67%	Good
8	21	12	2		1	36	160	4.44	88.89%	Best
Total	177	77	18	7	9	Total	1270	4.41	88.19%	Best

Some of the teachers answered very well in the indicators of computer operation (with a total of 8 questions). That is, there were a total of 177 teachers; 77 teachers answered yes, 18 teachers answered a little they could, seven teachers answered no, and there were nine other teachers who answered. It means that in operating computers in general, most teachers are competent, although some teachers admit that they cannot or cannot operate them very well. It can be seen in questions 5,6, and 7 regarding installing a computer/laptop to a multimedia device, software installation, and operation, as well as setting and removing useless software on a computer/laptop; there are still several seven teachers who answered firmly.

The respondents' achievement level is in the best category with an average final score, and the LAR shown is 4.41/88.19%. In addition, specifically, the results of the research on questions 1-8, except 6 and 7, are in the best category with a range of 85%-100%, while numbers 6 and 7 are in the excellent category with LAR values of 77.22% and 81.67%. That means that almost all teachers can operate computers and laptops very well, such as turning on and off the computer to connect the computer/laptop to a data/information storage device (CD, DVD, flash disk, memory card, Etc.). However, the inadequate condition of school ICT equipment, including computers, multimedia devices, and information storage devices, often hinders learning to the teacher's ability to master and use it. Requests for help from schools, teachers, and students should be carried out continuously so that there are no more excuses for teachers not to use computer devices

because they run out or for students not to attend class because they do not have devices at home, school-owned devices should be used by teachers and students later.

Table 6.3 Using Computer Software

Question	Skor					TOTAL	Scor	Average	LAR	Category
	Very capable	Capable	Quite a bit capable	Not capable	Not at all					
Using Computer Software										
9	22	12	1		1	0	162	4.50	90.00%	Best
10	26	8	1		1	36	166	4.61	92.22%	Best
11	25	9	1		1	36	165	4.58	91.67%	Best
12	20	10	4	2		36	156	4.33	86.67%	Best
13	15	12	5	3	1	36	145	4.03	80.56%	Good
14	16	11	6	1	2	36	146	4.06	81.11%	Good
15	11	9	7	6	3	36	127	3.53	70.56%	Good
16	20	9	3	3	1	36	152	4.22	84.44%	Good
17	16	8	9	1	2	36	143	3.97	79.44%	Good
18	15	11	6	3	1	36	144	4.00	80.00%	Good
19	12	14	3	6	1	36	138	3.83	76.67%	Good
Total	198	113	46	25	14	Total	1644	4.15	83.03%	Good

Some of the teachers answered very well in the indicators of using computer software (with a total of 11 questions), namely there were a total of 198 teachers, while 113 teachers answered yes, 46 teachers answered a little bit, 25 teachers answered no, and there were 14 other teachers who answered very well. can not. This means that in the use of computer software in general, most teachers have been able to, although there are also some teachers who admit that they cannot or cannot use it. At points number 15 and 19 there are 12 people who answered that they could not, this relates to making images/graphics using computer software (such as Microsoft, Adobe Premiere, Corel, Photoshop etc.) and cleaning computer/laptop viruses using device software (such as antivirus, AVG cleaner, Avast cleanup etc).

Broadly speaking, the level of achievement of respondents is in the good category with an average final score and the LAR shown is 4.15/83.03%. In addition, specifically, the results of the research on questions 9-12 are in the best category with a LAR range of 86%-90%, while numbers 13 and 19 are in the good category with a LAR value ranging from 70% - 84%. That means almost all teachers have been able to use computer and laptop software very well. Starting from creating a new folder on the computer to fill,

duplicate, move or copy data between disk storage, to cleaning computer/laptop viruses using device software (such as antivirus, AVG cleaner, Avast clean up, etc.). Although according to the results of interviews with school principals and several teachers, there are still many teachers whose ability to use computer software is still slow, such as in the use of presentation software and this is still very dependent on the speed level of a teacher's understanding, this does not reduce the enthusiasm of teachers to continue to improve themselves. upgrade his abilities. So that school principals always take the initiative to hold training activities such as teaching clinic training, training on the use of google meet, forms, and so on that support learning, by collaborating with various stakeholders in the central to regional education government so that teachers are not trapped in lost learning.

Table 6.4 Using Internet

Question	Skor					TOTAL	Scor	Average	LAR	Category
	Very capable	Capable	Quite a bit capable	Not capable	Not at all					
Using Internet										
20	26	7	2		1	0	165	4.58	91.67%	Best
21	17	9	4	5	1	36	144	4.00	80.00%	Good
22	13	14	5	3	1	36	143	3.97	79.44%	Good
23	15	13	7		1	36	149	4.14	82.78%	Good
24	13	14	5	3	1	36	143	3.97	79.44%	Good
25	16	13	3	3	1	36	148	4.11	82.22%	Good
26	18	9	4	4	1	36	147	4.08	81.67%	Good
Total	118	79	30	18	7	Total	1039	4.12	82.46%	Good

Some of the teachers answered very well in the indicators of computer operation (with a total of 7 questions). That is, there were a total of 118 teachers while 79 teachers answered yes, 30 teachers answered slightly, 18 teachers answered no, and there were seven other teachers who answered. It means that in general use of the internet, most teachers have been able to operate it, although some teachers admit that they cannot or cannot operate it very well. At point number 21, there are five people, and at point number 26, there are four people who answered they could not; this is related to sending electronic mail (using Gmail, iCloud mail, outlook, or others) with file attachments, as well as understanding policies, security rules, and ethics in the use of the internet network.

The respondents' achievement level is in a suitable category with an average final score, and the LAR shown is 4.12 / 82.46%. In addition, the research results on question number 1 are in the best category, with a LAR value of 91.67%. In comparison, numbers 21 to 26 are categorized as good, with a LAR value of 79% - 82%. That means almost all teachers can use the internet well, such as Connecting the internet network with WIFI or Hotspot to Download and upload files from the internet, websites, or blogs and save them to a storage folder.

In order to improve the ability of teachers to use the internet as a support for student learning, schools should continue to upgrade network capacity for both teachers and students such as adding routers through collaboration with outside parties such as TELKOM, providing data packages to students and teachers to improve the BBM process and generate willingness students through active and interactive learning in BBM learning and not just listening and being passive. If the above is done optimally, it will also give more satisfactory results in increasing the ability to use the internet for Muhammadiyah Kendari school teachers.

Table 6.5 Using Website

Question	Skor					TOTAL	Scor	Average	LAR	Category
	Very capable	Capable	Quite a bit capable	Not capable	Not at all					
Using Website										
27	16	9	6	3	2	0	142	3.94	78.89%	Good
28	15	14	2	3	2	36	145	4.03	80.56%	Good
29	11	12	7	4	2	36	134	3.72	74.44%	Good
30	14	12	5	3	2	36	141	3.92	78.33%	Good
31	11	13	7	4	1	36	137	3.81	76.11%	Good
32	10	9	11	4	2	36	129	3.58	71.67%	Good
33	12	9	9	4	2	36	133	3.69	73.89%	Good
34	9	10	11	4	2	36	128	3.56	71.11%	Good
35	11	10	7	7	1	36	131	3.64	72.78%	Good
Total	109	98	65	36	16	Total	1220	3.77	75.31%	Good

Most teachers answered very well using the website (with nine questions), with 109 teachers. In contrast, 98 teachers answered yes, 65 answered slightly, 36 answered no, and 16 other teachers answered. It means that in operating computers in general, most

teachers have been able to do it, although some teachers admit that they cannot or cannot use it at all. It can be seen in question 35 regarding providing communication through websites that provide communication pages such as webmail, contact forms, chat forms, Etc.

The respondents' achievement level is in a suitable category with an average final score, and the LAR shown is 3.77/75.31%. In addition, the research results on questions 27-35 are all in the excellent category, with a LAR range of 71% -80%. That means almost all teachers have been able to use the website well, such as using browser software (chrome, opera mini, Mozilla Firefox, google, youtube, safari, yahoo, Etc.) and creating web pages to improve the presentation of designs by using websites that have functions in the entertainment sector, such as online game sites, movies, video games, and music.

In addition, although there are still some teachers who initially did not master the use and use of websites properly, in the future, there will be continuous training by inviting presenters who are experts in the field of using websites that can support learning, such as in terms of introducing websites to design materials. and presentations, as well as collaborating material with audio-visual-based entertainment, which later on can help teachers in increasing the learning interest of the students themselves.

Discussion

In this discussion, the author wants to explain in writing the results of the analysis of the ICT capabilities of SMA Muhammadiyah Southeast Sulawesi Kendari teachers in classroom management. From the results of the research and analysis that the author did, it can be said that the technological ability of SMA Muhammadiyah Kendari teachers is good because the overall average score and respondent achievement level (LAR) of the four indicators of ICT ability (computer/laptop operation, use of computer software, internet use) and website) has reached 4.11 / 82.11%. Even though it is in a suitable category, it is still necessary to improve these skills to positively impact good classroom management and solve problems that arise in physical and non-physical classroom management. According to Karwati, 2015, the classroom management process includes not only the implementation level but also the effective and efficient organization, actualization, and supervision in order to create a teaching and learning process that is conducive, systematic, effective, and efficient.

Meanwhile, if each indicator is described, the first indicator (computer/laptop operation) reaches a LAR of 88.19% which means it is in the best category; the second indicator (use of computer software) reaches a LAR of 83.03% which means it is categorized as good, the third indicator (internet use) reaches a LAR of 82.46% which is meaning that it is categorized as good, and the third indicator (website usage) reaches a LAR of 73.31% which means it is categorized as good. The biggest score in the four indicators is in the first indicator (computer/laptop operation) with a LAR value of 88.19%, which means that most teachers have been able to operate computers/laptops starting from turning on and off computers/laptops to other basic technical abilities listed in the table above. However, points 6 and 7 show the lowest LAR compared to other item numbers, namely 77.22% and 81.67%. It shows the need to improve teacher skills in terms of installing software as part of a system that is not useful on a computer setting and removing useless software on a computer as part of technical skills in operating a computer/laptop.

The second largest score is in the second indicator (use of computer software) with a LAR value of 83.03%, which means that most teachers have been able to use computer software ranging from creating new folders on the computer to filling, duplicating, moving, or copying data between disk storage to basic skills—other technical aspects listed in the table above. However, points 15 and 19 show the lowest LAR compared to other item numbers on the same indicator, namely 70.56% and 76.67%. It shows the need to improve teacher skills in terms of making pictures/graphics using computer software (such as Microsoft, Adobe Premiere, Corel, Photoshop, Etc.) and cleaning computer/laptop viruses using device software (such as antivirus, AVG cleaner, Avast clean up, Etc.) can have an impact on a good, effective and efficient class management process, such as when teachers want to provide exciting learning materials or can control the course of class management smoothly because all software, data, and files are protected by antivirus so that they do not damage the ongoing teaching and learning process.

The third largest score is in the third indicator (internet use) with a LAR value of 82.45%, which means that most teachers have been able to use the internet starting from connecting the internet network with WIFI or Hotspot to other basic technical abilities listed in the table above. However, points 21 and 26 show the lowest LAR compared to

other item numbers on the same indicator, namely 80.00% and 81.67%%. It shows the need to improve teacher skills in terms of sending electronic mail (using Gmail, iCloud mail, outlook, or others) with file attachments and understanding policies, security rules, and ethics in the use of internet networks in order to have an impact on the process of good classroom management. , effective and efficient as when teachers want to send links or learning materials to their students.

The lowest score of the four indicators is in the fourth indicator (website use), with a LAR value of 75.31%, which means that this indicator requires more attention in improving the teachers' skills because most of the ability to use the website is very closely related to the ability to present material as learning materials, as well as the provision of communication through the communication page, which is very influential on good classroom management during the learning period. Even though in the results of the study, most of the teachers were in a suitable category in terms of using the website, starting from finding useful web information for learning materials such as personal websites, education, institutions, or social media to other basic technical skills listed in the table above. However, overall skill improvement in the fourth indicator item is still significant to be improved so it can be balanced with other skills in the other three indicators. In addition, points 32 and 34 show the lowest LAR compared to other item numbers on the same indicator, namely 71.67% and 71.11%. It also shows an increase in teaching skills, especially in terms of using hyperlinks to connect with other relevant information on the website as well as improving the presentation of designs by using websites that have functions in the entertainment sector, such as online game sites, movies, and music so that they can have an impact on the effective classroom management process. Good, effective, and efficient when the teacher wants to present fun learning through entertainment sites.

Conclusion

The total average score and respondent achievement level (LAR) of the four indicators of ICT ability (computer/laptop operation, use of computer software, internet usage, and websites) have reached 4,11/82.11 percent, indicating that SMA Muhammadiyah Kendari teachers' technological proficiency has attained a good category. Even though it falls under the "good" category, there is still room for improvement in a few areas so that they have a more significant positive impact on good

classroom management and problem-solving in both the physical and non-physical aspects of classroom management because classroom management is not an easy task and, of course, it is crucial for the continuity of learning. The first indicator (operating computers and laptops) shows the need to improve teacher skills in terms of installing software as part of a system that is not useful on computers and setting and removing useless software on computers as part of technical capabilities in operating computers/laptops. The second indicator (use of computer software) shows the need to improve teacher skills in terms of making pictures/graphics using computer software (such as Microsoft, Adobe Premiere, Corel, Photoshop, Etc.) and cleaning computer/laptop viruses using device software (such as antivirus, AVG cleaner, Etc.) Avast clean up Etc. The third indicator (internet use) shows the need to improve teacher skills in sending electronic mail (using Gmail, iCloud mail, outlook, or others) with file attachments and understanding policies, security rules, and ethics in network use. Meanwhile, the last indicator (website usage) shows the need to improve teacher skills, especially in terms of using hyperlinks to connect with other relevant information on the website and improving design presentation by using websites that have functions in the entertainment sector, such as online game sites, movies, and music. Improvement of teachers' skills mentioned above must be made to impact a good, effective, and efficient class management process so the classification process can run more optimally.

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