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AN ANALYSIS OF TEACHERS' AND PARENTS' IT CAPABILITY IN ONLINE LEARNING IMPLEMENTATION

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Abstract: *IT cabalility refers to ability to master information technology such as designing learning content, managing learning resources, building student learning independence, and communicating in various directions. A good pattern of active interaction must be built, learning activities can be controlled, learning difficulties can be overcome, learning outcomes are guaranteed and quality, and can evaluate learning. The first methodology used in this study is to conduct a literature study, namely by looking for previous studies, related books that are relevant to the research conducted. The next stage is to identify the problem to be studied, then design and collect data. Data was collected by distributing questionnaires to teachers and parents of public and private junior high school students in Talang Kelapa District, Banyuasin Regency. The discussion was carried out regarding data processing in general from research that has been carried out by researchers. Conclusions from the analysis of the ability of teachers and parents of junior high school students in Talang Kelapa District, Banyuasin Regency in using information technology during the Covid-19 period showed that both have good ability to utilize technology media and applications to support online learning activities during the Covid-19 pandemic learning period.*

Keywords : *Infrastructure, human IT resources, IT knowledge, Online Learning*

I. INTRODUCTION

The development of information technology in Indonesia is growing, the need for quality information is very necessary [1]. With information technology, we can easily learn and get the information we need anytime and anywhere. In the world of education, the development of information technology began to be felt to have a positive impact because with the development of information technology the world of education began to show significant changes. Many things are felt different and changed compared to the way that developed before. At this time, distance and time are not a significant problem to gain knowledge, various applications have been created to facilitate it. The development of technology for everyday human life is very useful. The most important benefits that can be felt are in the world of education, industry, and various other businesses.

Information technology has a very important role, especially for the world of education. Education without utilizing information technology can create a weak quality of education, especially in the midst of the current Covid-19 pandemic. Therefore, with government regulations to use information technology in learning by using various sites such as Google Classroom, Google Meet, Zoom, study houses, and television, the learning system can be implemented [2].

Although there are still obstacles because there are still areas that have not been touched by internet media. The government's decision to carry out learning at home can occur in every educational unit during the Covid-19 pandemic, as long as information technology (internet network) is affordable to every educational unit [2]. Thus, the use of information technology in learning in the midst of the Covid-19 pandemic really needs to be an important

concern for all stakeholders involved in the field of education. Thus, obstacles can be resolved properly and the online learning process during the pandemic can be carried out smoothly.

The teacher is only a class manager who has an important role in the successful implementation of online learning. This concerns the tasks that must be carried out by teachers such as planning, preparing, implementing, evaluating the learning process through online media, teaching, guidance, and supervision. Students must get learning facilities in order to increase their understanding of the materials provided by the teacher through the online learning system. Administrators have the obligation to access in terms of managing the entire system including managing the master data system, and managing access to all system users such as organizers, teachers, students and can also manage the management of the entire class through their respective homeroom teachers. The education world learning system during the Corona Virus Disease (Covid 19) outbreak has been regulated by the Minister of Education and Culture (Mendikbud) following up on this policy through Circular (SE) Number 4 of 2020 concerning the Implementation of Educational Policies in the Emergency Period for the Spread of Covid-19.

Furthermore, the Covid 19 pandemic that is currently hitting Indonesia is forcing students to take part in the online learning process at home. Of course, this kind of learning process is new experience for students. Even some tech-savvy parents find it difficult to guide their children to cope with online learning. Not to mention the problem of the high quota for some parents. If online learning is not implemented then learning is hindered and children don't learn. Then the responsibility of parents increases. In addition to educating their children to be good learners, they also must ensure that their children attend school sessions that are conducted online. Regarding to the phenomena, parents have a role as a teacher as well. Parents do have a dual role in the online learning process at home. In addition to the responsibility of educating children, parents are required to accompany children to learn online at home instead of face-to-face learning. Parental participation is required in the online learning process. In other words, parents act as teachers, representing the school during online learning at home starting from administering learning which includes the stage of children doing assignments, reporting assignments, and taking online exams.

The purpose of this study was to assess the extent of the ability of teachers and parents in the field of information technology in online learning during the covid-19 pandemic. Therefore, the researchers intend to analyze Information Technology capability of the teachers and parents in Talang Kelapa District, Banyuasin Regency

II. RELATED LITERATURE

Information technology is a means and infrastructure (hardware, software, useware) systems and methods for obtaining, transmitting, processing, interpreting, storing, organizing, and using data meaningfully. IT Capability is defined as the ability of information technology as an individual's ability to mobilize and deploy resources based on the combination of information technology or in combination

with other resources and capabilities [3]. Information technology capability is also defined as the ability or competence of an individual who is able to create, manage and disseminate information technology resources [4]. This research will combine IT capability and online learning which will be explained further.

A. Learning

Learning is essentially a process of regulating and organizing the environment around students so that it can grow and encourage students to carry out the learning process [5]. Beldarrain [6] online learning is learning that uses the internet network with accessibility, connectivity, flexibility, and the ability to bring up various types of learning interactions.

B. Online Learning

Online learning has been implemented since the issuance of Circular Letter Number 4 of 2020 concerning the Implementation of Education policies in the Emergency Period for the Spread of Corona Virus Disease (COVID-19) which was followed up by Circular Letter of the Ministry of Education and Culture Number 4 of 2020 dated March 24, 2020 concerning the Implementation of Education Policies during the emergency period of spreading the corona virus (Covid-19). Banyuasin Regency Education and Culture Office also issued Circular Letter Number 420/957/Disdikbud-PSD/2020 regarding the COVID 19 Period Learning Guidelines which contain instructions for implementing learning including;

- Providing information to parents about online and offline learning for students
- Advising the students' parents to direct their children to study through TVRI media that has been provided by the ministry and culture
- The Head of the Education Unit can create a COVID-19 Emergency Learning Activity Program
- Based on these guidelines, online learning in Banyuasin Regency, especially junior high schools in Talang Kelapa District, is carried out using online learning model 1 by fully involving teachers and students. Students conduct online learning by accessing and studying all teaching materials, working on worksheets, and discussing with teachers. During the learning process, students are fully facilitated online by the teacher.

C. The Role of Parents in Online Learning

There are four essential parents role during distance learning or online learning according to [7];

- Parents have a role as teachers at home, where parents can guide their children in learning remotely from home.
- Parents as facilitators become facilities and infrastructures for their children in implementing distance learning.
- Parents as motivators parents can provide encouragement and support to their children in carrying out learning, so that children have the enthusiasm to learn, and get good achievements.

- Parents as influences or directors. Parents have a role to always guide their children in order to achieve success in the future. Parents also play a role in directing children according to the talents and interests of each child.

D. The Role of Teachers in Online Learning

Giving lessons is not only a matter of knowledge transfer, but through the face-to-face teaching and learning process, students get values that cannot be obtained through online learning [8]. These values include religious, social, cultural, ethical and moral values. All that can only be obtained through social interaction in an educational area between students and students and students and teachers.

In online learning, the teacher must really attempt to do the best to make their students can understand the material presented online. The teacher's role as a motivator and innovator of learning transformation must be practiced in online learning. The teacher as an innovator, motivator of learning metamorphosis must continue to provide material or assignments to students, and motivating the students to stay enthusiastic in learning. On this occasion the teacher must give encourage the students to think positively and not to become bored. Besides, the teacher must also maintain the mood of the students so that they are not too stressed due to assignments with various approaches

The teacher's task in online learning is not only as a transmitter of material but also as an innovator, which is seen in the online learning process through the use of media and methods controlled by the teacher. Teachers must always innovate in utilizing the right techniques, media and methods during online learning [9].

In addition, the teacher also acts as a learning metamorphosis that always follows a process of student development until it reaches maturity perfectly and experiences a change in mindset [10]. As a matter of fact, after the online learning process is carried out, the teacher must be able to evaluate the obstacles that occur from online learning in the form of problems that arise during teaching and learning process.

Therefore, the essential teacher's role in the online learning process during the COVID-19 emergency is as a motivator, innovator and learning metamorphosis in conveying important information when online learning takes place. It is in fact, a challenge for teachers to adapt and always innovate in utilizing techniques, the right media, and methods in online learning.

III. IT CAPABILITY

Information technology (IT) capability can be defined as a shared technology resource that provides a platform for detailed enterprise information system applications. Information technology infrastructure consists of investments in hardware, software and services, such as consulting, education, and training that are spread throughout the company or spread across all business units within the company [1]. Table 1 shows a summary of the IT capability variables that is used in this study.

TABLE I. RESEARCH VARIABLE- TEACHERS' IT CAPABILITY

No.	Variable	Item / indicator	Author
1.	IT Infrastructure	1. Identification 2. Application usage 3. Sharing Information 4. Process 5. time	[3, 11]
2	Human IT Resources	1. Palnning 2. Briefing	[12]
		3. Technical Skills 4. Managerial Skills	[3]
		5. Social Factor and Utilization	[13]
3	IT Knowledge	ICT Literacy (Basic IT Knowledge of Parents) Independency (Learning Independency) Creativity and Critical Thinking (of Parents) Interaction Intrapersonal Information Skill) Collaboration	[14]

IV. RESEARCH METHODS

The type of design used in this research is quantitative research. Quantitative research method is one type of research whose specifications are systematic, well-planned and clearly structured from the beginning to the making of the research design. Quantitative research methods, as stated by Sugiyono [15], are: "Research methods based on the philosophy of positivism, used to examine certain populations or samples, in which the data are collected using research instruments, and data analysis is quantitative/statistical, with the aim of testing the established hypothesis."

TABLE II. AVERAGE CALCULATION OF STUDENTS' PARENTS

Number of Parents	Theory of Isaac & Michael 5%		Rheory of Cohen & Manion 95 colom 2			Theory of Morgan & Krecjie	
4.021	4.000	21	2500	1500	21	4.000	21
	320	19	333	306	19	351	19
Average	339		658			370	
	455 sampels						

Based on Tabel II, there were 455 respondents of Stuydents' parents. This sample represents the total number of parents of junior high school students in Talang Kelapa District.

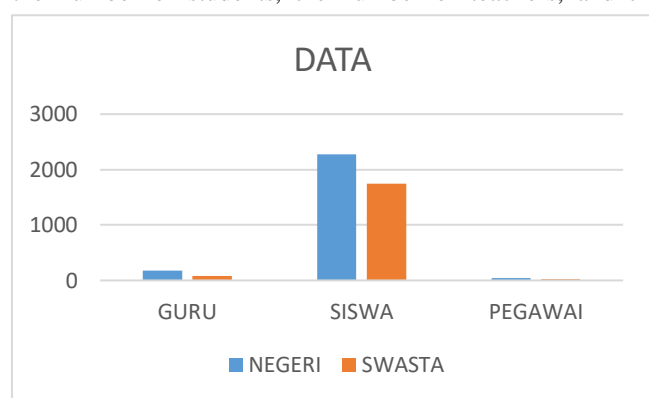
The sampling technique used in this study was probability sampling method. In this study, the researcher decided that

the sample of the studies were those private as well as public junior high schools in Talang Kelapa District.

V. RESULTS AND DISCUSSIONS

One of the basic educations in Indonesia is Junior High school or abbreviated as SMP which is the basic formal education that must be taken for three years started from grades 7, 8, and 9.

Talang Kelapa District is one of districts in Banyuasin Regency in South Sumatra Province that has several private and public schools ranging from Kindergarten, Elementary school, Junior High School and Vocational or Senior High School both private and public. The number of junior high schools recorded in the Department of Education and Culture in Talang Kelapa District, Banyuasin Regency, South Sumatra Province is 14 schools, consisting of 6 public junior high schools and 8 private junior high schools. The details of the number of students, the number of teachers, and the



number of employees in the SMP area of Talang Kelapa District can be seen in table 3.

Fig. 1. Jumlah Guru, Pegawai dan Siswa SMP (2020) sumber Dapodikdasmen TP. 2020/2021

TABLE III. THE NUMBER OF TEACHERS, EMPLOYEES AND STUDENTS OF SMP IN TALANG KELAPA DISTRICT SOURCE DAPODIKASMEN ACADEMIC YEAR 2020/2021

No.	NAMA SEKOLAH	KEPSEK	GURU	PEGAWAI	SISWA	KET
1	SMPN 1 TALANG KELAPA	1	64	17	1.015	
2	SMPN 2 TALANG KELAPA	1	19	4	226	
3	SMPN 3 TALANG KELAPA	1	25	6	252	
4	SMPN 4 TALANG KELAPA	1	35	6	435	
5	SMPN 5 TALANG KELAPA	1	23	4	209	
6	SMPN 6 TALANG KELAPA	1	14	1	136	
7	SMP HARAPAN IBU	1	9	3	207	
8	SMP MUFIDATUL ILMI	1	6	2	94	
9	SMP METHODIST TLK	1	11	1	188	
10	SMP NURUL ILMI	1	12	2	99	
11	SMP PGRI SUKAMORO	1	15	8	365	
12	SMP PPT HIDAYATULLAH	1	2	1	27	
13	SMP SANDIKA SUKAJADI	1	19	3	656	
14	SMP YAPI AIR BATU	1	6	1	112	
	JUMLAH	14	260	59	4.021	

A. Deskriptif Respondent

The respondents of this study were teachers and parents of junior high school students in Talang Kelapa District which were obtained from dapodikdasmen data that consist of 6 public junior high schools and 8 private junior high schools with a total of 260 teachers and 4,021 parents of students.

After the activity of distributing questionnaires conducted via google form to the school, researchers carry out editing and data entry activities for the data analysis process. The results obtained from these activities are used as the basis for analysis. The following is the calculation of the questionnaire data analysis which can be seen in table IV.

TABLE IV. TOTAL DATA PROCESSED (2021)

No	Teacher	Total	No	Parents	Total
1	Teacher	260	1	Parents	4021
2	Questionnaire	10	2	Questionnaire	5
3	Response responder	85	3	Response responder	901
4	Accurate Responder	85	4	Accurate Responder	901
5	Sample	85	5	Sample	455

B. Characteristics of Teachers Respondents Based on School Origin

The following is the figure that identifies teachers' respondents based on school origin either from public or private school:

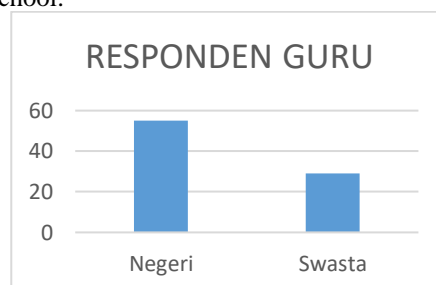


Fig. 2. The total number of teachers' respondents based on school origin

Figure 2 showed that the number of teacher respondents from public schools is 55 and the number of teacher respondents from private schools is 29. Judging from the data above, the difference between public schools and private schools is 26 teachers. It indicates that there are more respondents from public schools than respondents from private schools.

C. Characteristic of Parents Respondents Based on School Origin

The following is the figure that identifies Parents' respondents based on school origin either from public or private school:

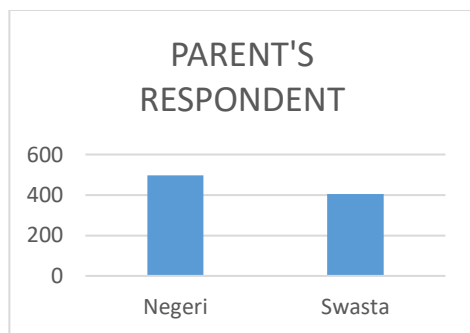


Fig. 3. The total number of parents respondents based on school origin

Figure 3 showed that the number of respondents from parents from public schools is 496 and the number of respondents from parents from private schools is 404. Judging from the data above, the difference between public schools and private schools is 92 parents which shows that there are more respondents from public schools than respondents from private schools.

D. Distribution of Teachers Respondents' Answer

The results of data processing from research variables according to [1, 8] to the number of respondents as many as 85 teachers, the researchers can distribute respondents' answers to existing variables and items by determining intervals so that so that each of the respondents score can be measured based on the variables he assesses.

The Likert Scale formula used to assess the data obtained, we need to know the formula of this scale. Here is a formula that can be used:

$$T \times P_n$$

Note:

T: total number of respondents who voted

Pn: Choice of Likert score numbers

Meanwhile, in order to know the maximum score, the formula is *the number of respondents x the highest score*. Then to find out the minimum score, the formula is *the number of respondents x the lowest score*. From this calculation we can know the assessment interval. This is the interval from the lowest distance of 0% to the highest of 100%. The following are the score interpretation criteria based on the interval:

Score 0% – 19.99% = Strongly disagree/bad/very less,
 Score 20% – 39.99% = Disagree / Not good, Score 40% – 59.99% = Fair / Neutral, Score 60% – 79.99% = Agree/Good/Like, Figures 80% – 100% = Strongly agree/Good/Like, Table V shows the criteria:

TABLE V. PROCESSED DATA INTERVAL (2021)

Category	Interval	Information			
Strongly Agree	22-25	5 soal	1 the lowest score	5	
Agree	18-21		5 the highest score	25	
Fair	14-17	The highest Score	The lowest Score		
Disagree	10-13	25	5	20	
Strongly disagree	5-9	Divided by liketr scale score			4

E. IT Infrastructure

Information Technology Infrastructure has the aim of identifying, sharing information, implementing processes and taking advantage of opportunities for teachers to students, so that the teaching and learning process during online learning can be carried out properly. The instrument used to measure the frequency of IT Infrastructure is in table 13 which consists of 5 question items. Each statements has an answer with a score range of 1 to 5 with the criteria; strongly agree (SS) is given a score of 5, agree (S) is given a score of 4, disagree (KS) is given a score of 3, disagree (S) is given a score of 2, and strongly disagree (STS) is given a score of 1. The IT Infrastructure frequency distribution table and its percentage can be seen in the table VI.

TABLE VI. IT INFRASTRUCTURE FREQUENCY DISTRIBUTION

Criteria	Frequency	Percentage (%)
Stromgly agree	39	45,9
Agree	45	52,9
Fair	1	1,2
Disagree	0	0,0
Strongly disagree	0	0,0
Total	85	100

From the data in table VI that shows the frequency distribution on information technology infrastructure it can be concluded that the most respondents are choosing to agree on the IT Infrastructure aspect as many as 45 respondents or 52.9%. This proves that the respondents' perceptions of these variables are agree.

F. Human IT Resources

Information Technology Human Resources include information technology technical skills and information technology managerial skills, as well as social factors and utilization in the teaching and learning process provided by teachers to students during online learning during the COVID-19 pandemic. The instrument used to measure the frequency of Human IT Resources is in table 13 which consists of 5 question items each. For statements, each has an answer with a score range of 1 to 5 with the criteria, strongly agree (SS) is given a score of 5, agree (S) is given a score of 4, disagree (KS) is given a score of 3, disagree (S) is given a score of 2, and Strongly disagree (STS) is given a score of 1. Based on these data, the frequency distribution table for Human IT Resources and the percentage can be seen in the following table VII:

TABLE VII. FREQUENCY DSITRIBUTION OF HUMAN IT RESOURCES

Criteria	Frequency	Percentage (%)
Strongy agree	36	42,4
Agree	46	54,1
Fair	3	3,5
Disagree	0	0,0
Strongly disagree	0	0,0
Total	85	100

From table VII, the frequency distribution of Human IT Resources, it can be shown that most respondents agree on human IT resources aspect. There are about 46 respondents (54.1%) chose agree. This proves that the respondents' perception of the two variables agree.

The frequency of the two variables; *IT Infrastructure* dan *Human IT Resources* can be seen in table VIII.

TABLE VIII. ASPECT

Criteria	ASPECT			
	IT IS		HITR	
	F	%	f	%
Strongly Agree	39	45,9	36	42,4
Agree	45	52,9	46	54,1
Fair	1	1,2	3	3,5
Disagree	0	0,0	0	0,0
Strongly Disagree	0	0,0	0	0,0
Total	85	100	85	100

G. Parents Respondents

The results of data processing from research variables according to [9] to 900 respondents, researchers can distribute respondents' answers to existing variables and items by determining intervals so that each of the respondents score can be measured based on the variables he assesses. For these intervals can be seen in the following table:

TABLE IX. PROCESSED DATA INTERVAL (2021)

Category	Interval	Information		
Strongly Agree	22-25	5 soal	1 the lowest score	5
Agree	18-21		5 the highest score	25
Fair	14-17	The highest Score	The lowest Score	
Disagree	10-13	25	5	20
Strongly disagree	5-9	Divided by likerts scale score		

Several things that parents must have in their role in supporting the implementation of online learning include basic knowledge of parental IT, independence, creativity, interaction, and collaboration so that parents can run their roles as children's companions during online learning well. Each statements has an answer with a score range of 1 to 5 with the criteria; strongly agree (SS) is given a score of 5, agree (S) is given a score of 4, disagree (KS) is given a score of 3, disagree (S) is given a score of 2, and strongly disagree (STS) is given a score of 1. Based on these data, the frequency distribution table for parents' IT abilities and their percentages can be seen in table X.

TABLE X. PARENTS' IT ABILITY FREQUENCY DISTRIBUTION

Criteria	Frequency	Percentage (%)
Strongly agree	255	28,3
Agree	570	63,3
Fair	66	7,3
Disagree	8	0,9
Strongly disagree	2	0,2
Total	901	100

From the frequency distribution on the IT ability of parents in table X, it can be explained that the most respondents (570 respondents Or 63.3%) chose to agree on the aspect. This proves that the respondents' perceptions of these variables agree.

H. Respondents Descriptif Analysis on Variables

In this study, researchers used data collection techniques in the form of questionnaires to the respondents who are teachers and parents of students at public and private junior high schools in Talang Kelapa District.

The questionnaire consists of 15 questions consisting of 10 questions for teachers regarding IT Infrastructure based on theory [1], 5 questions regarding Human IT Resources based on theory [10], and 5 questions for Parents regarding ICT Literacy based on theory [7].

The purpose of distributing this questionnaire is to determine the IT skills of teachers and parents of junior high school students in Talang Kelapa District during online learning during the Covid-19 period in 2020.

I. IT infrastructure

Based on data analysis of the IT Infrastructure teacher variable, 52.9% of respondents agreed that teachers must have IT Infrastructure skills, especially in terms of identifying, using and processing applications to assist during online learning activities to avoid the obstacles during the implementation.

Online learning is very necessary to help learning activities that were previously carried out face-to-face. Therefore, teachers are required to be able to use Information and Communication Technology, especially Infrastructure. Every teacher is also required to have adequate Information Technology tools to support the implementation of online learning, as well as improve their ability in terms of using these devices and then processing data on the device with the aim that the implementation of online learning runs effectively in order to create meaningful learning for the students.

To assist the process of improving teachers' information technology capabilities, the role of the relevant government and schools is very important. One of the ways is by organizing training for teachers on the use of information technology, including how to use and process information technology tools for smooth online implementation. The applications used by teachers related to the learning process are:

1) Whatapps grup

At the beginning of online learning, most of the teachers used the WA group application as an online learning platform by taking into account that most students would know and

easily access the application. In WA groups, teachers deliver learning materials using the chat feature and sometimes using the voice note feature. In fact, WA group is not an LMS (Learning Management system) application, of course, if it is used in online learning, there would be many weaknesses occur compared to other LMS applications.

2) *Google classroom,*

This application has been used by teachers to support online implementation and has proven effective in terms of providing meaningful learning for students. The teacher's ability in managing class skills, delivering fun and contemporary material to the teacher's skills in making assessment instruments is reflected in this application. Since this application is a Learning Management System (LMS) then of course the features contained in this application are very effective in supporting implementation of online learning by displaying the teachers' teaching skills.

3) *Zoom meeting,*

This application is used by most teachers to carry out the learning process through virtual face-to-face. Teachers can observe students' activities through video conferencing (V-con), although it is limited in space and time and of course it will not be as effective as face-to-face (Offline) learning process.

4) *Telegram,*

The use of this application is the same as WA groups, but the advantages of Telegram are that it can contain more members and can send videos with large capacities. The above applications can be applied in the learning process by using learning models that still pay attention to the characteristics of teaching materials, student characteristics and supporting facilities and infrastructure such as internet networks, smartphones and computers/PCs/Laptops. Teachers also have to improve their ability to take advantage of opportunities to synergize with students in terms of using IT Infrastructure with the aim that online learning can be carried out properly.

The results of previous research on "The Role of Information Technology Infrastructure for Applications of GPO (Online Learning Teachers) at SMAN Palembang City" [11] indicated that the progress of information technology, especially infrastructure, had a major influence on the world of education, especially for teachers in using devices in the field of Information Technology. The results was proved by the value obtained from the study in which the validity test showed that all instruments have a loading factor of 7 variables above 0.5 and considered valid. The reliability test also shows results above 0.7. Of the 7 variables tested, including Application Functionality 0.9, IT compatibility 0.9, Information Technology for Education 0.9, IT Connectivity 0.8, Technology Management 0.9, Knowledge Management 0.9, and Data Transparency 0.8, the whole variables are considered reliable. This is in line with the results of researchers study on the teachers' IT ability test in the infrastructure sector that of the 5 indicators, the loading factor was above 0.5 and confirmed valid. It proves that teachers are able to identify and use applications and share information with students in online learning.

J. HUMAN IT RESOURCES

Based on data analysis from the teacher's Human IT Resources variable, the results obtained that there are 54.1% respondents agree that teachers are one of the human resources in delivering information technology. The respondents agree that the teachers must have planning, direction, technical skills and managerial skills, as well as considering the social factor and utilization in the teaching and learning process provided by teachers to students during online learning during the Covid-19 pandemic.

This variable focuses on information technology skills that must be possessed by teachers in terms of technical information technology skills, including running Learning Management System (LMS) applications [12] such as whatsapp group, google classroom, zoom meeting, telegram, edmodo, and others and information technology managerial skills such as managing LMS applications so that they can be used in online learning by taking into account social factors and the usefulness of using applications in online learning.

This ability is in line with the ability that the previous teacher must have, which is IT Infrastructure. Most of this ability improvement is also obtained by teachers from trainings or sharing opinions from peers. This is intended so that the online learning process can improve students' ability to think, use ICT tools so that the learning process can run well.

The results of previous studies regarding "The Influence of Human Resource Capacity, "Utilization of Information Technology, and Accounting Internal Controls on the Value of Information on Local Government Financial Reporting, Studies on the City Government of Magelang" [13] described that human resources affect the use of Information Technology. This is proved by the variable test which were Human Resource Capacity with the results of Cornbach Alpha higher than > 0.5 . This is in line with hal ini dibuktikan dengan uji variabel yaitu Kapasitas Sumber daya Manusia cronbach alpha $> 0,5$. This is in line with the results obtained by researchers on the Human IT Resources variable test which consists of 5 indicators, including Planning (0.7), Directing (0.7), technical skills (0.7), Managerial skills (0.7) and social factors (0.7). It indeed proves that the ability of a teacher plays an important role in the use of information technology tools, as the IT tools becomes facilities for the teachers in delivering material in the process of online learning activities.

K. IT KNOWLEDGE

At the beginning of online learning, the preparations made by teachers, students, and parents were not optimal so that in its implementation there were obstacles in the use of Information Technology. The limited knowledge of parents regarding the understanding, use, and processing of Information Technology devices is one of the obstacles in implementing online learning which requires students to have independence in learning. Most parents have not facilitated their children by providing adequate Information Technology devices. In terms of knowledge, it has not been felt optimally in its utilization, in using and in processing Information Technology devices during online learning activities. In the online implementation that requires students' independence in learning, the role of parents is very important in helping

students participate in online learning. Therefore, parents are required to improve their IT Knowledge skills starting from having initial knowledge of Information Technology, independent learning, critical thinking, and collaborating with teachers so that meaningful online learning can take place well.

Based on the analysis of data from the teacher's IT Knowledge variable, 63.3% of respondents agreed that parents as one of the human resources in information technology must have ICT Literacy or basic IT knowledge, Independence or learning independence, Creativity and Critical Thinking or creativity and critical thinking of parents, Interaction or Intrapersonal and Collaboration communication skills. Learning activities that occur during the online learning process between teachers and parents have the aim that these activities can complement each other and can run well. This ability can be obtained and improved by some parents through online training or online tutorials that can be accessed easily. It is intended that in the online learning process students can obtain complete information and guidance from parents.

This is in line with research that has been done by previous researchers, such as "Online Learning Constraints During the Covid-19 Pandemic" [14]. This is proved by the results of crombach alpha which higher than 0.5 (>0.5). The results obtained by researchers on the IT Knowledge variable test on 5 indicators including ICT Literacy (Basic IT knowledge of parents) 0.7, Independence (Learning Independence) 0.7, Creativity and Critical Thinking (Parents' creativity and critical thinking) 0.7, Interaction (Intrapersonal Communication Skills) 0.7, Collaboration (Collaborating) 0.7 proves that the ability of parents is able to utilize information technology devices.

From the results of the analyses of this research study, the reserachers can conclude that:

- This study was conducted on junior high school students in Talang Kelapa District Banyuain Regency. There were 14 schools including 6 public schools and 8 private shoolc. There were 85 respondents from teachers and 901 respondents from parents.
- There were three questionnaires used as the instruments for three variables; *IT Infrastructure*, *Human IT Resources dan IT Knowledge*. There were 15 questions that includes 10 questions for teachers regarding *IT Infrastructure* based on theory of Bharadwaj (2000), 5 questions regarding *Human IT Resources* based on theory of Utami (2019), and 5 questions for parents regarding *ICT Literacy* based on Riyana's theory (2007).
- Validity test and reliability test employed by using SPSS 24 Show each of the items of the instruments were valid and reliable.
- The study found that there were correlation among the variables tested.
- During Covid-19 Pandemic, the teaching and learning activities at school were carried out online.
- There were severals application that can be used during online daring such as *WA grup*, *Google Classroom*, *Zoom meeting*, *Telegram* dll.
- Teachers and parents are expected to have good ability in utilizing technology media and application to support the online learning process during Covid-19 Pandemic.

After conducting an Analyses on the teachers' and Parents IT ability of Junior High Schools in Talang Kelapa district Banyuasin Regency, the researchers would like to give some suggestions:

- Face-to-face learning activities are better than online / online because the psychological elements that occur are not so touching.
- It would be better if online learning activities is not become the core learning activities that are carried out continuously.
- Utilization of a technology must also be supported by existing facilities and infrastructure so that the process of online learning activities can run well, such as quotas, networks, gadgets/smartphones for both educators and students.
- Related parties must pay special attention to increase the ability of educators and students by providing special trainings in the field of information technology.
- In the future, teachers are expected to be able to develop innovation and abilities in the field of information technology in order to produce good work.
- There must be a training in utilizing information technology media as well as its application.

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