# Analysis of The Application of Online Learning in SMA Negeri 1 Kendari

**Ahmadi**

Program Magister of Management High School of Economic Science of Enam Enam Kendari, Indonesian

**Rahmat Madjid**

Faculty of Economics and Business, Halu Oleo University, Indonesian

**David C. Lisapaly**

Politeknik Indotec Kendari, Indonesian

**Abstract**— This study aimed (1) to analyze the application of online learning held at SMA Negeri 1 Kendari;  (2) to analyze the effectiveness of online learning held at SMA Negeri 1 Kendari;  (3) to find out barriers to online learning held at SMA Negeri 1 Kendari, and (4) to find out how to overcome barriers to online learning held at SMA Negeri 1 Kendari. In order to answer these problems in depth, this study used a descriptive qualitative approach. The subjects used in this study were teachers, students and representatives of the school committee of SMA Negeri 1 Kendari. The methods of data collection were interviews, observation and documentation. The data validity method used source triangulation techniques.  Meanwhile, the data analy-sis method used Miles and Huberman's qualitative data analysis method which consists of data reduction, data presentation, and drawing conclusions. The results showed that SMA Negeri 1 Kendari implemented an online learning process as an alternative solution in the midst of the Covid-19 pandemic. The application of online learning held at SMA Negeri 1 Kendari was carried out effectively.  In the process of implementing learning at SMA Negeri 1 Kendari, the parties who implemented it were teachers and students and there was involvement of parents in monitoring online learning activities. Barri-ers to online learning at SMA Negeri 1 Kendari were included network (4G) or inadequate internet bandwidth, internet data packages for both teachers and students, the barrier of attitude assessment is that the teacher was not able to control all student activities while online as well as family economic problems. Efforts to overcome barriers to online learning by implementing long life education, namely the concept of innovation and teacher learning never stop, activating MGMP forum, massive cooperation (collaboration) between subject teachers, especially the use of learning platforms.  Students also tried to take advantage of learning resources anytime and anywhere, including the use of wifi facilities in schools for smooth online learning.

**Index Terms**— *Online Learning*

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## 1 INTRODUCTION

The Impact of the Covid-19 pandemic crisis, which is more suitable for more than 200 countries in the world, also affects the education sector in the country. The Indonesian government implements a learning from home policy from lower levels to higher education, people are advised to work from home, and right at home (Darmalaksana, W. 2020). The application of social distancing and has now turned into physical distancing by the government is manifested and implemented in all community activities such as working from home, work from home (WFH), learning online from home or learning to be brave (online) for students and university students. attending meetings that involved many people such as meetings, attending seminars or doing virtual video (teleconference). Integrating technology during the Covid19 pandemic outbreak, in learning with a bold learning system is the main choice (Kemendikbud, 2020). Over the past decade or so, the Internet has had a profound impact on education by enabling the phenomenal growth of online or daring learning. During the Covid-19 pandemic, the growth in the use of learning increased rapidly, occurring in almost all parts of the world. In fact, student learning activities are fundamental to achieving learning goals. The Pun series of programs has been launched by the ministry entitled 'Mobilizer' which was launched by

Nadiem since he was used as the highest leader in the Ministry of Education and Culture such as Mobilizing Teachers, Activating Lecturers, Mobilizing Organizations, and most recently the Driving School, essentially providing training and mentoring for education units throughout Indonesia to improve learning outcomes both during normal times and during the Covid-19 pandemic. According to Hattie from the OEDC (2020) page, we should not focus too much on the impact of school closings on student learning leaving teachers and then focus on "what must be learned" students to maintain continuous learning performance. Because if not, Indonesian students face the potential risk of learning disruption (disrupted learning) and learning loss in the midst of the Covid-19 pandemic storm, of course threatening the future of the nation's education.

### Innovation must be supported by adequate regulations and infrastructure in online learning

Lots of convenience and diversity of online media besides WA (Whats App) online or online learning is available today and is also supported by the website provided on the official government website, in this case the Ministry of Education and Culture of the Republic of Indonesia such as Learning

House, Google G Suite for Education, Smart Class, Quipper School, Teacher Room, Online School, Your School. Zenius, Google Classroom, Google Group, TeamLink, Microsoft Teams, Kaizala Microsoft, Zoom Meeting & Webinar, Youtube, Google Hangouts, and others will make it easier for students to interact and access knowledge online. Even the government or educational service institutions must provide network infrastructure with adequate internet network bandwidth / capacity for access and smooth online learning. Utilizing a variety of online media as an opportunity for both students and teachers. Students must be literate about today's digital technology which is very diverse. So it takes a spirit of collaboration in learning both among students (intrapersonal) among teachers, the success of the success of learning objectives depends on the degree to which students often interact with other students during online and offline learning. Creative solutions are needed today by all educational stakeholders, otherwise online learning activities by students will not run smoothly as expected.

From the description above, the researchers are encouraged to provide an overview of the application of online learning at SMA Negeri 1 Kendari, increasing student learning activeness through online learning and supporting factors as well as factors that hindered teachers in the online learning process during the Covid19 pandemic.

## 2. LITERATURE REVIEW
### 2.1. Education Management

Management is generally defined as the process of planning, organizing, directing, and monitoring. The efforts of the members of the organization and the use of other organizational resources in order to achieve the stated organizational goals. The essence of management is organization. According to Terry and Franklin (2003: 4), "Management is a process that consists of planning the movement and control arrangements that are carried out to regulate and meet the outcome goals that are realized by the use of humans and other resources (Management is the process of designing and maintaining the environment in where individuals, working together in groups, efficiently achieve selected goals). "Management is related to the clarity of goals or objectives and readiness of resources and the process of realizing the fourth goal. This activity is commonly abbreviated as POAC (Planning, Organizing, Actuating, and Controlling).

### 2.2. Management Functions

Some say the POAC above is a management function. Weihrich and Koontz (2005) in Management: a global perspective write management functions into 5 parts of Planning, Organizing, Staffing, Leading, and Controlling (POSLC). In his book Management of Education Programs, Sudjana (2004), divides them into Planning, Organizing, Motivating, Conforming, Evaluating, and Developing (POMCED). So, there are at least three management function models.

### 2.3. The Nature of Education

In Law No. 20 of 2003 concerning the National Education System, it is explained that education is a conscious and planned effort to create an atmosphere of learning and the learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills they need. society, nation and state.From the above understanding, education includes three aspects. First, conscious and planned efforts to create an atmosphere of learning and the learning process. Education must be prepared carefully starting from the quality of teachers, classes, media, methods, evaluation, to supporting infrastructure for the success of education. This thorough preparation will determine the success of achieving educational goals at all levels.

### 2.4. Educational Management Concepts

The essence of education is an effort to cultivate humanity or humanity. The term education defines it as a process of developing basic skills, which involves thinking (intellectual) and emotions (humans) which give meaning to education in an effort to change the behavior of individuals in their personal lives as part of their community and the life of their environment. Another explanation is that education is a process of cultivating humanity. Humans are people with basic thinking skills and basic potential to experience a world of tastes, so that through the educational process it is possible to create a developing mindset that finds application of knowledge to solve life's questions. The essence or essence of education is the process of conveying ideas of knowledge from one generation to the next. Humans have the talent to grow and develop through this educational process, so that they benefit themselves and their communities.

### 2.5. Online Learning

Online learning is very well known among the public and academics with the term online learning, another term that is very commonly known is distance learning, online learning is learning that takes place in a network where the teacher and those who are taught do not meet face to face directly . According to Isman (2016) online learning is the use of internet networks in the learning process. Meanwhile, according to Meidiawati, et al., (2019), online learning itself can be understood as formal education organized by schools where students and instructors (teachers) are in separate locations so that it requires an interactive telecommunications system to connect the two and various resources. required. The online learning system (in a network) is a learning system without face-to-face learning between teachers and students but is done online using the internet network. Teachers must ensure teaching and learning activities continue, even though students are at home. The solution, teachers are required to be able to design learning media as an innovation by utilizing online media (online).

### 2.6. Application of Online Learning Systems

According to the Big Indonesian Dictionary (KBBI), the def-

inition of application is the act of implementing, whereas according to some experts, application is an act of practicing a theory, method, and other things to achieve certain goals and for an interest desired by a group or group that has planned and prearranged.According to Usman (2002), application (implementation) is down to activities, actions, actions, or the existence of a system mechanism. Implementation is not just an activity, but an activity that is planned and to achieve the objectives of the activity. According to Mulyadi (2015: 12), implementation refers to actions to achieve goals that have been set in a decision. This action seeks to transform these decisions into operational patterns and seeks to achieve major or minor changes as previously decided. In essence, implementation is also an effort to understand what should happen after the program is implemented. In simple terms, online learning is a learning activity that utilizes networks (Internet, LAN, WAN) as a method of delivery, interaction, and facilitation and is supported by various other forms of learning services.

## 3. CONCEPTUAL FRAMEWORK

The flow of this research framework can be seen in the image below:

Figure 1. **Conceptual Framework**



Research Framework adapted from online learning framework, Redmond, Abawi, Brown (2018)
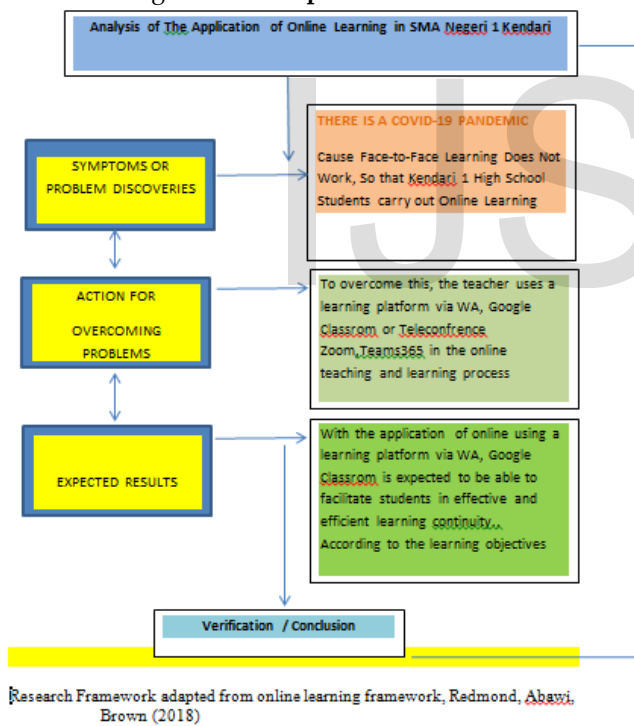
## 4. RESEARCH METHOD

This type of research used descriptive qualitative. The descriptive method was chosen because the research carried out was related to ongoing events and with regard to current conditions. The informants of this study were senior teachers, students and representatives of parents of students with a total of 8 informants.Data validity test was using the method triangulation is defined as a data collection technique that combines various data collection techniques and existing data sources. Researchers used different data collection techniques

to obtain data from the same source. Data analysis in this study was carried out through three activities that occurred simultaneously, namely data reduction, data presentation, and drawing conclusions or verification, Miles and Huberman (1992) in Sugiyono (2015: 246). Qualitative data analysis is an ongoing, iterative and continuous effort.

**Figure 2. Data Analysis**
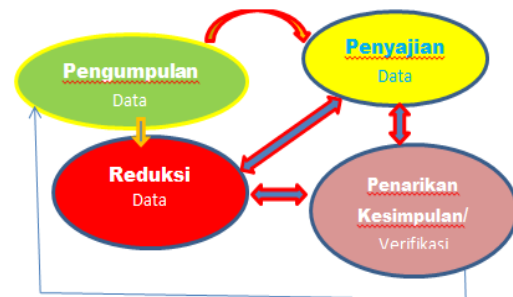


Data Analysis Components Miles and Hubermanin (Sugiyono, 2015 : 246)

## 5. RESEARCH RESULTS AND DISCUSSION

Data obtained from interviews with informants through source triangulation techniques were analyzed and described. Then all the research data are described based on the following questions:

Did you implement an online or online learning process during the COVID-19 pandemic? If so, what are the procedures for implementing the online learning process that have been implemented by you during the COVID-19 pandemic?

Researchers have conducted interview and documentation techniques to obtain data when the teacher / teacher implemented an online or online learning process during the Covid-19 pandemic. According to HRN informants, the use of Office Teams365 at SMA Negeri 1 Kendari, which was previously used by Google Classroom (semester 1) for students and teachers, has its own challenges to be able to adapt to sophisticated applications in the online learning process. The HRN informant stated:

*"In my opinion, online learning is an alternative form of learning that is carried out for the reason of the Covid-19 outbreak. Online learning at SMA Negeri 1 Kendari has been implementing Office365 or Teams beforehand Google Classroom and students and teachers have their own challenges to be able to adapt to sophisticated applications in the online learning process ". (interview, 01 March 2021).*

Then the HRN informant further said that the procedures for implementing the online learning process that had been implemented by teachers during the COVID-19 pandemic were through systematic planning contained in the Learning Program Plan (RPP) 1 sheet covering learning objectives, basic competencies and the use of applications such as Classroom and Teams365, which encourages students to learn interactively. The HRN informant stated:

*"Online preparation in schools is carried out by providing prior knowledge in the form of simulations, preparation of 1 (one) sheet of RPP through the MGMP forum and teacher workshops for the use of*

*applications such as Classroom and Teams365 applications".*

In line with HRN's opinion, IKS informants said that the Covid-19 pandemic that is currently sweeping the world is no exception, our country has a very strong influence on the learning process. Online learning is one of the right solutions implemented in the midst of this pandemic and since online PBM, teachers use a wide variety of media or applications (WA, Zoom, Google Clasroom, Microsoft Teams365), which is important that PBM is carried out well. The IKS informant stated:

*"The Covid-19 pandemic that is currently hitting the world, including our country, is very influential on the learning process ... online learning is one of the right solutions to be implemented in the midst of this pandemic, although not all regions can carry out online because of network constraints. Government policies in the field of education in the midst of this pandemic greatly determine the learning process in educational units, providing learning quotas for teachers and students is very important because it supports online learning. Not only pursuing curriculum completeness is also very appropriate, because the online process is very different when it comes to face-to-face PBM. In my opinion, since online PBM, teachers use very diverse media or applications (WA, Zoom, Google Classroom, Microsoft Teams365), the important thing is that PBM is carried out well. Easy for the teacher and easy for students too.*

Meanwhile, the LDN informant further stated that the application of online learning at SMA Negeri 1 Kendari was inseparable from the Mendikbud Nadiem Makarim Program which was deemed good because the program "Free Learning" is the essence of education that liberates is freedom of thought. And especially the essence of freedom of thought must be with the teacher first. LDN informants stated:

*"Freedom to learn is freedom of thought. And especially the essence of freedom of thought must be with the teacher first. Without it happening to the teacher, there is no way it could happen to students. Education that liberates at least can be understood in several understandings, namely: one of the education that liberates is a pattern of education that inculcates the correct values and transforms the individual who learns.*

Meanwhile, the results of the interview with SPR highlighted that online learning was not entirely applied to students only, so that there were minimal aspects of affective and psychomotor assessments for students. The SPR informant stated:

*'In my opinion, online learning is an alternative form of learning that is being implemented for reasons of the plague. Learning through online is not fully applied to students, affective and psychomotor are no longer available. Yes, so the assessment of students is not optimal ".*

Based on the results of in-depth interviews it was concluded that during the Covid-19 pandemic the teachers at SMA Negeri 1 Kendari implemented an online / online learning process as an alternative solution in the midst of the Covid-19 disease outbreak, systematic PBM planning through RPP 1

(one) sheet workshops as well. implementation of the Merdeka Belajar program that has been launched by the Minister of Education and Culture, Nadiem Makarim, but the online learning process in terms of affective and psychomotor assessments is not optimal.

**Implementation of Online Learning in SMA Negeri 1 Kendari**

Based on the results of in-depth interviews with informants at SMA Negeri 1 Kendari about the application of online learning that during the Covid-19 pandemic the teachers at SMA Negeri 1 Kendari implemented an online / online learning process as an alternative learning solution in the midst of the Covid-19 disease, but teachers. The teacher continues to carry out the systematic planning of the teaching and learning process (PBM) in advance through the RPP 1 (one) sheet workshop as the implementation of the 'Independent Learning' program that has been launched by Mendikbud Nadiem Makarim. Online preparations in schools are carried out by providing prior knowledge in the form of a simulation of the preparation of 1 (one) sheet of RPP through the MGMP (Subject Teacher Deliberation) forum and teacher workshops for the use of applications such as the use of Google Classrom and the Teams365 application ".

The online learning process at SMA Negeri 1 Kendari is carried out with both physical and mental preparation but it was surprising when the government announced that all school students from kindergarten to tertiary levels carried out the learning process from home or called online learning. Based on the results of interviews from informants and observations of researchers, it appears that in the implementation of online learning students, teachers and parents of students have their own challenges as a result of this online learning policy, for example the challenges of adapting technology for both students and teachers as well as parents of students, namely in the form of challenges from the supervision side of children at home while studying online.

Several informants stated that the problem was the process of implementing this online learning in terms of affective and psychomotor assessments which were still not optimal. SMA Negeri 1 Kendari as one of the oldest schools with all human resources including teacher capacity, digital skills and competencies, infrastructure and support for relatively gifted student input and high motivation to learn makes it possible to learn online well at the beginning of the learning process. long distance (PJJ) and online (April 2020) until now. Olasile Babatunde Adedoyin in (Ferrari, 2020) said that digital competence is a group of skills, knowledge and attitudes needed when using ICT and digital tools to carry out responsibilities, such as problem solving, information management, collaboration regarding effectiveness, efficiency and ethics.

During the process of implementing online learning, it shows its effectiveness in terms of interactions between students and educators, interactions between fellow students, and interactions between students or students with learning material. The ease of packaging, creating and distributing learning materials to students is very high. Teachers who apply online learning can easily choose the form of packaging,

either using text, images, audio or audiovisual, or virtual Zoom and Google Meet and even teacher interactions with students via the Teams365 application.

So far, the time allocation that can be used for distribution has become more flexible, namely only 30 minutes for 1 (one) lesson per hour. For example, the researcher himself teaches cross-interest subjects in Chemistry and Entrepreneurship with a duration of 90 minutes of online learning per week. Students can relatively easily get access to and control and store the learning material that is distributed. As stated by the IKS informant below. The IKS informant stated that:

"*Giving stimulus to students in the form of pictures, posters or learning videos related to the material, although it must be admitted that the delivery of the material is sometimes not well received by students.*"

The IKS informant further stated that:

"*If we personally, before giving assignments, first ask the students how many of their assignments this week are in other subjects ... so that we can adjust to the students' learning opportunities in doing the assignments. Likewise with the time of submitting assignments, according to our agreement with the students. .. so that students have time to rest or not burdens students* "

Related to family economic problems raised by informants, parents of students or representatives of the school committee. As said by the RIS informant: "During the implementation of online learning at SMA Negeri 1 Kendari the problem is the network problem. Yes network. Moreover, in high altitude areas, it is now difficult for the network to be strong (there is a network) which can eventually disappear. Our child's cell-phone doesn't support it if it's not Android too (becomes) a problem. The problem of pulses (data packages) is also ok maybe. economic problems are also an obstacle ".

**Efforts to overcome barriers to online learning**

Online learning methods bring new learning innovations but on the other hand there are also alarming effects starting from the infrastructure supporting online learning, the quality of online learning and other aspects of supporting infrastructure. The use of virtual Zoom videos or the use of the Teams365 application can certainly increase student activity online learning during the period of preventing the spread of Covid-19 because in practice students carry out learning activities as if they were in a real class (although virtual) and make learning more interactive fun so that every student can explore more knowledge so that it will have an impact on learning outcomes. The use of the Microsoft Teams365 application is currently the most widely used by SMA Negeri 1 Kendari teachers. This application is selected and used by teachers and students because of the interaction. Students do not just listen to the teacher explain, the teacher can write down questions and students can immediately scribble or make answers on their gadgets / smartphones / laptops, then the teacher can monitor interactively. This is an example of the opportunity to use online learning in the era of the Covid-19 pandemic. And teachers and students can continue to upgrade their skills and knowledge about a variety of learning applications that are

increasingly innovating from time to time for the quality of learning.

**Strategy Model for the Application of Online Learning in SMA Negeri 1 Kendari**

Learning in a network (online / online-learning) is a learning design system where the application uses the internet network and is carried out indirectly between teachers and students, with the same learning material learning time. As-muni, in (Harahap at al., 2021). The complete strategy model can be seen from the following figure:



**Figure 3. Strategy model for implementing online learning in SMA Negeri 1 Kendari.**
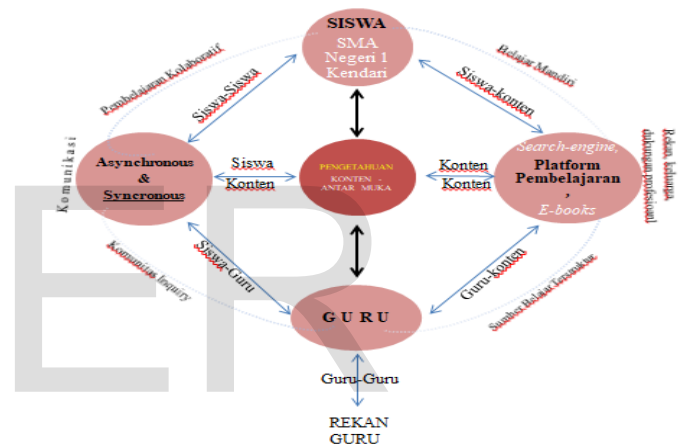
*Source:*Image of strategy model for implementing online learning in SMA Negeri 1 Kendari. Processed, 2021.

From the picture above, the arrow direction (two directions) shows an unbroken cycle of online learning interactions both in terms of student-student, student-teacher, student-content, teacher-content, student-content, content-content and interaction between peers. teacher. So that students are required to learn more independently (independent study) to be able to understand the material or content that is already available without direct interaction from the teacher (student-teacher), and the teacher is unable to provide the overall material to students regarding time and conditions. This will affect student achievement. According to Uswatun and Riyana in Syafa'ati at al.,: 2021) online learning is learning that emphasizes students' thoroughness and foresight in receiving and processing information presented online. This means that students must be able to understand any information provided online (in the network) which is informed through assistive devices such as cellphones or computers that are connected to the internet.

Online Collaboration Learning (OCL) theory provides a learning model in which students are encouraged and supported to work together to create knowledge: to discover, explore ways to innovate, and, thus, to seek the conceptual knowledge needed to solve problems rather than pronounce what which they thought was the correct solution. Although Online Collaboration Learning (OCL) theory encourages students to be active and involved, it is not considered sufficient for learning or knowledge construction. In Online Collaboration Learning (OCL) theory, the teacher plays a key role not as fellow learners, but as a liaison to the knowledge community, or state of the art in that discipline. Learning is defined as conceptual change and is the key to building knowledge. Learning activities need to be informed and guided by disciplinary norms and discourse processes that emphasize conceptual learning and knowledge building. Harasim in Bates (2014: 90).

Based on the picture above, it can be explained that there are several factors that hinder and support the process of implementing online learning at SMA Negeri 1 Kendari starting from students, teachers, and system support.Student learning independence in online learning at SMA Negeri 1 Kendari based on the results of interviews with informants and observations can be seen, for example, from the ability of students to manage time and utilize various learning resources from various current learning platforms. This means that to achieve an understanding of the material, students do not depend on the material provided by the teacher but students independently find out a lot of scientific information through search engines, virtual labs, e-books, or using available learning applications. Student learning progress at SMAN 1 Kendari is seen when students work on problem solving problems in cross-interest lessons in chemistry or craft and entrepreneurship independently. Students are asked to make a concept map (mind mapping) related to the subject matter / topic being studied. Students can independently do the assignment on time, then the results of the student work are sent to the teacher online. Independence can be seen through activities that are driven by problem-solving competencies. Prisha Bahri et al., In (Ambiyar et al., 2020).

Students who have high learning independence will try to complete the exercises or assignments given by the teacher with the abilities they have, on the other hand, students who have low learning independence will depend on others. Assagaf & Ambon in (Ambiyar et al.,: 2020).In the model above, the researcher also saw how to design the inquiry method of learning. Students are involved in building community in the process of scientific inquiry. The inquiry method is a method that involves students in the process of collecting data and testing hypotheses. Teachers guide students to find new understandings, practice skills, and acquire knowledge based on their own learning experiences. In the inquiry method, students learn actively and creatively to seek knowledge. Then

the online process can run asynchronously (online indirect) is communication on a delayed basis, using media such as e-mail, forums, and reading / writing Web-based online documents is a data communication process that is not bound by a fixed time, the data transformation process is speedy. quite relative and not fixed. However, this process is rarely done by SMA Negeri 1 Kendari teachers in the application of online learning. Synchronous (direct online) is direct communication, events that occur at the same time with the same rate as for example making Video Calls and Chattting or virtual Zom with students directly or virtually on Microsoft Teams365. This is what teachers often do in schools to make online learning effective in the midst of the Covid-19 pandemic.

Choosing learning videos that have interesting animations, because they can make it easier for students to absorb the subject matter delivered by the teacher. Also learning applications that have a structured learning concept, will greatly facilitate students in understanding the material. Because students are guided to learn starting from basic knowledge concepts, intermediate knowledge concepts, to applied learning content is an inseparable part of the strategy model that the researcher presents in this thesis.

**Research Limitations**

The limitation of this study was limited to one public school in Kendari city, thus limiting the ability to generalize the results. Future research should also be able to reach and include various informants / respondents from all public high schools and private schools / foundations in Kendari City, Southeast Sulawesi Province. If based on the perspective of students, teachers and representatives of parents who include public / private high schools in Kendari city, future studies may help in understanding the problems faced in the application of online education as well.

**6. Conclusions**

Based on the results of the research and discussion above, it can be concluded that SMA Negeri 1 Kendari implements an online learning process as an alternative solution in the midst of the Covid-19 pandemic, The application of online learning carried out at SMA Negeri 1 Kendari was carried out effectively. In the process of implementing learning at SMA Negeri 1 Kendari, the parties who implement it are teachers and students and there is the involvement of parents in monitoring online learning activities.Barriers to online learning at SMA Negeri 1 Kendari include inadequate (4G) network or internet bandwidth, internet data packages for both teachers and students, attitude assessment barriers, namely the teacher is not able to control all student activities while online as well as family economic problems.

Efforts to overcome barriers to online learning can be overcome by implementing long life education, namely the concept of innovation and teacher learning that never stops, activating MGMP forums, massive collaboration (collaboration) between subject teachers, especially the use of applications. Students also try to take advantage of learning resources any-

time and anywhere, including the use of wifi facilities in schools for smooth online learning. The problem is that students who do not have internet data packages or Android cellphones, students can go to school to use the school's wifi facilities. Also encouraging the role of stakeholders and relevant agencies (Pemda-Dikbud) to assist and support online learning related to data package credit assistance, and facilities for smooth online learning.

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