

# PROCEEDING

## THE 7th PROGRESSIVE AND FUN EDUCATION INTERNATIONAL CONFERENCE

Indonesia, September 8<sup>th</sup>, 2022



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# Actualization of Cultural Playground Educational Game Tools as Strengthening Love for The Country in Early Children

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**Abstract.** Educational game tools (APE) are play equipment that contains education that is used to stimulate imagination in the child's development process. APE in this Indonesian culture-based playground can foster a sense of love for the Indonesian homeland in children from an early age. The purpose of this study is to describe and explain various APEs in cultural playgrounds as strengthening love for the homeland in early childhood. This research is a qualitative descriptive study. Data collection techniques using observation techniques, in-depth interviews, and documentation. The data analysis technique used is an interactive data analysis model by Miles and Huberman, namely data reduction, data presentation, and conclusion drawing. This research was conducted at the Taman Kanak-Kanak (TK) Pembina Ponorogo. The results of this study indicate that the TK Negeri Pembina Ponorogo requires APE based on Indonesian culture to strengthen the love for the homeland from an early age. Therefore, APE that is appropriate and supports cultural playgrounds as a strengthening of love for the Indonesian homeland “egrang”, bekel ball, “congkak”, jump rope, “engklek”, “bakiak”, “rangku alu”, “cublak cublak suweng”, and “gasing”. The APE is a representative learning media to be introduced to children because in each game there are cultural values from various regions in Indonesia. Playground, in this case, is the right vehicle to introduce these various games because of course all these games are very fun when played together outside the classroom. Thus, the existence of APE in this cultural playground can support the implementation of a cultural playground that can foster a sense of love for the Indonesian homeland in children from an early age with fun methods and media.

**KEYWORD: APE, PLAYGROUND, CULTURE, LOVE THE COUNTRY**

## INTRODUCTION

The world of children is beautiful and meaningful. Children are small humans who have certain characteristics that are unique and different from adults [1]. However, many people treat children not according to their level of development it interferes with their growth and development [2]. Education at the level of early childhood is very fundamental in the development and formation of the basic knowledge, attitudes, and skills in children. The success of the educational process at the basic level is the key to the success of education at the next level. The early childhood education institutions in question include Play Groups, Child Care Parks, and Kindergartens. These institutions have a very important role in the success of children as the nation's next generation

In the process of learning and teaching, teachers should have a good understanding of the material presented to children. Presentation of interesting material, able to attract children to learn the material presented by the teacher. The world of children is the world of play which is a phenomenon that has attracted the attention of educators, philosophers, and psychologists of the past [3]. In these play activities, it is necessary to inculcate important aspects so that children's growth and development are according to their level. In addition, the game has a role as a means of self-socialization

(children) in the community [4]. Playing is also a means to express active activities in achieving pleasure from activities that have been carried out by children [5]. Through play activities, children can build confidence and challenge themselves to interact with other children and be able to master personal, physical, intellectual, and social challenges [6]. Therefore, it is important to balance activities in the classroom and outside the classroom to create a learning process that is integrated with games in a fun way.

Educational game tools or APE are one interesting learning resource for early childhood. Educational game tools are tools that are specifically designed to help learning activities and can optimize children's development according to their age and level of development [7]. Through this APE children's growth and development will develop optimally [8]. The developmental aspects in question include cognitive aspects, affective aspects, and motor aspects. Each of these aspects can certainly be developed through relevant educational game stimuli. APE is a teaching aid designed to develop children's development that has educational value. The value of education is certainly very much [9]. This research focuses on the application of inculcating the values of love for the homeland in children, to create a superior generation that has a high spirit of nationalism.

One of the government's efforts in realizing a generation of superior character and nationalists is to implement strengthening character education (PPK) which has been integrated with the National Mental Revolution Movement (GNRM), namely in the aspect of changing the way of thinking, acting, and acting for the better [10]. Character education functions (1) to develop the basic potential to be kind, think well, and behave well; (2) to strengthen and build the behavior of a multicultural nation; (3) to improve the nation's civilization that is competitive in world relations. Character education aims to form a nation that is competitive, resilient, dynamically developed, and oriented to science and technology, all of which are imbued with faith and piety to God Almighty based on Pancasila [11]. Early childhood is an integral part of the character education strengthening program. Pancasila in this case is one of the main foundations in the implementation of planting the value of love for the homeland in children. In Pancasila, there is a third principle, which reads "Unity of Indonesia". The meaning of the third principle is that Indonesian citizens should love and be proud to be Indonesian citizens by upholding cultural values that have existed since time immemorial as a nation's heritage that must be introduced to all citizens from an early age. This is intended so that these noble values do not fade or become extinct with time.

In this study, we focus on the educational aspect of the value of patriotism. Love for the homeland is behavior that shows a sense of caring, and appreciation based on the spirit of nationalism and being willing to sacrifice for the sake of the homeland and nation [12]. The forms of patriotic behavior include loving domestic products, diligently studying for the sake of the nation and state, loving the environment, carrying out a clean and healthy living, and knowing the territory of the homeland without regional fanaticism. The characteristics of love for the homeland include appreciating the services of national heroes, being willing to use domestic products, appreciating the natural beauty and culture of Indonesia, memorizing national anthems, and choosing to travel domestically [13]. In another sense, love for the homeland is a feeling that arises in the citizens of a country to serve, maintain, defend, and protect their homeland from all threats and disturbances [14]. Examples of love for the homeland include; (1) pride in Indonesian customs; (2) pride as an Indonesian citizen; (3) maintaining the good name of the nation; (4) spirit and personality by Pancasila. Thus, it can be concluded that to realize a sense of love for the homeland in early childhood, namely through the introduction of various types of educational game tools or APE from various regions in Indonesia, is one effective method. Childhood is a time of play, so it is through games that children can easily receive various information, knowledge, affective and psychomotor. This is reinforced by the opinion of [15] who states that APE is a game tool specifically designed for educational purposes. The characteristics of a good APE are (1) it can be used in various ways, purposes, benefits, and various forms, (2) it is intended primarily for preschool children to develop their intelligence and motor skills, and (3) aspects safety is greatly improved, both in the form and use of paint, (4) stimulates children to be active, (5) is constructive.

Thus, research on the actualization of cultural playgrounds to instill a sense of love for the homeland in children from an early age, can add to the scientific treasures, especially in early childhood education in realizing a superior generation with a nationalist spirit. The introduction of various types of cultural APE from various regions in Indonesia is believed to be able to stimulate children to start getting to know various Indonesian cultures. That way, a sense of pride and love for the homeland can be fostered in a fun but meaningful method.

## **METHODOLOGY**

This research is a qualitative descriptive study. Qualitative descriptive research is a research method with a simple qualitative approach to the flow of the process of an event which the end can be concluded as a generalization that becomes a conclusion from the process that has been studied [16]. Research like this is more likely to be an analytical activity [17]. Thus, this is the research objective, namely to analyze culture-based APE on a cultural playground so that this APE can foster a sense of love for the Indonesian homeland. Data collection techniques in this study use observation techniques, in-depth interviews, and documentation. The data analysis technique used is the interactive data analysis of the Miles and Hubermann model, namely data reduction, data presentation, and conclusion drawing.

## **RESULT AND DISCUSSION**

Based on an in-depth analysis of the use of cultural playground APEs that have been developed at Pembina State Kindergarten in Ponorogo, several APEs that support cultural playgrounds include “egrang”, bekel ball, “congak”, jump rope, engklek, “bakiak”, “rangku alu”, cublak cublak suweng, and gasing. The description of each culture-based APE that supports the cultural playground at the Pembina State Kindergarten is as follows.

### **EGRANG**

This game can train children's balance, and muscle strength, and can train the synchronization of children's hand and foot movements. Finally, this is a game that can develop children's gross motor skills [18]. The stilt game is one of the games that can improve or develop children's motor skills. This “egrang” game comes from South Sulawesi Province and is played by the Bugis tribe as Majjeka. However, this “egrang” game is also a traditional cultural game in Indonesia on the island of Java [19]. This “egrang” game can improve children's motor skills, namely balance, agility, and strength [20]. This traditional “egrang” game can also train children's enthusiasm and teach children to use the materials around them [21].

### **BEKEL BALL**

That the traditional bekel ball game is a game that utilizes bekel balls and six grains or others. The bekel ball is made of rubber which produces a bounce when the ball is thrown [22]. The Bekel ball game is a traditional game that is influenced by Dutch culture. This can be seen from the word bekel which comes from the Dutch language, namely Bikkelspel or Bikkelen. Javanese traditional philosophy believes that this game is a symbol of the relationship between humans and God and humans with humans. Bekel ball game is very popular in Java. Thus, this bekel ball game originated on the island of Java [23].

### **CONGKAK**

The “congak” game is a traditional game that is still preserved in Indonesia. This game has many different names from various regions in Indonesia. The name “congak” is a game originating from Sumatra [24]. While in Java the term cocky game is known as dhakon. This “congak” traditional game is one of the games that can satisfy the demands and needs of motoric, cognitive, affective, creativity, emotional, social, and social attitudes of early childhood. In addition, this game is also able to improve the language of early childhood by listening to their friends speak, understanding the commands given, imitating the sentences they hear, and so on [25].

### **JUMP ROPE**

The jump rope game is a very easy game for children to play [26]. The jump rope game is also a traditional game that can develop children's gross motor skills. The jump rope game is a traditional game that needs to be preserved which is an effective and fun learning media for children. The benefits of this game are to train children in the spirit of hard work, train children's accuracy, the ability to estimate rope height and jumps that must be done, and develop



children's kinesthetic intelligence [27]. This jumping rope game can improve the kinesthetic intelligence of children at the age of 1-12 years [28]. Children's gross motor skills can be developed through jumping rope games this game was very popular around 1970 to 1980 and became a favorite game for children when they went out to play at school or after an afternoon at home [29].

## **ENGKLEK**

The engklek game is a traditional game that can improve children's motor skills. This game is played by two or more people and before the game starts, plots are usually made first that the child will step on when jumping. This game uses coins as a sign that the child has arrived at the number of tiles. This jump must not touch the tiles that contain coins [30]. The term engklek comes from the Javanese language and this is a traditional game by jumping on the come/plot field [31]. The mention of this engklek game in several regions in Indonesia has different names. In terms of how the game is played, it requires gross motor skills, especially, because, in this game, children need to jump from one plot to the next [32].

## **BAKIAK**

The “bakiak” game is a game that involves gross motor skills such as stepping, walking, and maintaining balance so as not to fall. This traditional game of “bakiak” is also able to improve children's gross motor skills [33]. This game is one solution to improve the physical/gross motor skills of children at the age of five to six years which is carried out in groups. So that child in this game is fostered for cooperation between the members of the players [34]. In general, that traditional games play an important role in education, especially in developing and improving children's motor skills. One of the traditional games is the game of “bakiak” [35].

## **RANGKU ALU**

The “rangku alu” game is one of the traditional games that requires bamboo as a playing tool. This game comes from East Nusa Tenggara, precisely the Manggarai community. Usually, these people play this game at plantation and agricultural harvest parties [36]. This “rangku alu” game is played by utilizing two pairs of bamboo sticks with movement and singing until the opponent's feet are squeezed between the bamboo [37] & [38]. This game was carried out in groups using bamboo as a medium and was played by women. The interesting thing is that the more agile the players, the rhythm of the bamboo beat also increases [39].

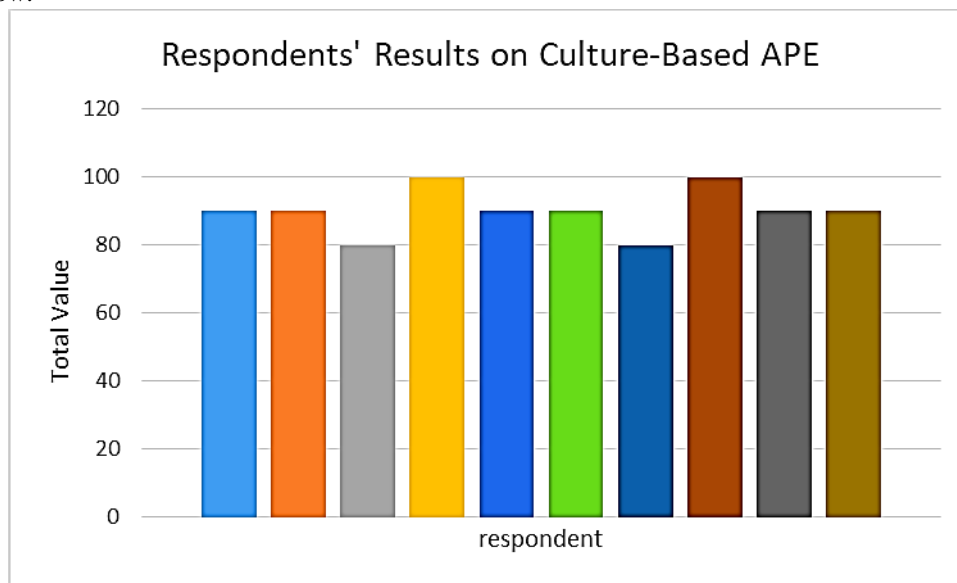
## **CUBLAK-CUBLAK SUWENG**

The “cublak-cublak suweng” game is a traditional game originating from Central Java. This game is very closely related to the song, namely the song “cublak-cublak suweng”. The creator of the song is Walisongo, a figure who spreads Islam on the island of Java. This game is a medium to develop children's moral abilities. The implicit meaning in this game is in looking for treasure, position, and position, not to be accompanied by lust but with a good conscience [40]. In particular, The “cublak-cublak suweng” game is a means to develop children's psychological aspects by instilling moral values in children from an early age, and in general, this game can provide moral teachings in the form of advice and mandates to the public about whether or not human behavior in everyday life [41].

## **GASING**

The “gasing” game is a children's game made of wood which is played by wrapping a rope around the top of the “gasing” and then throwing it to the ground [42]. This “gasing” game is very good for children's physical motoric development [43]. Children's physical motoric development after playing the traditional game of “gasing” is that children can throw, jump, run, can practice accuracy, and are able to coordinate hand and eye abilities. This “gasing” game creates a sense of pleasure in children, improves children's physical and psychological health, balances must and gross motor skills, and develops a child's competitive attitude [44].

The results of teacher respondents at Pembina State Kindergarten Ponorogo relating to the need for culture-based APE on the cultural playground that has been developed at Pembina State Kindergarten Ponorogo are presented in Figure 1 below.



**FIGURE 1.** Respondents' Results on Culture-Based APE Needs at Cultural Playground

Figure 1 above shows that 90% of teacher respondents at the Pembina State Kindergarten in Ponorogo need cultural APE to support activities at the Cultural playground. Thus, cultural APE is also expected to be able to foster a sense of love for the Indonesian homeland in early childhood on the cultural playground at the TK Negeri Pembina Ponorogo. [45] The preservation of the existence of traditional Indonesian games has indirectly instilled positive character values, namely love for the homeland. [46] That traditional/cultural APE is very good for fostering a sense of love for the Indonesian homeland in early childhood.

## CONCLUSION

Based on the results and discussion above, it can be concluded that 90% of the respondents of the TK Negeri Pembina Ponorogo teachers need cultural APE to support the implementation of the cultural playground that has been developed at the TK Negeri Pembina Ponorogo. The existence of APE in this cultural playground can support the implementation of a cultural playground that can foster a sense of love for the Indonesian homeland in children from an early age by applying several appropriate methods and media.

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# Students' Perceptions On Fun School

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**Abstract.** Elementary School is a fun place for child, for that it is necessary to create a conducive atmosphere so that children feel comfortable and can develop their potential. This study aims to describe students' perceptions of a fun school in the Muhammadiyah Elementary School, Special Program for Kottabarat Surakarta. The research method used is qualitative by conducting interviews and observations on students in grades 3, 4, and 5. The results of the study found that students looked very happy both inside and outside the classroom, they enjoyed every activity carried out without feeling lazy or burdened. They look happy when they learn with various learning activities and other activities outside the classroom. They also seem very close to the teacher, so that the teacher being a second parent to the student really happens. This indicates that the Surakarta Special Program Muhammadiyah Elementary School is able to create a fun school. If it is based on students' perceptions, they argue that a fun school is a school that has good facilities, pleasant teachers, lessons can be accepted easily, and friendly with nature.

**Keywords:** *Perception, Students, Fun School*

## INTRODUCTION

In principle, every student has the right to have the opportunity to achieve satisfactory academic achievement (1). Indonesian education today in particular, is no longer a pleasant place for students. Family, affection, freedom of self-expression of students, little by little began to disappear from an educational institution known as school. In order for education to run smoothly, a supportive and comfortable place is needed, namely the school (2). However, for some time there have been ideas to reconstruct education in this country. The former Minister of Education and Culture, Anies Baswedan, stated that he was thinking about organizing a fun school movement. So students feel happy to be at school, not only when the bell breaks or when they go home they are happy (3).

The fun school movement has not only become a discourse, but the government has tried to form the movement and implement it. It is proven that a fun school web has been formed that posts training activities, workshops and research or direct application. Muhammad Nur Rizal is the initiator of the Fun School Movement and was recently invited to the Australian Embassy in Jakarta to explain his movement, and exchange ideas with education activists and observers.

This fun school movement is a combination of several concepts including child-friendly schools. The concept of a child-friendly school has begun to be applied by several schools in the Solo city area, one of which is the Surakarta

Special Program Muhammadiyah Elementary School. As stated by Bodil Rasmusson, Mentor of the Children Rights Convention (CRC) of the United Nation and Lund University Sweden, during a visit to the school, stated that the West City Special Program Muhammadiyah Elementary School (PK) was considered to have implemented child friendly education (Child Friendly School). CFS) (4).

The West Kotta Special Program Muhammadiyah Elementary School applies the concept of a child-friendly school that aims to make children learn in a pleasant atmosphere without being burdened, to make school a second home for students, to achieve maximum educational goals, and so on. These are the things that combine to create a fun school. The effects of a fun school are not only felt by students, but also teachers, principals, and parents. Elementary School is a fun place for children, for that need it is necessary to create a conducive atmosphere so that children feel comfortable and can develop their potential (5).

The roots of the fun school concept found in the Surakarta Special Program Muhammadiyah Elementary School gives the writer to find out how students perceive a fun school. Because knowing the perceptions of students can affect the running of a fun school, so that all parties involved in the world of education can find out that what kind of fun school is expected by students and becomes an input for schools to be even better in implementing the concept of a fun school.

## **RESEARCH METHODS**

This research is a qualitative research with a naturalistic phenomenological approach. The phenomenological approach seeks to understand human behavior in terms of the framework of thinking and acting of the people themselves (6).

This study will observe students' perceptions of a fun school at SD Muhammadiyah Surakarta Special Program. This type of qualitative research was chosen to obtain data that is more complete, more in-depth, and meaningful, so that the objectives of this research can be achieved.

The subjects in this study were grade 3, 4, and 5 students who were taken randomly. The data in this study were validated using triangulation. Triangulation is a data validity technique that utilizes something else (6). While the triangulation technique used is the source and technique triangulation technique. Source triangulation means, to get data from different sources with the same technique (7). In addition, the technique used to collect data uses several techniques, namely: interviews, observation and documentation. So, in this activity, the researcher conducted interviews with several students of SD Muhammadiyah PK Surakarta to explore and find out the credibility of the data that had been obtained.

## **RESULTS AND DISCUSSION**

Based on the interviews and observations that have been made, students look very happy both inside and outside the classroom, they enjoy every activity carried out without feeling lazy or burdened. They look happy when they learn with various learning activities and other activities outside the classroom. With extracurricular, namely learning outside the classroom, it can increase student creativity and students are happier in participating in activities (8). Fun learning by providing audio visuals can improve student learning outcomes (9). They also seem very close to the teacher, so that the teacher being a second parent to the student really happens. This indicates that the Surakarta Special Program Muhammadiyah Elementary School is able to create a fun school. If it is based on students' perceptions, they argue that a fun school is a school that has good facilities, pleasant teachers, lessons can be accepted easily, and friendly with nature. This thing in accordance with study (10) that a fun school for students is to create a conducive atmosphere in teaching and learning process.

A fun school must have a series of activities that are challenging and certainly fun. From the results of interviews and observations, all students said that the activities at SD Muhammadiyah Surakarta Special Program were very challenging. For example, there are many games during learning, inter-class competitions such as "Ranking Satu Pintar Ga Tuh", *outing classes* and so on.

Students also know about what extracurriculars are available at their school. This school provides guidance on talent development according to students' interests. Especially for the first grade, they are still given the same type of

extracurricular, one class to adapt and assess themselves. Many of the students often take part in competitions and get championships.

Through activities at school students feel a lot of experience as a provision to move to the next phase of life . Students feel every experience they get and enjoy it. Besides these activities, there are other activities, namely *leadership* or leadership activities. These activities are also important activities to train their leadership spirit. HW (*Hisbul Wathan* ) camp activities are held every semester as a forum for training leadership. However, for daily activities students are also trained in the form of class organization. Each class has a class organization which is carried out under the guidance of the teacher. With this class organization students are trained to be responsible for something and in making decisions.

Teachers and students do not have barriers that make students have to submit to teachers and teachers arbitrarily give orders to students. However, the teacher-student relationship is like a parent and child who can help in solving the problems they face. This attention and motivation given by the teacher can be in the form of advice, repetition of lessons and moral messages. A fun school by creating a pleasant learning atmosphere by creating a comfortable atmosphere for children, especially the teacher-to-student approach (11–13).

Many challenging activities were held at SD Muhammadiyah this special program. Challenging activities arouse students' interest and attract them to be actively involved. Challenging activities are indeed an indicator of a fun school. Challenging activities are not only carried out during learning, but also carried out in activities such as extracurricular, *outing class* , and PPL. The benefits of these activities are felt by students, they don't just study indoors but can learn with nature. Many lessons can't be obtained in the classroom. Activity *outing class* and PPL at school this involve committee school for succeed its activities. This is in accordance with research (12,14) state that movement school pleasant need involvement of all parties, especially parents and the community.

Looking from the student's perception of a fun school, there is only a slight difference in students' perceptions of how fun school is. Every student has their own opinion about a fun school, but in essence a fun school according to them is a safe, healthy school, there are lots of friends, teachers and fun lessons. To create a positive perception of the school it is necessary to create a pleasant school climate among others, by changing the mindset of teachers and parents of students towards humanizing education, create relationships and interpersonal relationships with love and affection, resolve conflicts as soon as possible so as not to interfere with work comfort, harmonize the work environment by creating a positive environment both physical and non-physical (15).

The difference in perception is a natural thing, because perception is a subjective view. The process of perception cannot just take place, perception goes through a process of cognition which is also influenced by many factors. Therefore, someone's perception of something is not necessarily the same as someone else's perception of something similar to him.

## CONCLUSION

Based on the results of the research, the researchers concluded that students' perceptions of schools in general all stated that the Surakarta Special Program Muhammadiyah Elementary School was a fun school. They all enjoy studying at the school. Students feel comfortable learning and also playing with their friends. The lessons are easy to accept and the teacher's fun way of delivering them makes students feel at home studying at school

An indicator of a fun school according to students is school that is safe, healthy, there are many friends, teachers and fun lessons. The difference in perceptions of the school indicators that are pleasing to students is only on which emphasis is prioritized. However, they agree that fun school indicators as mentioned above.

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# **The Response And Parental Role Toward the Implementation of Online Learning During Pandemic in High-Class SD/MI Punggelan District, Banjarnegara Regency**

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**Abstract.** Learning during the pandemic causes learning to be done online. This study aims to find out how the parents of students respond to the implementation of online learning during the pandemic. How is the response to online learning policies, policy regulations in schools, online learning systems, and the implementation of online learning. This research is a descriptive qualitative research with a survey method with the subject of fifteen parents of high-class students in the Punggelan sub-district, Banjarnegara district. The data collection technique used a questionnaire sheet. The results showed that the response of parents of high-class students obtained a total score of 236.79 with a score of "B" in the good category and in each variable obtained: online learning policy got a score of 59.33 with a very good category, policy regulations in schools got a score of 59.66 in the good category, the online learning system got a score of 58 in the good category, and the implementation of online learning was 59.80 in the good category. So it can be concluded that the response of parents of students to the implementation of online learning during the pandemic is in accordance with predetermined provisions with high grade results getting the "Good" category and these results are in accordance with the previously set values.

**Keywords:** *online learning, parental response, elementary school*

## **INTRODUCTION**

The spread of the coronavirus disease 2019 (COVID-19) that already hit the world become a challenge to prevent the spread of COVID-19. The government prohibits crowds, social distancing and physical distancing, wearing masks and always washing hands. According to (1) with interaction restriction, the Ministry of Education in Indonesia also issued a policy that is closing schools and replacing the teaching and learning process (KBM) using an online system. This certainly affects education world, such as teaching and learning activities that are usually carried out in schools that now carried out at home and carried out online.

The government through the Ministry of Education and Culture had issued Circular Number 4 concerning the Implementation of Education Policies in the Emergency Period of the Spread of Corona Virus Disease (Covid-19) starting March 24, 2020. The existence of the Circular, it causes all educational institutions take quick steps as response to the anticipation of the spread of Covid-19 and the implementation of learning. The Covid-19 pandemic has caused impact in various fields, one of which is education. In the scope of learning, we must also trying to change teaching

methods online (2). Practice previous learning face-to-face now must be implemented with the Distance Learning system (PJJ) or better known as the internal system network (online) as a preventive measure the formation of a new cluster of the spread of the virus Covid-19 in the school environment (3). The Banjarnegara Regency Youth and Sports Education Office as one of the agencies under the auspices of the Ministry of Education and Culture issued Circular Number 420/1227/Dikpora/2020 concerning Prevention of the Spread of Corona Virus Disease (Covid-19) Education Units in Banjarnegara Regency. In the circular, the Banjarnegara Regency Education Office appealed to teachers to carry out online teaching and learning activities.

Not just in Indonesia, according to UN News in (4) "government have closes temporarily all school, country wide to limit the spread of coronavirus and as on 14 March 2020, approximately 420 million children are not attending school. More than thirteen countries have temporarily closed their all schools which has affected students of almost all classes". There are millions of children in the world who cannot go to school because of the COVID-19 pandemic.

Online learning does not run smoothly, there are also many obstacles that arise, especially in areas with difficult internet access and the economic conditions then the difference in education levels of parents of students which cause delays in the online learning process. Due to the diverse geographical conditions of Banjarnegara Regency, especially in Punggelan District, internet access is not yet fully affordable, and there are many areas which difficult to get internet access. Because of that, the learning materials provided to students are hampered, even though they only use the Whatsapp application between the teacher and the student's guardian. It can allow a lack of communication between teachers, students and guardians of students.

Not only internet access has not been evenly distributed, the next problem is the parents' role. Parents are an important part in education, because children actually learn from home as the first informal learning place in their lives. Parents play a role in children's learning to provide attention, supervision, motivation and fulfill children's learning needs. Supervision from parents according to (5) facts in the field show that parents of students in the first week of the online learning activity, parents give full attention to their children. But in the second week onwards, the parents' supervision to their children begins to decrease because parents have to divide between working, taking care of the house and supervising children in learning. So what happens in the end is that the teacher only sends assignments to the parents of students without any supervision in their learning. According to (6) The fact that both students and teachers have not had a culture and skills of distance learning caused another tension. Teachers, students, and parents need time to adapt to the new learning system. Teachers' limited technical skills demanded the educational institutions to provide intensive training in a short time to maintain the quality of learning and teaching. Therefore, both parents, teachers and students need time to adapt first in carrying out the new online learning so that learning can be created that has good quality.

The inhibiting factor of online learning according to (7) is that most parents have not been able to always accompany their children to study because they have jobs that cannot be abandoned. So, due to the lack of assistance from parents, it causes the learning achievement of students decreases due to lack of motivation and assistance.

Based on the background above, the researcher is interested in conducting research on the response and parental role toward online learning during the pandemic in elementary schools in Punggelan District, Banjarnegara Regency. This study aims to determine the response and role of parents in high class of elementary school in Punggelan District, Banjarnegara Regency.

## **RESEARCH METHODS**

In the research of response and the parental role towards the implementation of online learning during the pandemic in SD/MI in the Punggelan District, Banjarnegara Regency, the researcher would use descriptive research with a survey method. According to (8), the definition of quantitative method is "a research method used to examine a particular population or specimen, using research instruments, analysing quantitative or statistical data as data collection, which aims to test predefined hypotheses.

The population that used in this study were elementary schools and Islamic elementary schools in Punggelan District, Banjarnegara Regency. In this research, the researcher was not possible to take all the SD/MI in the entire



Punggelan District, which amounted to 69 schools. The sampling technique of this research was based on using probability sampling method with simple random sampling that was taking random samples from the population, because the population is considered homogeneous. Therefore, the number of samples determined were parents of students at SDN Badakarya, MIM Badakarya, SDN 1 Bondolharjo, SDN 2 Tanjungtirta and SDN 2 Purwasana.

Data collection techniques in this research used non-test data collection methods namely questionnaires and interviews. Basically, a questionnaire is a list of questions that must be filled out by the person to be measured (respondent). Through this questionnaire, people can be known about the situation, experience, knowledge, attitude or response, and others. Then interviews as a way of collecting data directly on the subject under study.

In this research, the researcher used the width of the questionnaire as a tool in collecting data from respondents. The questionnaire in this research aimed to determine the response of parents of students toward online learning during the pandemic. Before it used, the researcher had carried out the content validation process on the data collection instrument used through expert judgment by the expert (validator). The data collection instrument in this research was using a response questionnaire. Questionnaires was used to collect data on the responses of parents of students to the implementation of online learning during the pandemic. While the interview guide was used to determine the role of parents in online learning.

The analysis of the Questionnaire of parents' responses toward online learning during pandemic used a Likert scale (9).

**TABLE 1.** Likert Scale

Alternative Answer	Score/Statement
Strongly Agree	5
Agree	4
Quite Agree	3
Disagree	2
Strongli Disagree	1

Data analysis was carried out with the aim of being able to answer the questions posed in this research, that was how the parents of students responded to the implementation of online learning during the pandemic. The data obtained is converted into qualitative data with a five scale, with the formula which adapted from (10) in the following table:

**TABLE 2.** Conversion from Quantitative Data to Qualitative Data

Interval Score	Score	Category
$X > X_i + 1,5 SB_i$	A	Very Good
$X_i + SB_i < X \leq X_i + 1,5 SB_i$	B	Good
$X_i - 0,5 SB_i < X \leq X_i + SB_i$	C	Fair
$X_i - 0,5 SB_i < X \leq X_i - 0,5 SB_i$	D	Poor
$X \leq X_i - 1,5 SB_i$	E	Very Poor

Description:

X : Empiris Score (Actual Score)

Xi : ideal mean = 1/2 (maximal score + minimal Score)

SBi : ideal standard deviation = 1/6 (maximal score - minimal Score).)

## RESULTS AND DISCUSSION

The distribution of the questionnaire was carried out to find out the response of parents toward the implementation of online learning during the pandemic. Researcher conducted research toward parents of elementary school students in Punggelan District, Banjarnegara Regency. The respondents were 30 parents of students consisting of two groups of respondents namely 15 questionnaires for parents of low class students (classes I-III) and 15 questionnaires on parents of high classes students (classes IV-VI). Consists of 4 Elementary Schools (SD) and 1 Madrasah Ibtidaiyah (MI). The schools sampled in this research were SDN Badakarya, SDN 1 Bondolharjo, SDN 2 Tanjungtirta and SDN 2 Purwasana MIM Badakarya.

There were 4 (four) statement variables contained in the parent student response questionnaire toward online learning during the pandemic, namely the response to online learning policies, responses to policy regulations in schools, responses to online learning systems, and responses to online learning implementation. The variables were divided into 10 indicators which from these indicators become 20 statements.

Based on the results of the questionnaire the parents of students' responses toward online learning during the pandemic were very good in the low class and good in the high class. Therefore the response of parents of students toward online learning during the pandemic was in accordance with the criteria which set by the researcher. The complete results of the student's parents' response questionnaire are as follows:

**TABLE 3.** The Result of Parental Response Questionnaire in High Class

Variable	Score	Value	Category
Online Learning Policy	59,33	B	Good
Policy Regulations in School	59,66	B	Good
Online Learning System	58	B	Good
Implementation of Online Learning	59,80	B	Good
Total	236,79	B	Good

From the data in table 4, the total score of the parents' response questionnaire for low class is 236.79. If the score was converted it would get a B value in the "Good" category; thus, the response of the parents of the high-class was in accordance with the criteria set. The scores for each variable are based on table 4, namely: (1) online learning policy get a score of 59.33 in the "Good" category, (2) policy regulations in schools get a score of 59.66 in the "Good" category, (3) the online learning system got a score of 58 with the "Good" category, and (4) the implementation of online learning 59.80 with the "Good" category. student responses to online learning, namely students do not understand online learning at school, it takes time to adjust long and constrained by many things (11).

The response of parents toward online learning would determine the next role of parents in online learning. The success of students' learning was influenced by factors from internal and external the students themselves. External factor from the students include the parent factor, the attention of parents in learning activities during the pandemic which become one of the form of the parent's role.

The role of parents during the pandemic includes: (1) providing guidance; guidance is needed by students in understanding the material presented by the teacher through online learning, (2) giving advice; parents play a role in giving advice if the child makes a mistake (example: the child has not done the assignment until the deadline for collection), (3) giving motivation and rewards; the existence of motivation and appreciation from parents creates enthusiasm in student learning, (4) meets the needs of children; the fulfillment of the needs of children is the obligation

of parents, the fulfillment of educational needs during the pandemic is carried out by parents in the form of fulfilling the needs of communication tools (mobile phone) and also internet quotas, (5) supervision and attention; supervision and attention is carried out by parents so that student achievement does not decrease during the pandemic.

## CONCLUSION

The response and the parental role towards online learning during the pandemic got a good response in the high class. It was evidenced by the results of the questionnaire on the responses of parents of students in high class who got a total score of 236.79 with the "Good" category, thus the response of parents of students to online learning during the pandemic was declared to have been in accordance with predetermined provisions. The the role of parents during the pandemic was optimal by paying attention to students.

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# Implementation Of Standard Operating Prosedures (SOP) on Circulation Services at the Library of South Sumatera Province

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**Abstract.** This article is entitled "Implementation of Standard Operating Procedures (SOP) on cirkulation services at the South Sumatra Provincial Library Service". This research is motivated by considering the importance of implementing SOPs in circulation services at the South Sumatra Provincial Library Service properly, consistently, effectively and efficiently in order to provide maximum service results to users. The problems discussed in this study are how to implement Standard Operating Procedures (SOP) and what factors affect the implementation of Standard Operating Procedures (SOP) at the South Sumatra Provincial Library Service. The type of research in this research is field research with a qualitative approach. In this study, the key informant was the head of the service and automation section, while the supporting informant was the user service staff. The data collection techniques used in this study were interviews, observation, and documentation. From the results of the research obtained, it shows that the implementation of Standard Operating Procedures (SOP) at the South Sumatra Provincial Library Service. and extend the borrowing period of books and impose sanctions if the user is late in returning the book. The factors that influence the implementation of Standard Operating Procedures (SOPs at the Library Service Office of South Sumatra Province are supporting and inhibiting factors. Supporting factors include staff performance that has been supported by a computerized system, adequate infrastructure and work experience of circulation service staff. The inhibiting factors are implementation of Standard Operating Procedures (SOP) on circulation services, including when the electricity goes out, all internet access and equipment that supports circulation service activities will stop.

**Keywords:** Implementation, Cirkulation, Standard Operating Procedures, Libraries

## INTRODUCTION

In this modern era of technology and information, the public's need for information and educational media is a challenge for information and education service providers in Indonesia. Information systems in the academic world with information technology that has increased rapidly due to its efficiency and (1). Educational institutions such as libraries also do not escape the development of information technology to improve their performance in terms of education and information services needed by the community, especially academics.

The library is an information center where there are many available books and various types of references needed to strengthen knowledge. Therefore, the library has a function to create a literate society (2). Libraries provide facilities that can support student learning (3). Libraries cannot be understood as merely a building or physical accommodation where books are kept. However, it can simply be stated that the library is a work unit that has human resources, a "special room" (reading room) and a collection of collections according to the type of library. The existence of the library is not limited to a place to store textbooks, but it must be able to provide alternative sources of knowledge that are needed and have been difficult to access (4). According to Sulistyo Basuki, a public library is a library financed from public funds, either partially or wholly, open to the general public without discriminating against age, gender, belief, religion, race, occupation, ancestry, and providing free services to the public (5) A library can be said to be well developed if it is able to attract and improve people's reading power and be able to change the character of the community to be fond of reading (6).

Libraries as a source of information must be able to keep up with the developments and progress of the times (7). Libraries as educational institutions and information institutions will have good performance if they are supported by adequate management. Furthermore, using management means that an agency seeks to work in a structured manner, both in terms of its work processes, workflows, and the work methods it uses. Libraries must have an organizational structure. The organizational structure is a form or figure that will develop the formation of positions, lines of communication, orders, reports, cooperation, duties, authorities, and responsibilities providing firmness on what work will be done by the library staff (8).

As a scientific information service unit, especially to the academic community and the wider community, libraries are required to work professionally by prioritizing quality, speed, and ease of service. In order to carry out their duties optimally, a good library management and work standards or Standard Operating Procedures (SOP) are needed.

Library management is a process of activities carried out by the library to achieve goals as efficiently as possible by using existing resources. These resources are HR (Human Resources), facilities, methods, and funds. In order for management to be effective, the objectives of the management must be clear. Koontz and O'Donnell in their book *The principle of management and analysis of managerial function* cited by Abdul Rahman Shaleh stated that there are five management functions, namely planning, organizing, staffing and directing), and monitoring (controlling) (9).

On the other hand, the user's guidance to the library is expected not only as a mediator in service and information but also to be able to function as a provider of facilities in providing scientific needs so that the library can meet the needs of users, utilization and service efforts. Furthermore, to produce performance in accordance with predetermined standards, it is necessary to have a series of standardized procedures. Standard procedures or better known as Standard Operating Procedures (SOP). SOP are standardized procedures or stages that must be passed to complete a certain work process (10). In simple terms, it can be interpreted as a guide that shows what to do, when it is done, and who does it.

SOP for libraries are important because they can function to assist libraries in providing services to the academic community properly, consistently, effectively, and efficiently in terms of providing guidelines or instructions for the academic community, about a library service procedure that must be carried out, providing guidelines for all library staff. and library officials in carrying out routine library services, avoiding overlapping implementation of library service tasks to the academic community, assisting the search for procedural errors in providing library services, and ensuring the service process continues in various situations (11). Service soups in the library include: The National Library Standard on libraries mentions the types of library services, at least covering circulation services, reference services, information literacy, and information and communication technology services.

## **METHOD**

In this study, the author uses the type of research field research (field research) which is a form of research that aims to reveal the meaning given by community members to their behavior and the surrounding reality. The field research method is used when survey or experimental methods are felt to be impractical, or when the research field is still so wide (12).

Qualitative research is rooted in the natural setting as a whole, it relies on humans as research tools, it uses qualitative methods and inductive data analysis. It directs the research objectives to the effort to find theory from the ground up. Descriptive in nature, more concerned with the process than the results and limiting the study of focus (13). So, the form of this research is descriptive research, namely research conducted to determine the value of independent variables, or more (independent) without making comparisons or connecting between one variable and another variable (14). Most of the analysis developed in this study is based on qualitative data and information (15).

## **RESULTS AND DISCUSSION**

### **1. Standard Operating Procedures (SOP) on Circulation Services**

This chapter is a research analysis as well as an answer to the problems that have been formulated previously. As explained in the introductory chapter, that to analyze the data collected, be it data from observations, interviews, and documentation that researchers did. The researcher then described it with a qualitative descriptive approach. That is to explain in detail the data so that it can be used as conclusions by researchers. To analyze this problem, the researcher connects the data from interviews, observations and documentation obtained in the field. The key informants in this study are: The head of the service and automation section while the supporting informants are the user service staff (member registration, book lending service staff, book loan extension service staff, book return service staff) and users.

#### **a. Standard Operating Procedures (SOP) for Library Member Registration**

- 1). Before using library services, you must first fill in visitor data.
- 2). To become a member, you must meet certain requirements.
- 3). Only users who are members of the library are allowed to borrow book (16).

#### **b. Standard Operating Procedures (SOP) for Book Borrowing Services**

- 1) To borrow books, you must become a member of the library
- 2) Member card must be scanned first in order to make transactions
- 3) Borrowing a maximum of 3 books with a loan period of 7 days and can be extended 2 times

#### **c. Standard Operating Procedures (SOP) for Return Services**

- 1) The user must scan the membership card in order to carry out the book return transaction.

#### **d. Standard Operational Procedures (SOP) for Extending Book Loans.**

- 1) The user must scan the membership card in order to carry out the loan extension transaction 2) Extension can only be executed 2 times

### **2. Implementation of Standard Operating Procedures (SOP)**

#### **a. Standard Operating Procedures (SOP) for Registration Services Library Member**

The library determines who is entitled to become a member of the library, and what conditions must be met to register as a member. Through membership, the library will know the identity of its users. By registering membership, it also makes the guarantee procedure easier.

#### **b. Standard Operating Procedures (SOP) for Book Borrowing Services**

As explained in the chapter, book lending activities are circulation services in the form of recording evidence that users borrow library materials. The borrowing process uses various methods, some use large books, book cards and so on according to the conditions of a library (17). The process of borrowing books at the Regional Library of South Sumatra Province has been supported by a computerized system and has implemented Standard Operating Procedures (SOP) in the book lending service process.

#### **c. Standard Operating Procedures (SOP) for Returning Books**

Returns are circulation services in the form of recording evidence that the user returns the borrowed library materials. There are two ways to return library materials that can be done at the library, namely the user brings library materials directly in the return box. The second, the user brings directly the library materials that he wants to return to the circulation table (17). In the book return service section at the South Sumatra Regional Library using the second method, the user brings directly the library materials he wants to return to the circulation table.

Library services are one of the main activities in every library. This service is an activity that is directly related to the community, and at the same time is a barometer of the success of library operations. Therefore, from the service desk an image and image of the library will be developed, so that all library activities will be directed and focused on how to provide good services as desired by the community or library visitors. Good service is one that can provide a sense of pleasure and satisfaction to the user (18). In the process of service to visitors, the South Sumatra Provincial Library Service provides services and already has standards in its services.



#### **d. Standard Operating Procedure (SOP) for Book Loan Extension Services.**

The extension of the loan period depends on the policy of the user, there are libraries that provide two extensions, some only give one time (17). The procedure for extending the loan period at the South Sumatra Provincial Library Service already has standards in its service.

### **3. Factors Affecting the Implementation of Standard Operating Procedures (SOP) at the South Sumatra Provincial Library Service.**

#### **a. Supporting factors**

Based on the results of observations and interviews that the authors conducted at the Regional Library of South Sumatra Province, the researchers found several supporting factors in implementing Standard Operating Procedures (SOP) in circulation services, as follows:

(1) Staff Performance That Has Been Supported with Computerized Systems and Adequate Facilities and Infrastructure. Factors supporting the implementation of Standard Operating Procedures SOP on circulation services in the member registration section, namely the performance of staff who have been supported by a computerized system in their services, (2) Experienced Circulation Service Staff. The South Sumatra Library Service has a large number of employees and the average is already a civil servant when viewed from the position, then there are several Echelon officials from Echelon II, III, and IV and functional officials. The circulation service section has 3 employees who are already civil servants and have long work experience.

#### **b. Obstacle factor**

As an organization, the Regional Library of South Sumatra Province will not be free from problems and obstacles. The problems faced by libraries in implementing Standard Operating Procedures (SOP) on circulation services according to informants are such as barcodes on damaged books, internet networks that are disconnected when the lights go out.

1) The inhibiting factor in implementing Standard Operating Procedures (SOP) in circulation services at the South Sumatra Provincial Library Service is electricity that often goes out.

## **CONCLUSIONS**

Management activities range from deciding the future direction of the organization to creating organizational activities, promoting cooperation among organizational members, and monitoring activities to achieve them. Goals, management, play a very strategic role in making organizational efforts more effective. Specifically, to make better use of equipment, land, offices, products, services and relationships within your organization.

Madrasa education management must be based on the concept of democratization, task specialization, delegation of authority, professionalism, and task integration to achieve common goals. Leadership in an institution means carrying out a leadership process that has an impact on educational staff resources (educators and staff) to take collaborative action to achieve educational goals. Madrasah education development is carried out by madrasa leaders.

Madrasa management and implementation of leadership in madrasas harmonize various inputs or student interactions (processes) between teachers, students and supporting facilities both inside and outside the classroom. All components must be able to work synergistically. In an atmosphere that supports the learning process, both in the context of curriculum and extracurricular, both academic and non-academic, so that madrasas can survive in the demands of the times.

As a writer, I realize that there are still many shortcomings that are far from perfect. Of course, the author will continue to improve it. Therefore, the author really hopes for criticism and suggestions regarding this article.

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# The Use of “Smart Shoes” To Increase Barrier Awareness in Blind Person

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**Abstract.** This study discusses the application of "smart shoes" to detect obstacles encountered by the blind person on the road. These shoes are designed according to the needs of blind person by adding sensors to the shoes to increase alertness. The barriers that usually found in the road are slippery road, potholes, uphill and downhill road. This barriers cannot detect by the blind person, so that we made this shoes to help them can identify these barriers. Smart shoes was design comfortable to wear for blind person as they needs. In first design smart shoes was thick, after redesigning smart shoes was more thin and water resistant so that blind person can easy to walk. In this research to develop smart shoes, we decided to use research and development and with ADDIE design. The results of this study are that the application of "smart shoes" to increase awareness of blind person against obstacles on the road increases, based on 8 of respondents. Besides that, smart shoes are highly recommended to be an alternative for blind person in walking in addition to using a white cane.

**Keywords:** Awareness, Blind Person, Smart Shoes

## INTRODUCTION

Mobility in blind person is a very important thing to be developed in their lives. It is intended to carry out their daily activities independently.

Mobility in general is also related to the environmental conditions, because mobility is the movement from one place to another. This is also explained by mobility as the ability, readiness and ease of movement, as well as moving places (1). The importance of expertise in mobility can increase the confidence of the blind in moving from place to place, because in moving places there are things that sometimes pose a threat to the blind when they move. The threats can be in the form of potholes, slippery roads, climbs and descents. If all of this is not recognized by the blind, then this can endanger the blind themselves. These existing obstacles cannot be circumvented because not all roads in every area provide accessibility.

Suraman in (2) reveals that accessibility in particular in public services is related to how easily public services can be accessed and used by many people. In line, the definition of accessibility according to Black in Miro (2009) is a concept that combines geographic land use systems with transportation network systems where land use changes, which cause geographical zones and distances in the area. An area or city, will be easily connected by the provision of transportation infrastructure or facilities.

According to (3) accessibility is the convenience provided for the disabled in realizing equal opportunities in all aspects of life and livelihood, as an ease of moving through and using buildings and the environment by paying attention to smoothness and feasibility, which is related to circulation, visual and setting components.

The available accessibility has indeed been promoted by the government by issuing the Regulation of the Minister of Public Works Number 30/PRT/M/2006 concerning Technical Guidelines for Facilities and Accessibility

in Buildings and the Environment which regulates appropriate facilities and accessibility for persons with disabilities (4).

The building in question is a building that can provide safety, convenience, usability and independence for users, so that it is not only for non-disabled people, but also for people with disabilities. Accessibility that has been provided such as the provision of special roads for the blind, handrails, provision of white canes in schools, procurement and reproduction of braille books and so on. It's just that the accessibility provided has not been optimally utilized by blind person so that the existing obstacles cannot be optimally minimized.

The obstacles experienced by blind person are indeed quite complex, which occur due to a lack or absence of vision. This obstacle is also a serious problem for them, because in essence the sense of sight captures more information than other senses possessed by humans. Regarding the above conditions and the limited exploration of the environment due to incomplete information acquisition, a blind person has difficulty in mobility.

The existing accessibility does not actually meet the needs of the complete mobility of the blind, new developments and innovations are still needed to support the feasibility of living for blind person. For example, a white cane, almost all blind people already have it, but for use it still has drawbacks, for example unable to detect in detail the obstacles that exist. Therefore, there are other additional alternatives that can be used either to accompany the white cane or can be used alone to detect obstacles or dangers when the blind walk. Another alternative that is offered in this study is a shoe that can detect various threats on the road, whether it is potholes, there are objects that block, uphill roads and downhill roads. These shoes are designed by using sensors that are arranged in the shoe that will vibrate if it encounters certain obstacles. These shoes will detect obstacles within one meter so that blind person can be careful and alert on the road. This shoes is named "Smart Shoes". This one designed based on the results of the assessment and profile analysis of blind students so that it is found that they need a device to detect obstacles that will be encountered on the road. Smart shoes is a product of assistive technology. Assistive technology is all kinds of modified tools or applications that are able to provide convenience and accessibility for children with special needs. (5).

According to Assistance for Persons with Disabilities Act (1990) Amerika Serikat "...assistive technology devices...are any item, place of equipment or product system, whether acquired commercially of the shelf modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities ." Then, Wobschall dan Lakin et.al (6) said that "...assistive technology is just a subset of tools used by human being, providing in ways and places that are needed by relatively few people with significant impairment in 'normal' physical, sensory, or cognitive abilities." With assistive technology, smart shoes can be designed according to the needs of the blind person (7,8).

This type of research used research and development where this research data was used ADDIE design. Form of data was words, schemes, pictures and numbers. Gorman & Clayton (9) that this research method is to report the meaning of events from what is observed by researchers. At the report stage, it contains observations of various events and interactions that are observed directly by researchers from the scene (9). Descriptive research is included in the type of qualitative approach that can describe a situation or existing phenomena.

The design of this study was an ADDIE design that used an analysis approach of interviews, observations, trials and conducted FGD. Respondents in this research were 7 of blind person from special school and one student of Universitas Muhammadiyah Lampung, totally there were 8 of respondents.

## METHODS

Qualitative data were obtained from interview guides with research subjects of blind students, observation guidelines were also carried out when conducting needs analysis on the mobility of blind students and conducting trials and fgds when the tools could be used to see the capabilities of the designed tools. Data collection techniques in this study were used to analyze obtained from observations, interviews, trials and fgds. Data analysis techniques in this study were carried out by several techniques including data reduction, data presentation, verification/drawing conclusions and data collection. The validity of this research data will be known through the triangulation method.

(10) triangulation method is a data collection technique that combines various techniques and data sources that already exist. In the credibility test, there is triangulation of sources, triangulation of data collection techniques, and triangulation of time and also tested through fgds through several expert resource persons in designing "smart shoes" tools.

## **RESULTS AND DISCUSSION**

The manufacture and development of "smart shoes" is carried out on the basis of the mobility needs of the blind in the field. Obstacles when moving places become a challenge for blind person, especially when they have to travel to an area or road that has never been passed or that has been passed but has not memorized the existing conditions. To assist the mobility of the blind person, a device called "smart shoes" is designed in such a way as to provide services to the blind person. This shoes was developed from Agas Siwi Jalu Pamungkas dan Vicy Azizah Malihah & Damar Triyana product's (2019), but the difference are in durable from water and more thin. For more research, in Latifah et.all (none), they made a shoes named (SULTAN), the differences are in shape of shoes more thick, that shoes only can detect from wall, empashized to distance and detect the position.

Smart shoes are made with various features that make it easier for blind person to recognize obstacles on the road, such as potholes, slippery roads, uphill roads and downhill roads. The features in smart shoes work according to their respective functions. The way it works is that this shoes has sensor that can detect obstacles within one meter of where the visually impaired are by connecting the sensor to an audible warning that appears from inside the shoe. This sensor will automatically sound if it encounters these obstacles.

At the beginning of the design, Smart Shoes was still constrained by the high sole of the shoe which made it difficult for the blind to walk, this was due to the large number of cables and tools that were inserted in the shoe, then the shoe material used was not waterproof so that when it came into contact with water on the road will have an impact on turning off the currents in the shoe so that the sensor cannot function properly. This was obtained after being tested on blind students when they were asked to walk indoors and outdoors. From the results of these trials, the research team decided to redesign the shoes by changing the shoe material into leather shoes and looking for tools and materials that are light and thin so as not to make the shoes thick.

After redesigning, the shoes were re-tested on blind students who explained that the shoe designs were quite easy to use and did not make it difficult to walk anymore. The student also recommended that shoes be distributed more widely in the future.

The trials that have been carried out on research subjects, so these "smart shoes" must also be reviewed from the perspective of experts, namely through FGD activities. FGDs were conducted on 6 experts and several visually impaired individuals who were present, the result of which was that there was an improvement in the shoes, namely that the sound sensor should be able to catch the signals of obstacles more quickly and the price offered to get the shoes was lowered. According to the experts who attended the FGD, these shoes cannot replace the white cane commonly used by blind person, but can be an alternative, for example being a supporting companion on a white cane.

## **CONCLUSION**

Smart shoes are one of the alternatives offered to assist the mobility of blind person to identify obstacles encountered on the road or in a place to avoid danger. Smart shoes are developed based on an analysis of needs in the field and adapted to the features installed in the shoes. These shoes have sensors that will pick up the obstacle signal and accumulate it by vibrating, so that blind person can be aware of the danger ahead.

During the trial, visually impaired individuals felt that they were more careful when walking.

Here is the difference first design and after redesigning:



Picture 1



Picture 2

## **ACKNOWLEDGMENTS**

This research was supported by team and blind person that become a subject and KEMDIKBUDRISTEK DIKTI for choosing us to develop this shoes.

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# Effectiveness of the Student Inductive Thinking Learning Model Through the Help of Google Classroom Media in Learning Economic Mathematics

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**Abstract.** Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan is one of the private universities that has used google classroom as a learning medium during the covid-19 pandemic. To activate students in these learning activities, a certain method is needed to make learning more lively, one of which is an inductive thinking learning model. In this inductive activity under the guidance and direction of the lecturer through google classroom, students actively learn mathematics individually. This research is a descriptive study that is used to describe the effectiveness of inductive thinking learning assisted by Google Classroom in the Development Economics Study Program of the Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan in terms of 3 aspects, namely student activities, student learning outcomes, and student responses. The research design used is One Shot Case Study. The instruments used were student activity observation sheets, learning outcomes test sheets, and student response questionnaire sheets. Based on data analysis, it was found that (1) student activities during inductive thinking learning assisted by active google classroom were shown by 85,15% of students doing activities as desired by researchers; (2) classically complete student learning mastery which is shown by 86,96% of students meeting the standard; and (3) positive student responses. So it can be concluded that the inductive thinking learning model assisted by Google Classroom in economic mathematics learning is said to be effective.

## INTRODUCTION

The COVID-19 pandemic is the beginning of the current educational changes, where central and regional governments have devised policies covering all educational institutions to break the chain of transmission of the virus. COVID-19. The policies adopted force the government and related organizations to put in place alternative educational processes for students who are unable to complete their education in educational institutions, one of which is practice implement the policy of teaching and learning remotely or by online conferencing. Teachers or instructors must have unique skills and competencies for the material to reach students in order to achieve educational goals. This agrees with that (1) the teacher's ability to master the classroom is balanced with the ability to evaluate student competency planning which is very decisive in the context of next planning, or the treatment policy towards students related to the concept of complete learning. Therefore, the teacher is an important component that acts as the person in charge in the learning process and is responsible for the process of absorbing learning materials.

According to (2) a difference can be seen between the conventional method of learning conducted by the teacher and the online learning method. Conventional learning is a learning process achieved by combining one or more learning methods and teachers have an important role to play in this approach, while methods are used in the form of direct explanations, exercises, and questions and answers, while online learning can be defined as technology-based learning in which learning materials are sent electronically to remote students using a computer network. Thus, it can be said that teachers and lecturers are the decisive factor in the main cause of problems in the application of distance learning.

Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan, is one of the private universities that has utilized online learning before this pandemic as a learning medium. These learning activities utilize the Google Classroom application. Google Classroom can be a way to distribute assignments, submit assignments, and even evaluate collected assignments (3). Indeed, students and teachers can collect assignments, distribute assignments, give grades at home or anywhere without being bound by time limits, class hours. During the learning process, students receive materials and assignments from their teachers and send the results of their reports to the Google Classroom application. However, in its implementation there are some lecturers who still have not optimized google classroom media in their learning because they only send material files and assignments to the google classroom. In fact, to activate students in these learning activities, a certain method is needed so that learning is more lively, one of which is the learning model. The learning model serves as a guide for teaching designers and teachers in carrying out learning. The selection of the learning model is greatly influenced by the nature of the material to be taught, the objectives to be achieved in the learning, as well as the level of ability of the learners (4). The learning model that will be developed in this study is the inductive thinking learning model. According to (5) the inductive learning model has the meaning of how a learning model can be developed and created to improve the ability of students to process information and think creatively. Where learners learn to organize facts.

Marpaung is referred to in (6) learning by involving an effective inductive mindset to teach a mathematical concept, and give students the opportunity to understand the concept or acquire generalizations in a more meaningful way. Concept formation is a complex thought process that includes comparing, analyzing and classifying and inductive reasoning and the results of an understanding (7). Students gain experience when making careful direct observations of special cases given by the teacher, in constructing this mathematics students are involved with the process of adaptation and organization, so that learning mathematical concepts in this way is seen as more meaningful than just memorizing them. It is also expressed by that (8) inductive thinking models are used to increase students' effectiveness in shaping and using concepts, and develop skills to complete tasks.

This inductive thinking learning model is an inductive learning model pioneered by Hilda Taba (9). Taba developed this inductive learning model by being based on the concept of students' mental processes by paying attention to students' thought processes to handle information and complete it. Learning begins with giving examples or special cases towards concepts or generalizations. Students make a number of observations that then build up in a concept or generalization. Students do not have to have the main knowledge in the form of abstractions, but arrive at those abstractions after observing and analyzing what is observed. In this inductive activity under the guidance and direction of lecturers, students actively learn mathematics individually. Nevertheless, students are given the opportunity to interact with their friends, for example exchanging opinions with their deskmates or with friends nearby.

Therefore, the aim of this study is to describe the inductive thinking learning model of students assisted by google classroom media in the Development Economics Study Program, College of Economics, Jambatan Bulan.

## **RESEARCH METHOD**

### **Research Design**

The type of research used is descriptive research. This research was used to describe the effectiveness of google classroom assisted learning with an inductive thinking learning model in the Development Economics study program of the Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan which was reviewed from 3 aspects, namely student activities, student learning outcomes, and student responses.

The study design used was a One Shot case study, in which subjects received a certain treatment followed by observations at the time of application of the treatment and performance of the treatments. measure the effects of treatment. The design in this study can be seen in Table 1 below

**Table 1.** Eksperimental Research Design

<b>Treatment</b>	<b>Posttes</b>
X	O

Information:

X : Learning the google classroom-assisted inductive thinking model in the economics mathematics course

O : Final test (posttest) after learning

## **Population and Sample**

This research was carried out from May to December 2022 located at the College of Economics, Jambatan Bulan. The subjects in this study are 2nd semester students of the Development Economics Study Program, Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan, for the 2021/2022 academic year.

## **Research Instruments**

The instruments that will be used in this study are in the form of student activity observation sheets, student learning outcomes tests and student response questionnaire sheets. The three research instruments are first validated which will then be used in the implementation of the research.

## **Data Collection and Analysis**

In this study, the data collection techniques used were test and non-test techniques. This type of test technique is used as a test of learning outcomes, that is, a test to measure a person's achievement after learning something. This learning outcomes test is obtained from the results of student posttests. The type of non-test used is a questionnaire of student responses regarding the use of inductive thinking learning models assisted by google classroom media and student activity data during the learning process.

Data on student learning outcomes, student responses and student activity data to the use of inductive thinking learning models assisted by google classroom media were analyzed descriptively. The completeness of the student's learning is fulfilled if the classical completeness is fulfilled. Meanwhile, a class is said to be classically complete if the Classical Completion in the class  $\geq 80\%$  of students. Student activity is said to be active if the percentage of activity is  $> 80\%$ . And the student's response is said to be positive if the percentage of student responses who answer "yes" to positive questions and answer "no" to negative questions is  $> 70\%$  then students have a positive response to the statement.

## **RESULT AND DISCUSSION**

After conducting a research that lasted for 1 month and filling out a response questionnaire to Development Economics students, the researcher has obtained the data to be analyzed. The data obtained are learning outcomes, student responses and student activities. Data on student learning outcomes are analyzed by calculating the average learning outcomes obtained by students after learning. And the data on the results of student responses and their activities are analyzed by calculating and describing their percentages in each statement item.

## Student Learning Outcomes

In this study, student learning outcomes were obtained from students after taking the learning outcomes test at the fourth meeting. The learning outcomes test was attended by 23 students of the Development Economics Study Program, Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan.

The results showed that out of 23 students, as many as 20 students had met the minimum completion standard and the other 3 students did not meet. So it can be said that the inductive thinking learning model assisted by Google Classroom on the material of the two-variable linear equation system as many as 86,96% of students completed learning while the remaining 13,04% did not complete learning. So, completeness is classically fulfilled.

## Student Response

Data on student response results were analyzed by calculating and describing the percentage of student response scores after being taught using a google classroom-assisted inductive thinking learning model. The following are the results of the recapitulation of statistical analysis obtained by students.

**Table 2.** Recapitulation of Student Response Percentage

No.	Statement	Percentage (%)	
		S	TS
1.	I am very happy and enthusiastic about participating in learning economic mathematics through the media of <i>google classroom</i>	93,3	6,7
2.	Google classroom-assisted inductive <i>learning</i> makes it easy for me to understand economics math courses	86,7	13,3
3.	Google classroom-assisted inductive <i>learning</i> limits me from expressing ideas	40	60
4.	Using Google's classroom media can be used to teach concepts by generalizing	100	0
5.	Because being able to interact well with friends and lecturers without feeling reluctant makes me enthusiastic in participating in learning through <i>google classroom</i> media.	86,7	13,3
6.	With the use of <i>google classroom</i> media learning becomes more fun and I am more active	73,3	26,7
7.	<i>Google Classroom</i> lets me get feedback faster	80	20
8.	With learning through <i>google classroom</i> media I can find new knowledge that I have not yet gained from learning in the classroom	86,7	13,3
9.	Assignments and activities in learning economic mathematics through <i>google classroom</i> media given by lecturers arouse my creative ideas	93,3	6,7
10.	With <i>google classroom</i> , obtaining announcements, materials and collecting economic mathematics assignments becomes more flexible	100	0
11.	Using Google Classroom to learning economic mathematics can motivate and build my confidence	80	20
12.	By using <i>google classroom</i> , I am able to develop thinking skills in learning at any time	100	0
13.	I am more courageous to issue ideas or opinions during the learning process by using the help of <i>google classroom</i> media	86,7	13,3
14.	Through learning economic mathematics with the help of <i>google classroom</i> media made me realize to appreciate the ideas and ideas of others.	100	0
15.	After doing learning activities, I am more proficient in concluding concepts taught through <i>google classroom</i> media	93,3	6,7

From table 2 above, it is known that most students have a positive response to the inductive thinking learning model assisted by Google Classroom. This is because the inductive thinking learning model assisted by Google Classroom is a new learning model for students and has never been applied before. In addition, with this kind of learning, students are more enthusiastic in participating in learning without feeling shy either with friends or lecturers, this can be seen in statement number 5 with a percentage of 86.7%.

For statement number 3, it can be seen that the percentage of student responses who feel limited in expressing ideas in the inductive thinking learning process assisted by Google Classroom is 40% for positive statements and 60% for negative statements. That means 60% of students feel free to express their ideas with this kind of learning model. This is also supported by student statements which say that they are able to develop thinking skills in learning at any time with a percentage of 100%. This research is also supported by (5) that the inductive learning model requires a learning environment in which students feel free and free from the risk of fear and embarrassment when giving opinions, asking questions, presenting conclusions and answers. They must be free from sharp criticism that can discourage learning.

Statement number (2) regarding students' responses to the economics mathematics course after participating in the lesson stated that 13.3% of economics mathematics was difficult and 86.7% of students considered economic mathematics to be an easy subject. This means that 86.7% of students find it more helpful to understand the mathematical concepts of economics by using the inductive thinking learning model assisted by Google Classroom. Moreover, student responses through the use of these media can be used to teach concepts by generalizing with a percentage of 100%. This is similar to the statement by Marpaung referred to in (6) learning by involving an effective inductive mindset to teach a mathematical concept, and providing opportunities for students to understand the concept or obtain generalizations in a more meaningful way. Students gain experience when making direct observations carefully on special cases given by lecturers, in constructing this material students are involved with adaptation and organization processes, so that learning mathematical concepts in this way is seen as more meaningful than just memorizing them. It can be seen that the percentage of student responses in statement number 12 that by using google classroom, students are able to develop thinking skills in learning at any time by 100%.

In statement number 7 also agrees with (1) that the teacher's ability to master the class is balanced with the ability to evaluate student competency planning which is very decisive in the context of subsequent planning, or the policy of treatment of students related to the concept of complete learning. It can be seen that the percentage of students getting feedback quickly is 80%. Thus, the sooner students submit their assignment reports, the faster the evaluation results from the lecturer will be sent to students. Thus, it can spur students to be more motivated in learning.

Furthermore, statement 10, in accordance with the research of 3that Google Classroom is an application that allows the creation of classrooms in cyberspace. In addition, Google Classroom can be a means of distributing assignments, submitting assignments and even assessing submitted assignments. This can be seen from the percentage of student responses that strongly agree (100%) which says that through Google Classroom, announcements, materials and collection of economic mathematics assignments become more flexible.

Based on the category of student responses, it can be concluded that student responses are very positive towards the inductive thinking learning model assisted by Google Classroom with a percentage of 88%.

## **Student Activities**

From the results of observations of student activities, it can be seen that student activities that have the highest percentage in a row, namely (1) Able to write down mathematical sentences according to problem problems 34,78%, (2) Making conclusions from the concepts / data given 34,78%, (3) Doing assignments given 34,78%, (4) Identifying and grouping data in similar categories 30,43%, (5) Identifying interconnected data and explaining them 26,08%, (6) Activeness in asking and/or answering questions 26,08%, and (7) Able to give suggestions or opinions in group discussions 13,04%.

## **CONCLUSION**

Based on the results of the research data analysis, it can be concluded that the inductive thinking model is supported by google in the economics mathematics course of the Development Economics Research program, Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan, responding to aspects (1) Student activities in Google-assisted inductive learning in the classroom in the Econometrics course are classified as activities. (2) The completion of studies for a student of the Development Economics Research Program, Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan, classically after undergoing inductive learning with the assistance of Google Classroom in economics mathematics course, graded as completed. And (3) Students' responses after participating in google-supported inductive thinking learning in

econometrics courses are evaluated as positive. Based on the above 3 aspects, it can be concluded that the inductive learning model supported by Google Classroom in the economics mathematics course of the Development Economics curriculum, Sekolah Tinggi Ilmu Ekonomi Jambatan Bulan, is the most effective. fruit

## **ACKNOWLEDGMENTS**

The researcher expresses his highest appreciation and thanks to the Director of Research and Community Service (DRPM) of the Directorate General of Research Strengthening and Development of the Ministry of Research, Technology, and Higher Education for the grant assistance for Beginner Lecturer Research in Fiscal Year 2022 which allowed researchers to complete this research.

## **REFERENCES**



# Code Switching and Code Mixing in Animation Diva the Series

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**Abstract.** This study aims to describe code switching and code mixing contained in the animated film Dive the Series. The method used in the analysis of this research is a qualitative descriptive method. The data processing technique used is by looking at the notes on the animated films Diva the Series Episodes "Masakan Nusantara" and "Febi Jangan Sedih" using the theory used in this study. Data collection is done by identifying, classifying, describing, and analyzing so that it can be seen that there is a process of code switching and code mixing. The results of this study aim to find out what languages are included in the process of code switching and code mixing in the animated film Diva the Series. The results of the analysis show that there is a process of code switching and code mixing in sociolinguistic studies contained in the Diva the Series animation. In the two episodes analyzed, it is known that there are Indonesian, Javanese, Moluccan languages, Foreign languages, and Gaul languages in the animated film Diva the Series.

## INTRODUCTION

Sociolinguistics is a combination of two disciplines, namely sociology and linguistics. Sociology is a study that discusses humans in their society, while linguistics is a study that studies the ins and outs of language in general. So it can be said that sociolinguistics is an interdisciplinary science that studies language in relation to the use of language itself in society(1). This sociolinguistics discusses the use and use of language, the place of language use, the grammar of the language level, the various consequences of the contact of two or more languages, and the variety and time of use of the language variety (1). Thus, it can be understood that sociolinguistics does not only look at facts, but also analyzes the facts that occur in the field.

Language is a communication tool used by humans with other humans. Language is a system of arbitrary sound symbols used by members of social groups to work together, communicate, and identify themselves (2). So that language can be used for a mutual understanding relationship between speakers and speech partners and also as a form of identification from where someone comes from. The relationship that exists can initiate the diversity of language use in society. Thus the use of language in sociolinguistics is to study the relationship between language and social society.

The use of different languages is known as language variety. Code switching or the use of two languages interchangeably in constituents, sentences, or discourses is a common phenomenon in society (3–5). Code switching and code mixing are inseparable from studies on bilingualism, bilingualism, and bilingualism (6). Indonesia has many tribes, races, and cultures that make there are many diverse languages that exist. However, Indonesia has a national language, namely Indonesian. Indonesian is used as the unified language of all regions in Indonesia. Even so, the variety of languages still exists because it is not uncommon for people to still use the mother tongue they master as a means of communication. Currently the wider community has understood that character education is very influential for the future (7). Character planting can create a peaceful, serene, and safe environment (4).

In a social area, everyone has a different speaking language. It can be used as the identity of a community, and a differentiator from one society to another. In this regard, it can be understood that the speech community is a group of people who have a language that interacts using the same language.(8) argue that a speech community is a group of people in a broad or narrow scope who interact with a particular language that can be distinguished from

other speech community groups on the basis of significant language differences. These differences make the role of two or more languages in the communication process.

Bilingualism is the use of two languages by the speech community (bilingualism). People who are able to use two languages well in communicating are called bilinguals. (9) suggests that bilingualism refers to the habit of using both languages, while bilinguality refers to the ability of speakers to use language. So it can be understood that bilingualism is the process of one's speech act to the interlocutor.

Sociolinguistic studies discuss the choice of language in using language. There are two language choices, namely code switching and code mixing (10). First, code switching is the transition from one code to another with the aim that speakers and their interlocutors build intimacy. Meanwhile, code mixing is a speaker where when expressing something he inserts a regional language or a foreign language in Indonesian conversation. Code mixing does not only occur in the world of daily communication within the community, but also occurs in a film through dialogue spoken by the characters (11).

Along with the development of the use of technology in the current digital era, there are more and more various events that can be watched. Likewise with the events witnessed by children at this time. Character education and moral messages contained in the event witnessed by children became one of the important factors in shaping the nation's character. (12) cannot deny that nowadays many children spend their time playing gadgets, this of course can help children to instill character values from an early age through watching children's animated films that contain education. . Animated films are one of the most popular shows for parents as children's spectacle.

One of the animations that brings insight into Indonesia is the Diva The Series animation. (13) suggest that film is a form of electronic mass communication in the form of audio-visual media that can display words, sounds, images, and combinations. The animation of Diva the Series can be seen on the Youtube application, the theme underlying this animated film is about the friendship of children with different cultural backgrounds. The use of local languages in the animated film Diva the Series makes the animation can be classified in various forms of language. One of the things that can be analyzed from the content of the speech by the characters of this animated film is the language of sentences that refer to the description of code mixing and code switching. Bilingualism contained in the language is Indonesian, regional languages and foreign languages. This is based on a film story that depicts characters from 5 regions in Indonesia, namely Banten, Yogyakarta, Ambon, Denpasar, and Jakarta.

## METHODOLOGY

This research uses a theoretical and methodological approach in the process. The theoretical approach method used in this research is a sociolinguistic approach. The methodological approach used is descriptive qualitative. (13) qualitative method is a research procedure that creates descriptive information in the form of words or words from people and observable attitudes. The data collection technique used is watching and listening to the animated film Diva the Series, then the things that are used as material for analysis are recorded to be described based on existing theories. This type of research aims to describe code mixing and code switching in the animated film Diva the Series.

## FINDINGS AND DISCUSSION

### Masakan Nusantara Episode

This research was conducted to obtain data in the form of code switching and code mixing in the children's animated film Diva the Series. In this study, we use an episode of Diva the Series with the title "Masakan Nusantara" which airs on January 4, 2021 on the Youtube application. The writer chose this episode because there is a direct dialogue between Mona and Ibu Mona who uses Indonesian as their mother tongue. So that in this episode there are some data found regarding code switching and code mixing.

#### a. Data 1

- |               |   |  |
|---------------|---|--|
| Mona's Mother | : | " <i>Senang banget Ibu dibantuin masak sama kamu, Mon.</i> " (I'm very happy that you help mom cook, Mon)  |
| Mona          | : | " <i>Iya Bu. Kalau <b>ndak</b> bantuin, Mona takut kalau nanti <b>ndak</b> keburu mateng masakane, Bu.</i> " (Yes ma'am. If you don't help, Mona is afraid that the cooking will |

be too late, Mom.)

The data above is a code-switching involving Indonesian and Javanese. In the first sentence comes from the word *ndak* which means no, which is contained in the sentence " Kalau *ndak* bantuin...". Then the use of code switching is found in the second sentence which is written "... kalau nanti *ndak* keburu mateng masakane..." There is a use of the same word as the previous sentence, where the word *ndak* means no. Meanwhile, the use of the word *masakane* in the second sentence has the meaning of cooking. In the sentence that Mona said in the first sentence, it can be interpreted in Indonesian as " Iya Bu, kalau tidak bantuin" and in the second sentence it becomes "... Mona takut kalau nanti tidak keburu mateng masakannya, Bu".

b. Data 2

- Mona's : "Ohh.... Jadi kalau **ndak** ada tugas bawa masakan nusantara ke sekolah kamu **ndak**  
Mother mau bantu Ibu masak, begitu?" (Ohh.... So if you don't have an assignment to bring  
Indonesian food to school, you don't want to help Mama cook, right?)  
Mona : "Hahaha.... Ya mau **toh** Bu." (Hahaha.... yes I want it, Ma'am)

The data above is code switching which also involves Indonesian and Javanese. The first sentence comes from the word *ndak* which means no, which is found in the sentences " Jadi kalau *ndak* ada tugas ..." and "... kamu *ndak* mau bantu Ibu masak ...". While in the second sentence, code switching is found in the sentence "... Ya mau toh Bu." However, the word *toh* does not have a real meaning, but based on the sentence above it can be interpreted as the word *dong* which has the same meaning of the word in Indonesian. In the first sentence, it can be translated into Indonesian as " Jadi kalau tidak ada tugas ..." and "... kamu tidak mau bantu Ibu masak ...". While in the second sentence it can be interpreted as "... Ya mau dong Bu."

c. Data 3

- Mona's : "Anak Ibu ini emang pinter banget." (This mother's son is very clever)  
Mother  
Mona : "Iya dong, siapa dulu... Mona, sang **master chef** Indonesia." (Yes, of course...  
Mona, the Indonesian master chef)

The data above is a code mix involving Indonesian and English. The use of foreign languages in the sentence above is contained in the sentence "Mona, sang *master chef* Indonesia". The word *master chef* itself in Indonesian means the main chef or someone who is an expert in cooking. In this sentence it can be interpreted as "Mona, sang koki utama Indonesia."

d. Data 4

- Mona's : "Nah, masakannya udah selesai nih, Mon. Tinggal nunggu dikukus 1 jam sebelum  
Mother siap dihidangkan." (Well, the cooking is done, Mon. Just waiting for it to be  
steamed 1 hour before it is ready to be served.)  
Mona : "Haaaa, **ndak** sabar aku Bu, **rasane** pengen nunjukkin masakan khas Jawa Tengah  
yang enak banget ke teman-teman, Bu." (Haaaa, I can't wait, Ma'am, I feel like  
showing my friends the delicious Central Javanese cuisine, Mom)

The data above is a code switching which also involves Indonesian and Javanese. In this sentence, the use of the Javanese language comes from the word *ndak* which means no, which is found in the sentence "Haaaaa, *ndak* sabar aku Bu ...". While in the second sentence, the code switching is in the sentence "... *rasane* pengen nunjukkin masakan ...". The word *rasane* in Indonesian means "feel like". In the first sentence it can be interpreted in Indonesian as " Haaaaa, tidak sabar aku Bu ..." and in the second sentence it becomes "... rasanya pengen nunjukkin masakan..."

e. Data 5

- Mona : "Udah pasti masakan dari daerah aku yang paling enak nih, **endolita manulita**.  
Namanya garang asem, aseli ini uenak banget." (I'm sure the cuisine from my area  
is the best, endolita manulita. The name is ferocious sour, this original is really  
delicious)

Putu : “*Kalau aku bawa ayam betutu, itu juga enak tau.*” (If I bring chicken betutu, it's also delicious you know)

The data above is a code mixing involving Indonesian and slang, and there is also a mix of Indonesian and Javanese codes. The first code-mixing is in the sentence "... *endolita manulita* ..." where the word is a slang that has a delicious meaning that is shown for food. Meanwhile, in the mixed code of Indonesian and Javanese, the sentence "... aseli ini *uenak* banget" where the word *uenak* is pronounced using a Javanese accent which has a delicious meaning.

f. Data 6

Febi : “*Kalau **beta** sekarang bawa nasi kepala batu merah nih.*” (Now I bring red stone head rice)

Diva : “*Kalau aku bawa soto.*” (If I bring clear soup)

The data above is a code mixing involving Indonesian and Moluccan languages. The use of the Maluku language above is found in the sentence " *Kalau beta sekarang ...*" which means *saya* in Indonesian. In this sentence it can be interpreted in Indonesian as "Kalau saya sekarang..."

g. Data 7

Tomi : “*Alahh..., palingan masih enakan kerak telur khas Betawi. Kamu belum pernah nyoba aja, Mon.*” (Alahh..., at least it's still better with the typical Betawi egg crust. You've never tried it, Mon)

Mona : “***Ndak** mungkin, **wes** jelas garang asem aku itu **sing** paling enak.*” (Impossible, it's clear that my fierce sour is the best)

Tomi : “*Hohoho, gak bisa. Kerak telur yang paling **mantul**, garang asem mah lewat.*” (Hohoho, you can't. The egg crust is the most delicious, fierce sour others pass)

The data above is a code mixing that also involves Indonesian and Javanese, and there is also between Indonesian and slang. In the first sentence comes from the word *ndak* which means no, which is contained in the sentence " *Ndak mungkin ...*". In the second sentence there is the sentence "... *Wes* jelas garang asemku itu *sing* paling enak." where the word *wes* means "sudah" and the word *sing* means "yang" in Indonesian. In the whole sentence, it can be interpreted in Indonesian as "tidak mungkin, sudah jelas garang asem aku itu yang paling enak". Meanwhile, code mixing in slang is found in the word *mantul* which is found in the sentence "...yang paling mantul...". Where the word *mantul* is an acronym for steady true.

h. Data 8

Mona : “*Ngawur aja kamu Tom. **Ndak** mungkin ada yang bisa ngalahin garang asem, apalagi kerak telurmu itu Tom.*” (Don't be silly, Tom. There's no way anyone can beat the fierce sour, let alone your egg crust, Tom)

Tomi : “*Kamu yang ngawur, kerak telurku gaada yang bisa ngalahin pokoknya deh.*” (You silly, nothing can beat my egg crust)

The data above is code mixing which also involves Indonesian and Javanese. In the sentence above there is the use of the word *ndak* in Javanese which means “tidak”. So that the sentence can be interpreted in Indonesian as "... Tidak mungkin ada yang bisa ngalahin garang asem..."

i. Data 9

Tomi : “*Hmm..., ternyata garang asem tuh enak banget.*” (Hmm..., it turns out that sour ferocious is really good)

Mona : “*Kerak telur juga **endolita manulita** nih. Maaf ya Tom tadi aku ngomongnya sembarangan.*” (Egg crust is also *endolita mantulita*. I'm sorry Tom, I said that carelessly)

The data above is code mixing which also involves Indonesian and slang. The use of the word *endolita manulita* in the sentence "Kerak telur juga endolita manulita..." means that the egg crust is also very tasty. Where the word *endolita manulita* is a slang indicated for food.

### Febi Jangan Sedih Episode

This study also uses an episode entitled "Febi Jangan Sedih" which aired on October 20, 2015 on the Youtube application. The writer also chose this episode because there are stories that use the Moluccan language used by Febi's family. Febi and her family are native speakers from Maluku, so there are a lot of code switching and code mixing in this episode. However, the similarities and similarities of words that are owned by Indonesian and Maluku languages make the writer only take data that uses words that are different from Indonesian. Learning is a dynamic activity and influenced by contextual factors and development (14,15). The right learner needs analysis can produce the required development design (16).

#### a. Data 1

Febi : "*Tidak mau, Febi mau ikut Papa.*" (No, Febi wants to come with Papa)  
Febi's : "*Sudahlah **nona manisku**.*" (Come on my beautiful girl)  
Mother

The data above is a code-switching that also involves Indonesian and Moluccan languages. In that sentence the code switching comes from the word *nona manisku* which means "beautiful girl." In the sentence above, it can be interpreted in Indonesian as "Sudahlah gadis cantikku" which is shown to Febi the child.

#### b. Data 2

Mona : "*Ehh, itu si Febi kenapa **toh**? dari kemarin kok cuma diem aja kaya gitu.*" (Ehh, what's wrong with Febi? Since yesterday, why has she been silent like that)  
Putu : "*Iya, kenapa dia ya. Diva kamu tau gak?*" (Yeah, why is he? Diva you know or not?)  
Diva : "*Wah, aku juga gak tau tuh. Kemarin sempat aku tanyain, tapi Febi gamau jawab.*" (Well, I didn't know that either. Yesterday I asked a question, but Febi didn't want to answer)

The data above is code mixing which also involves Indonesian and Javanese. The first sentence comes from the word *toh* in the sentence "Ehh, itu si Febi kenapa *toh*? ...". The word *toh* basically has no real meaning, but in the sentence above it can be understood as the same meaning of the word "ya" in Indonesian. So that it can be interpreted in Indonesian as "Ehh, itu si Febi kenapa ya? ..."

#### c. Data 3

Mona : "*Kasihlah loh dia, **mbok** coba ditanyain lagi.*" (It's a pity for him, please try asking again)  
Diva : "*Iya, ayo kita samperin yuk.*" ("Yeah, let's go over there.")

The data above is code switching which also involves Indonesian and Javanese. The sentence comes from the word *mbok* which has the meaning of emphasis in a command sentence. So it can be understood that the sentence aims to inform the interlocutor to follow his direction.

#### d. Data 4

Mona : "*Febi, kamu jangan diam terus gitu **toh**. **Mbok yo** ngomong sama aku.*" (Febi, don't keep quiet like that. Come talk to me)  
Diva : "*Febi, mau kemana?*" (Febi, where are you going?)  
Mona : "*Febi, kok malah pergi **toh**.*" (Febi, why are you even leaving)

The data above is code switching which also involves Indonesian and Javanese. The use of code switching comes from the words *toh* and *mbok yo* in the sentence above. The word "toh" is found in the sentences "... diem terus gitu toh...." and "Febi, kok malah pergi toh ". The word *toh* basically has no real meaning, but in the two sentences above it can be understood as an emphasis on a sentence similar to the word "si" in Indonesian. While the

use of the word *mbok yo* in the sentence above can mean that it has the same meaning in the word "dalam" in Indonesian. So it can be understood that the meaning of the sentence is a proposal to tell the speaker.

e. Data 5

- Febi's : "Ada apa dengan **nona manis** mama ini. Kok tumben, biasanya Febi mau membantu mama memasak." (What's wrong with Mama's beautiful girl. Why, usually Febi wants to help Mama cook)
- Febi's : "Febi, Febi sayang.... Ada apa denganmu **nona manisku**." (Febi, dear Febi.... What's wrong with you my beautiful girl)

The data above is a code-switching which also involves Indonesian and Moluccan languages. In both sentences there is the use of the word *nona manisku* which means "beautiful girl". So that it can be interpreted in the second Indonesian language to show the use of the word beautiful girl for her child as the speech partner.

f. Data 6

- Febi's : Febi, sayang.... **Nona manis** mama kok murung. Febi, kamu kenapa nak?" (Febi, dear ...my beautiful girl is so gloomy. Febi, why do you want to?)
- Mother : "Tidak apa apa, ma. **Beta** mengantuk, mau tidur." (It's okay, mom. Beta is sleepy, wants to sleep)
- Febi's : "Oh yasudahlah kalau begitu. Mimpi yang indah ya sayang, jangan lupa berdoa." (Oh well then. Sweet dreams, dear, don't forget to pray)

The data above is a code-switching which also involves Indonesian and Moluccan languages. In the first sentence, it comes from the word *nona manis* which means "beautiful girl", which is found in the sentence "... *nona manis* mama kok murung ...". While in the second sentence, the code switching is in the sentence "... *Beta* mengantuk, mau tidur ". The use of the word *beta* in Indonesian means "saya" which refers to oneself. In the second sentence it can be interpreted in Indonesian as " Saya mengantuk, mau tidur".

g. Data 7

- Febi : "Ahh, gelapnya." (Ahh, it's so dark)
- Friends : " **Surprise.**"

The data above is a code mixing involving Indonesian and English. The code mix contained in the sentence above is the use of the word *surprise* which is a foreign language. The word *surprise* itself has the meaning of "kejutan", so the use of the word aims to surprise the interlocutor.

h. Data 8

- Diva : "Ini Febi dari kita. *Spesial untuk kamu.*" (This is Febi from us. Special for you)
- Febi : "Waw hello kitty, terima kasih teman-teman. Tapi **beta** kan hari ini tidak ulang tahun." (Wow hello kitty, thank you guys. But today is not my birthday)

The data above is a code mixing which also involves Indonesian and Moluccan languages. In this sentence the use of the word *beta* which means "saya" indicates code mixing. The word *beta* in the sentence becomes "...Tapi *beta* kan hari ini tidak ulang tahun" in Indonesian.

i. Data 9

- Mona : "Anggap saja itu hadiah dari kita biar kamu gasedih lagi. Habis dari kemarin **tak** lihat kamu diam terus." (Think of it as a gift from us so that you don't feel sad anymore. After yesterday, I saw you keep quiet)
- Tomi : "Iya Feb, kita cuma ingin **lo** tersenyum lagi kaya biasanya." (Yes Feb, we just want you to smile again like usual)

The data above is code mixing which also involves Indonesian and slang. In the sentence there is the word *lo* which is slang. The word *lo* means "kamu/Anda" in Indonesian. In this sentence, it can be interpreted in Indonesian as "... kita cuma ingin *lo* tersenyum lagi kaya biasanya."

## CONCLUSION

Based on the description above, it can be concluded that code switching and code mixing are contained in the animated film *Diva the Series*. The occurrence of code switching and code mixing is influenced by several factors including speakers and interlocutors, place settings, events, social, cultural, and others. In the animated film *Diva the Series*, there is a picture of friends with different language and cultural backgrounds. So that in the two episodes entitled "Masakan Nusantara" and "Febi Jangan Sedih" we can find the use of Indonesian, Javanese, Moluccan languages, foreign languages, and slang. The use of these different languages makes code switching and code mixing occur in the animated film *Diva the Series*.

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# The Influence of The Problem-Based Learning Model Assisted by Zoom Meeting on Student Learning Outcomes

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**Abstract.** Learning outcomes are the ability to obtain thoughts from the knowledge gained. The online or distance learning system makes students increasingly constrained by access to knowledge so that one way is to change the pattern of learning models. Problem-based learning is a learning model that wants to be applied at this time to improve student learning outcomes in goods and services, so that a zoom meeting application is also needed to help students regain their knowledge as a virtual medium. This quantitative research uses quasi-experimental research methods using a non-equivalent design. This research was carried out at SD Muhammadiyah, Sorong City. The population in this study was 60 students in this class IV. The sample was 30 students in the IVA class and 30 IVB class. Data collection techniques use learning outcomes tests, observations and doctination. Data analysis used was an independent sample t test (t test) with a significant level of 0.05 assisted by SPSS 25. The results obtained an increase in the average score in the class given treatment with the PBL (Problem Based Learning) learning model assisted by zoom meetings on learning outcomes.

## INTRODUCTION

The science that examines social science disciplines regarding social, economic and cultural relations is social studies learning. It is important to have knowledge in social science education that is taught in schools (1). purpose of social studies learning is to educate a community's life based on good moral and ethical values and can uphold the nation's cultural values and also aims to form students who have the knowledge, national insight, skills, social ethics, and high social character (2–4). Social studies carried out both in basic education and in higher education do not emphasize the theoretical aspects of science, but the practical aspects in studying, studying, studying symptoms, and social problems of society, whose weight and breadth are adjusted to their respective levels of education. By learning about the surrounding environment and the social environment through social studies learning at school, it is possible to apply it to everyday life (5). Humans are social creatures and need other humans around them, therefore, as social beings, they must be able to provide positive things in their environment

Learning is a process of achieving the knowledge gained to change human behavior to be good and beneficial to others. Success in the learning process can affect the future. This makes students aware of academic support and encourages them to get good grade (6). Learning media that does not contain problem-solving skills will hinder the achievement of student competence (7). However, seeing the poor learning conditions, the first time it was discovered in China, it caused the implementation of a work from home policy, so that all levels of education from basic to high schools must also carry out online learning in order to prevent the spread of the Covid-19 virus. Distance learning is a type of teaching and learning that allows the delivery of teaching materials to students using the internet, intranet, network media or another computer (8). In distance learning, based on observations and facts that researchers know, there are teachers who only give assignments / homework to students, such as doing questions in books or



doing questions made by the teacher himself. Then the participants also find it difficult to understand something caused by accuracy during this pandemic. So it feels very difficult to develop their knowledge skills so that student learning outcomes are not carried out optimally. Even though students need a ability or skill in finding ideas and solving problems.

Learning outcomes are patterns, deeds, values, understandings, attitudes, appreciations and skills. According to Bloom, learning outcomes include cognitive, affective and psychomotor. "Learning outcomes are the abilities that a student has after he or she receives his learning experience." From this explanation, it can be interpreted that learning outcomes are the result of the learning process experienced by students, measured by students' abilities according to their learning experience (8,9) Learning outcomes are all the consequences that can occur and be used as indicators.

The survey, conducted by educational institution PISA through the U-Report channel consisting of SMS, WhatsApp, and Facebook Messenger, received more than 4,000 responses from students in 34 provinces. Student learning outcomes have decreased during their distance learning. The percentage of lack of learning experienced while studying from home, 58 percent of students said they lacked guidance from teachers while 42 percent cited poor internet access. If distance learning continues, more than half (62 percent) say they need help in both mentoring and adequate internet access. "When this country started easing restrictions, it is very important to prioritize children's learning whether in school or remotely,". It is concluded from the statement above that students' knowledge is very limited due to distance or online learning caused by two-way interactions that are not carried out directly so that the learning outcomes obtained decrease(10)

The children who have felt the most about school closures are one of them elementary school students, and we know from previous crises that the longer they have not attended school, the less likely they are to return to having the knowledge gained. related to distance or online education during the Covid-19 pandemic. The results of the survey showed that 95% of students experienced many problems in participating in online learning during the corona pandemic. SMRC Public Policy Manager Tati D. Wardi said the survey was attended by respondents with an age range of 17 years and above. Of these, as many as 5% admitted that they were still in school or college. As many as 87% of the total respondents said they did online learning, while those who did not learn amounted to 13% (11)

The solution to the problems described above is the selection of a student-centered learning model. In PBL (Problem Based Learning), students are asked to solve a real problem which will later produce a problem solving in learning independently. Furthermore, PBL (Problem Based Learning) presents various problematic situations that are authentic and have meaning to students, which can serve as a stepping stone for carrying out investigation activities and investigations of (12). From the description above, it is concluded that PBL (problem-free learning) can foster the development of students' knowledge, attitudes, and skills such as creativity, motivation, interests, responsibilities, cooperation, socializing, and being able to solve their own problems (13,14)

PBL (Problem Based Learning) is a learning model using authentic (real) problems as a context for students to solve problems and think critically to gain knowledge and learn to make decisions. Authentic problems become the starting point in PBL (Problem Based Learning) learning, thus encouraging students to collect information and data in solving problems. PBL (Problem Based Learning) has five basic characteristics in its learning. First, PBL (Problem Based Learning) is problem-based learning. Second, PBL (Problem Based Learning) is about solving problems and directing students to find solutions to problems faced on a daily basis. Third, the PBL (Problem Based Learning) model is student-centered learning. Fourth, the PBL (Problem Based Learning) model is independent learning. Fifth, the PBL (Problem Based Learning) model is reflective, so students can identify problems, gather important information, and find alternative solutions to problem solving through group discussions (7,15)

The Problem Based Learning (PBL) model is a learning model with a learning approach where students work on authentic problems(16,17), so that students can compile their own knowledge, develop higher thinking skills, bathe students, and increase student confidence. In this learning the student is faced with a problem, then performs problem solving, through which the student is required to learn with more basic thinking skills to a higher level in order to solve the problems he faces independently and confidently.(1,18–20)

This PBL (Problem Based Learning) approach prioritizes the learning process where the teacher's task must focus on helping students achieve Sumantri's self-directing skills in problem-based learning the teacher plays the role of a problem presenter, questioner, holding a dialogue, helping to find problems and as a facilitator(21,22). In addition, the teacher prepares support and encouragement that can improve the intellectuality of students. Problem-based learning can only occur if the teacher can create an open classroom environment and guide the exchange of ideas. Problem-based learning can also increase the growth and development of student learning activities, both individually and in groups.(9,23)

Zoom meeting application is a virtual video service application that can be accessed using cellphones, computers and other software devices. In distance learning, teachers and students need information technology that

collects so that learning continues, one example is "zoom meetings. The zoom meeting application is an online communication media that can be used in meetings, learning and virtual videos to connect more people in one frame (24) it can be concluded that zoom meetings are virtual learning media that is very useful for everyone, especially for students in improving learning even though it is carried out online or remotely (16,17,25,26)

According to research conducted by Irfandi Idris, there is a significant influence of PBL (Problem Based Learning) assisted by zoom meetings on student learning outcomes, testing from the "paired t-test analysis test, namely the value (sig.) is less than 0.05 (sig. < 0.05) which is 0.000. So that H0 is rejected and H1 is accepted, which means that the use of the PBL (Problem Based Learning) influence model is better in improving student learning outcomes. The thing that distinguishes the study of Lailiya and Ririn is in the population, samples and teaching materials. Based on the problems with the decomposition, the intention of the study is to look at those that affect the variables.

## METHODS

The research used in the research is quantitative research. This research model is a quasi-experiment. The form of pseudo-experimental design in this study is a non-equivalent control group. The specific form of the design is described in the following table.

**Tabel 1. Desain nonequivalent control group**

Group	Pretest	Perlakuan	Posttest
Eksperimen	$O_1$	$\times$	$O_2$
Kontrol	$O_3$		$O_4$

(Sumber: Sukardi 2012:26)

Information:

O<sub>1</sub> : Pre-test kelompok eksperimen.

O<sub>2</sub> : Post-test kelompok eksperimen.

O<sub>3</sub> : Pre-test kelompok kontrol.

O<sub>4</sub> : Post-test kelompok kontrol.

X : Perlakuan pada kelompok eksperimen".

The population in this study was class IV of SD Muhammadiyah Kota Sorong, namely class IVA and class IVB as many as 60 students. In this study, the IVA class is a control class while class IVB is a class used by experiments, using random sampling techniques. The samples in this study were 30 in the IVA class and 30 students in the IVB class. The types of instruments used in this study are written tests and documentation. The written test in this study looked at the knowledge indicators of learning outcomes. Previously, test instruments passed validity and reliability testing. The validity test is used in research with a relationship formula using the cronbach alpha formula. The technique is from analyzing the data from this study quantitatively, then the depiction of the data obtained comes from several things that support, on the statistics of the data obtained. Before performing inferential statistical calculations, there is a requirement for analysis testing, namely the "normality test. In normality testing, the data were tested using liliefors or kolmogorov-smirnov tests on SPSS. After the requirement test is carried out, it is continued by calculating the hypothesis test with the t test, which is an independent t-test using the separated variance formula. In this study, researchers used the help of SPSS version 25 to perform calculations.

## RESULTS AND DISCUSSIONS

The results of this data study are the results of student learning using the PBL (Problem Based Learning) model assisted by zoom meetings against experimental groups and conventional learning in the control group. The determination of the quality of the research variables can be determined from the average value of each variable converted into a likert scale. The following is a likert scale table on learning outcomes.

**Tabel 2. Score Interval Likert Scale Learning Outcomes**

Score Interval	Categori
85-100	High
75 – 84	Medium
0- 74	Small

Based on the table above, it shows that the interval of learning outcomes scores ranging from 85-100 has a "high" category and score intervals ranging from 0-74 belong to the "sufficient" category. The results showed that the highest score obtained by students in the Control class was 79.61 the lowest score was 46.35 while the highest score obtained by the experimental class was 90.71 the lowest score was 67.50. To be clear, Descriptive the results of calculating the average value of the experimental class and control class table 2 below:

**Tabel 3. Descriptive Statistics Learning Outcomes Pretest Posttest Control and Experiments**

Data	Class	Eksperimen		Control Class		
		P	P	P	Post	
		retest	osttest	retest	test	
High		6	8	8		95
Score		6	6	6		
Small		2	4	6		75
Score		6	9	0		
Mean		6	9	4		79.6
		7.5	0.71	6.35	1	
Medi		5	8	4		73
an		0	3	4		
Mod		4	8	4		73
us		7	0	0		
Stan		9	8.	7.		7.93
dar Deviasi		.69	55	59		

Based on the table above, it is known that the mean of the pretest of the experimental group was 67.5 while the mean of the posttest was 90.71. While the mean of the pretest of the control group is 46.35 while the mean of the control group is 79.61. In testing requirements, namely the normality test using the implementation liliefors test by looking at the study from table 4.

**Tabel 4. Uji Normalitas Class Kontrol and Eksperimen**

Class	N	$l_{hitung}$	$l_{tabel}$	Information
Pretes Eks		0,0854		59.80
Posttes Eks		0,149		84.70

<b>Pretest</b>	30	0,158	<b>0,1614</b>	60.70
<b>Kontrol</b>				
<b>Posttes</b>		0.109		69.93
<b>Kontrol</b>				

Based on the calculation results of the normality test with a significance level ( $\alpha$ ) = 5% or 0.05 above, it can be seen that Lhitung in the experimental class pretest was 0.854, while the Lhitung in the experimental class posttest was 0.149. If you look at the pretest results of the control class, Lhitung = 0.158, while the calculation results in the control class show that the Lhitung = 0.109. Thus, the pretest posttest of the experimental class using PBL (Problem Based Learning) is assisted by zoom meeting and control classes with Ltabel = 0.1614 indicates that the data is normally distributed, because all results Lhitung < L\_tabel.

In the next stage, after testing the requirements of the analysis and calculation of the data of the normal or homogeneous statement, with the phase to test its implementation with the aim of seeing what affects the use of the model with the ability to think(27), the level of signification is 5% or 0.05. Below is the calculation of the t test in table 4 assisted by SPSS version 25.

**Tabel 5 Test (T)**

Sample	Numb er of students	Standa rd Deviation	Varian ce	D b	t- count	t- table
Experim ent	30	3.733	59.94	9	7 95	2.8 62
Control	30	1.132	53.74			

Based on the calculation results of the independent t-test assisted by SPSS version 25, when viewed from the decision rules, namely a significant value (2-tailed) < 0.05 with a statement if it affects when viewed from the calculation results in table 4 above, "significantly smaller than 0.05, namely 0.000 < 0.05. Thus, it can be stated that there is an influence of PBL (Problem Based Learning) assisted by Zoom meetings on student learning outcomes of goods and services in grade IV SD Muhammadiyah, Sorong City.

Based on the results of the description above, it is clear that the use of PBL (Problem Based Learning) assisted by Zoom meetings makes learning activities student-centered to solve a problem. In PBL (Problem Based Learning), students not only listen and pay attention but are also directly involved in learning(2,6,28) This model is able to improve students' abilities by involving them to solve a problem both in learning and daily life. This learning model comes from a collection of student ideas as another way to solve a real problem, so that students can plunge directly into the learning process. In contrast to learning that uses conventional models, students with restrictions pay attention to an acquired(5).

## CONCLUSION

Based on the results of data processing, it is concluded that the PBL (Problem Based Learning) learning model assisted by Zoom meetings affects student learning outcomes. This is shown from the average score of the students who applied the learning model. From the results of hypothesis testing, it also shows that the PBL (Problem Based Learning) learning model has an influence on the acceptance of  $H_a > H_o$  which shows a figure of 2,895 > 2,062, so it can be said that  $H_o$  was rejected and  $H_a$  was accepted. Thus, the application of the Problem Based Learning learning model assisted by Zoom meetings is considered successful in improving student learning outcomes. For this reason, the Problem Based Learning learning model is able to influence learning outcomes for students so that this model can be used by teachers in PBM (Teaching and Learning Process) activities or learning to create a new learning atmosphere

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# Analysis of Childhood Education Program at Early Ages: The Study of The Thinking of Abdullah Nashih 'Ulwan

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**Abstract.** This study aims to find out the description of the analysis of the PAUD program Abdullah Nashih 'ulwan's thoughts on relevance in the 4.0 era. research data collection is library research. This test aims to obtain data on the relevance of the PAUD program according to Abdullah Nashih Ulwan with the current 4.0 era. Data analysis techniques through data reduction, data presentation and drawing conclusions. The research results obtained from testing 5 questions.

## INTRODUCTION

For humans, education is very important, because through education we can achieve a noble life and good insight. Then, the origin of the word "education", in Arabic it can mean "At-tarbiyah", (fertilize, grow, develop) comes from the word "Rabb" which means (God). The word explains the basis of the word education has a superior value that can never be ignored in the life of every human soul. If education is kept away from elements of human life, it will give birth to an imbalance. Islamic education is Islamic education that produces good Muslim characters in each lesson that will produce good personality potential. Islamic education is not just a process of inculcating character values to protect oneself from destruction. But the most important thing is how the personality values embedded in Islamic education can be freed from the pressure of financial shortages, lack of knowledge, socio-cultural and economic backwardness (1).

Of course, this section can realize quality education for mankind. Islamic education itself must produce people who have a high level of piety before Allah SWT, are able to think intelligently and measuredly, have a social spirit and are responsible for everything he has done (2).

The era of the Industrial revolution 4.0 and the road to demographics for Indonesia, the biggest challenge for Islamic education, is how to prepare and educate children well. Educating children requires energy, mature minds, because they are under the age of gods. Moreover, this age is characterized by very rapid changes. Among them is the existence of digitalization in the line of life which certainly has an impact on individuals as well as on society. Such as the lack of strict and strict care for the use of communication tools (Gadgets) or smartphones very freely. Finally they are addicted to the digitalization of cyberspace, its impact leads to real life. There was skepticism and cynicism because of the widespread addiction to technology. It's like a two-way blade (3).

The existence of the internet can have a positive impact such as increasing knowledge because the internet provides many sources of information, reading skills, as a means of communication, entertainment and forming a network. However, there are three bad effects that will occur if they have been addicted to the internet. i.e., first; grow up to be a child who is not optimal due to the impact of being engrossed in gadgets for too long, secondly; Our children and teenagers have become addicted to gadgets, not only looking for information but also for playing, having fun with other people and the dangers of pornography.

How important is the education of this child, then as parents, educators in both formal and non-formal institutions, the community to the government in an area should understand how educational methods and systems are to improve society, especially in children's education. Because children are the golden generation (Golden age). Children are the successors of their parents' struggle. Children are the next generation for community life. Children are the forerunner to become the leader of a nation. Children are our shared responsibility. So it is fitting that we understand the methods of educating children with the aim of creating generations that bring noble civilization.

In one hadith related to the command to parents to educate their children in a good direction. Narrated by Abdur Razzaq Sa'id bin Masur, Rasulullah SAW, joked.

((علموا أولادكم وأهلكم الخير وأدبهم))

Meaning: Teach kindness to your children and your family. And educate them with good character.

Parents are role models and the most important thing for the future of children through family education. Parents are a reflection of their children. They see, they hear, they record from the attitudes and behavior of both parents. If what they see is good, then the children tend to behave well. If parents behave badly then the child also tends to behave in a bad direction. All of that cannot be separated from the events they catch at every moment that occurs in the family.

Prof. Dr. Abdullah Nashih Ulwan (1928-1987 AD) was a great scholar from Syria, who last taught at Malik Abdul Aziz University (Jeddah) (4). He gave many lectures on the importance of Islamic education in the family. Also writes in journals, newspapers and even his books are also widely published. The book *Tarbiyatul Aulad Fil Islam* (Children's Education in Islam) is a phenomenal book. Lots of praise from the great scholars for the work of his thought.

In Abdullah Nashih Ulwan's thought, Islamic education has relevance in Era 4.0. Of course this shows that there are important points in Islamic education for children such as Aqidah education with faith education, moral education in accordance with moral and psychological education, worship education in line with sexual education, intellectual education, physical and social education that presented by Abdullah Nashih Ulwan. Therefore, the basics of Islamic education for children are taught and familiarized as early as possible with the hope of being a solution to the problems of children in Era 4.0, which will have a positive impact on the generation of mankind (2).

From the message conveyed by our prominent thinker Abdullah Nashih 'Ulwan, we can see at a glance that its aim is to offer the concept of child education that is appropriate in Islamic teachings based on the Qur'an and Sunnah. His thoughts are concocted on education for children in families that produce the best generations for world civilization. Therefore, the researcher wants to integrate his thoughts on the education of children in the family which will later be beneficial for Muslim families and better education, especially in the State of Indonesia in Era 4.0.

## RESEARCH METHOD

This research uses a descriptive qualitative approach. Qualitative research is research that obtains data from a natural setting through the scientific method and is carried out by naturally interested people or researchers (5). Then the descriptive sense is something that describes a certain object or event which is then followed by efforts to draw general conclusions based on certain historical facts (6). There are two types of qualitative research, namely empirical studies (field studies) and normative studies (literature studies). In this study, the authors conducted library research, namely research that was sourced from the results of library data collection (library research).

## RESULT AND DISCUSSION

### Early Childhood Education Program According to Abdullah Nashih 'Ulwan

#### *Motivating Children to Earn Income the Noble Way*

One of the responsibilities that must be carried out by an educator to his child is to motivate him to become an entrepreneur, whether in the field of industry, agriculture or trade. The prophets also practiced entrepreneurship, and specialized in one skill and industry. They set a good example for their people on how to be entrepreneurship and earn a good income (4).

Here are some prophets and apostles who run a business to get a lawful income and da'wah:



*Prophet Noah taught the shipping industry. Then Allah Ta'ala ordered him to build a ship. The Word of Allah SWT, "And build the ship with the supervision and guidance of Our revelation, and do not talk to Me about the wrongdoers. Verily they will be drowned."*

*And he (Noah) began to build a ship. Whenever the leader of his people walked past him, they mocked him. He (Noah) said, "If you mock us, we will mock you as you mock (us)."*

*Prophet David as. Forge metal and make armor. "And We taught (also) Dawud how to make armor for you, to protect you in battle. Are you grateful (to Allah)?"*

*Prophet Musa as. Offered himself to herd goats for eight years for the prophet Shu'aib as. To be able to marry one of Allah's daughters. He (Syuaib) said, "Indeed I intend to marry you to one of my two daughters, provided that you work for me for eight years and if you complete ten years then it is (a kindness) from you, and I do not mean burden you. God willing, you will find me one of the good people."*

*While our prophet Muhammad saw. Also herding goats, and doing business before being sent as a prophet. As he said in his saying, "I once herded the goats of the people of Mecca to get some coins." (HR. Bukhari)*

*He also twice went to Syria to trade. The first time was with his uncle, Abu Talib, when he was twelve years old.*

*He even motivated to seek halal sustenance. Prophet Muhammad SAW said, "Seeking halal sustenance is an obligation after the (Five) obligations." (HR. Thabrani and Baihaqi)*

From these texts, it is clear that Islam is very concerned about income from one's own business. Therefore, an educator must encourage his child from childhood to practice acting as a profession, skill and industry, studying Arabic, calligraphy, and the sciences of history, sharia and science. It is needed to get income from sweat and own efforts.

#### *Paying Attention to Children's Talents*

The Importance of Educator's Attention to Children's Talents. The important thing that educators must know and pay attention to is knowing the child's talents, the appropriate profession for him, as well as his goals and objectives. Every child is different in character, intellectual, ability and balance. A wise educator and a good father will put his child in the right place for him, according to his interests, and in the right environment that brings him good.

In a history Aisha ra. said, "Rasulullah SAW, ordered us to put people according to their position." (HR. Muslim).

The Prophet directed education to pay attention to the interests of children and put them in their place. Therefore, Islamic education experts led by Ibn Sina emphasized the importance of paying attention to the mind, talents, and natural abilities of children when guiding children to their chosen profession.

Ibn Sina said, "Not all skills desired by children can be suitable for him, but must be in accordance with his talents and character."

Abdurrahman bin al-jauzi (died 597 H) gave his support by explaining the urgency of children's talents. He said, "Sport will only be good for talented people. Wild animals will not leave their savagery even though they are educated since childhood.

Therefore, an educator must have a way of knowing the psychological condition of children, the level of intelligence and skills that they are interested in to achieve a future for them with the perseverance and abilities they have.

#### *Providing Opportunities for Children to Play and Entertain*

Islam is a religion of reality and life that treats humans as creatures who have a longing heart, soul desire, and human character. Islam indeed recommends all their words as remembrance, their silence as thoughts, their reflections as lessons and all their free time as worship. However, Islam also understands all the demands of human nature to have fun, have fun, joke, play and relax. With the condition that it remains within the limits of Allah's shari'ah and Islamic ethics.

In the view of Islam, one form of game and entertainment that is permissible is physical exercise which is a must for a Muslim. And this must be done by children at an early age. This is due to two things:

First, because when a child is a child, he or she will be more receptive to learning than when he is an adult. Rasulullah saw. Said, "Learning at a young age is like carving on a stone." (HR. Baihaqi and Thsbrani)

Second, children need to play, have fun, and entertain themselves more than adults, "The energetic nature of children in their childhood is a (sign) of excess intelligence in their adult years." (HR.at-Tirmidhi)

It was narrated from Anas bin Malik ra., he said, "The Messenger of Allah. He is the best human being. One day he sent me for a purpose, then I said, 'By Allah, I don't want to go

Let's look at the words of Imam al-Ghazali in *Ihya' Ulumuddin* regarding this right, "The child should be allowed after reading the book to play with a good game, so that he can rest after being tired of reading, because he will not get tired of playing. Forbidding a child to play and forcing him to learn can kill his heart, destroy his intelligence, and make his life difficult. Eventually he will find a way to leave the lesson altogether."

We know that playing for children is useful for eliminating boredom, boredom, fatigue, and to renew the spirit, cleanse the heart, and keep the body from getting sick.

However, education must pay attention to two things in this children's game:

First, the game does not make children more tired and difficult, because this can weaken and harm the body. Rasulullah saw. Said, "Do not seek danger and do not harm others."

Second, the game should not be detrimental to other obligations that must be learned. Because it will take time and eliminate the benefits. The Prophet Said, "Be excited about things that can benefit you. Ask Allah for help, and do not be weak." (HR. Muslim)

### *Cooperation Between Homes, Mosques, and Schools*

Among the factors that are quite influential in the formation of a child's personality in the aspects of science, spirituality, and physical are holding close cooperation between homes, schools and mosques.

We all know that the main function of the house is physical education. It is a great sin for people to ignore the rights of their children and their family's support. Rasulullah saw. He said, "It is enough for a person to reap sin when he abandons those who are his dependents." (Narrated by Abu Dawud)

The most important function of a mosque in Islam is for spiritual education, with congregational prayers and reading the Qur'an which is an outpouring of Rabbani and God's grace that will not end and will not be interrupted.

It was narrated from Abu Hurairah, he said that Rasulullah saw. said,

"If a people gather in a house of Allah to read Allah's book (the Qur'an) and study it, surely tranquility will be sent down to them and mercy will cover them. The angels will surround them, and their Allah to those around Him." (Narrated by Muslim)

Among the things that have been agreed upon is that the main function of schools is focused on scientific education because of the existence of knowledge which greatly influences the formation of personality and elevates human dignity. The virtue of knowledge is very large in the view of Islam, including:

Rasulullah saw. Said, "Whoever goes out to seek knowledge, it means he is in the way of Allah until he returns." (HR. at-Tirmidhi)

With the cooperation between home, mosque and school, the child will have a perfect personality in terms of spiritual, physical, intellectual, and mentality. In fact, he will become a useful member of society for the progress of the people and the honor of his religion.

However, this collaboration will not work perfectly without two main conditions, first, there should be no dualism and conflict between direction at home and at school. Second, the goals of cooperation are so that the development of the child's Islamic personality can be perfect and balanced.

If the cooperation with these two conditions is carried out, the child will be spiritually and physically perfect, as well as intellectually and mentally formed. In fact, he will become a balanced and normal human, who is admired by humans and becomes the center of their attention.

### *Strengthening Relationships between Educators and Children*

One of the rules of public education according to social experts. Psychology, and education is to strengthen the relationship between educators and children. It is needed so that educational interactions can be carried out as well as possible, and the formation of knowledge, mental and morals can be perfect with noble values.

If there is a gap between children and educators, or between students and their lecturers, then the learning process will not be carried out, or education will not be realized. Therefore, parents and educators must look for positive ways to make children like them, strengthen the relationship between them, create cooperation between them, and give sympathy to them.

Among the tools needed are:

- Education should not hold a smile from his mouth. It was narrated from Abu Dharr, the Messenger of Allah. Said, "Your smile in front of your brother is charity." (HR. at-Tarmidhi)
- Motivate the child with a reward for all the positive things he does, or for achievement in studies. Narrated from Aisha ra. Marfu', "If you give each other gifts, then you will love each other." (HR at-Tabrani)
- Make the child feel important and sympathetic to him. Narrated from An-nas ra. In a marfu' manner, "Who does not care about the (nasbi) of the Muslims, then he is not one of them." (HR al-Baihaqi)
- Treat children with good morals, and in a gentle way. Rasulullah saw. He said, "The believer with the most perfect faith is the one with the best character and the gentlest with his family."
- Education must respond to the child's interest, so that it can help him to be devoted to his parents. Narrated by Abu Sheikh from the Prophet. That he said. "Allah has mercy on a father who helps his son to serve him."
- Be one with the child and have fun with him. In the narration of Fari Jabir, he said, "I entered to meet the Prophet, when he was walking with his legs and hands (like a horse). On his back were Hasan and Husayn, he said, "The best camel is for you, and the best passenger is you." (HR at-Tabrani)

Rasulullah SAW. is the first educator and a good role model for all human beings. He is the best example in applying these positive tools to his friends, family and children.

**TABLE 1.** Results Evaluation

No	Children's Education Program According to Abdullah Nashih 'Ulwan	Reasons and Goals According to Abdullah Nashih 'Ulwan
1	Motivating Children to Earn Income the Noble Way	The Prophets also run Entrepreneurship, so that the future of children can be independent Be diligent with business and produce halal sustenance for him later Education needs to encourage children to pursue interests according to their talents Able to guide them to achieve their goals
2	Paying Attention to Talent (Child's Talent)	Talents support children's careers in the future and get a proper position for them and are a form of devotion to both parents An educator must have a way of knowing the psychological condition of children, the level of intelligence and skills they are interested in to achieve a future for them Games for children are part of the right for children to rest from studying (According to the hadith and opinions of scholars such as Imam Ghazali)
3	Providing Opportunities for Children to Play and Entertain	Early childhood souls tend to want to play Able to put time to play and study Playing for children is useful to eliminate boredom, boredom, fatigue, and to renew the spirit Home is physical education (Live
4	Cooperation between Home, Mosque and School	Mosque is Spiritual education School is intellectual education The virtue of people seeking knowledge out of the house according to the hadith Educators must make good relations with children to create knowledge, mental and moral formation. and do good things as follows: 1) Giving smile to children, 2) Motivate children, 3) Treat them with noble character, 4) Unite with children in happy and sad times, 5) Giving Gifts.
5	Strengthening Relationships between Educators and Children	Morning: 1) Morning prayer and dhikr, and 2) Teach etiquette at home
6	Daily Education Program	Evening: 1) Maghrib prayer, and 2) Reciting Al-Qur'an Night: 1) Storytelling, and 2) Study together and discussion

7	Providing Cultural Facilities That Are Beneficial for Children	Cultural tools are useful in all fields of science: 1) Library for children (Home library), 2) Using Film and projector, 3) Using props, 4) Visit the museum, and 5) Visit the public library
8	Raising children's desire to read	Motivate them to be more passionate about learning and reading by: 1) Comparing science with ignorance, 2) Hold a competition with children, 3) Instill a sense of sincerity in learning, 4) Providing books for children, and 5) Make them aware that knowledge can be useful for them
9	Making children feel responsible with Islam	Explain to them that they are required to learn and practice Islamic teachings by: 1) Telling stories of friends, and 2) Talks about good and bad conditions, the impact of our actions in carrying out Allah's commands and staying away from His prohibitions
10	Instilling the Spirit of Jihad in Children	Instilling Islamic values starting from the urgent thing, namely faith Instilling the spirit of jihad by seeking knowledge Instilling the Islamic struggle with wealth, namely sharing for the needy.

## CONCLUSION

Based on the data exposure and research results above, it can be concluded that:

- The early childhood education program according to Abdullah Nashih 'Ulwan is a good program that can be poured into early childhood education both at home, in schools, in mosques and in the community. The children's education program conveyed by the author can be read and realized by educators.
- The results of this study indicate that every program presented by Abdullah Nashih 'Ulwan needs comparisons, references from books related to children's education programs so that they can be tested and utilized for many people.

Through the results of the research above, there are several things that need to be discussed through the suggestions below, among others:

- Seeing from the program built by Abdullah Nashih 'Ulwan, it is very good to be able to apply how it can be noticed by educators. Especially educational institutions in Indonesia.
- The thoughts of Abdullah Nashih 'Ulwan in planting this educational program can be used as embryos to produce maximum results in early childhood education.

## ACKNOWLEDGEMENT

Finally, I am indebted to my parents, to all students and teachers in SMK Negeri 2 in Sorong city for their continuous support and encouragement in this research.

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# Implementation of Limited Face-to-face Learning (PTMT) to Improve Students' Interpersonal Intelligence at MIN 1 Ogan Ilir

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**Abstract.** The demands of the current global era are not only on students' academic values but also their non-academic, the ability to understand others, work together, solve problems, effectively, self-awareness, adapt to the social environment and communicate effectively. So that students can build relationships, create relationships that are mutually beneficial for both parties. This intelligence can be developed through learning activities in the classroom. This study aims to describe the implementation of limited face-to-face learning, to find out how to improve students' interpersonal intelligence, and what are the supporting and inhibiting factors in improving students' interpersonal intelligence at MIN 1 Ogan Ilir. The approach used in this study is a qualitative approach, namely the research method in natural object conditions (natural setting) where the researcher is the key instrument. The data collection techniques are observation, interviews and documentation. The data analysis technique uses data reduction (data reduction), data presentation (data display), and verification (conclusion). The results of this study indicate that the implementation of limited face-to-face learning at MIN 1 Ogan Ilir has gone well and complies with the health protocols that have been set by the government by increasing the interpersonal intelligence of students at MIN 1 Ogan Ilir for the academic year 2021/2022 covering four stages, namely Context, The real atmosphere of the learning environment at MIN 1 Ogan Ilir is very good and beautiful so that it is good for students to develop interpersonal programs. Input, the pattern of new student admissions at MIN 1 Ogan Ilir uses a quota system without conducting a formal test. The process begins with carrying out learning preparations, as well as implementing learning carried out with apperception and motivational activities. The product is known from the academic and non-academic aspects, the academic aspect is seen from the good grades of the students and non-academic is seen from the students who often participate in the competition activities. For the supporting and inhibiting factors, the supporting factors are the activeness of the students themselves and the teacher who conveys the material in an interesting way, while the inhibiting factors are students who are shy or introverted so it is difficult to develop their interpersonal skills. Researchers recommend increasing interpersonal intelligence in schools because it is beneficial for students in socializing.

## INTRODUCTION

The implementation of limited face-to-face learning to improve interpersonal intelligence in madrasas in general cannot be separated from several obstacles. First, the mindset of the community and parents who tend to glorify academic achievement. So far, society still considers academic achievement as the main measure of student success in the future. Second, the lack of readiness of madrasa educators in applying the concept of interpersonal intelligence education. Third, there is no standard and consistent concept in applying the interpersonal intelligence education model in madrasas. Fourth, the curriculum developed today is oriented towards academic intelligence, and tends to be imposed on all students. Seeing some of the obstacles that exist in madrasas in improving interpersonal

intelligence, MIN 1 Ogan Ilir sets a priority scale for intelligence to be developed, adjusted to the abilities and urgent needs of students as a provision to reach the future.

In the end, interpersonal intelligence was chosen as intelligence that was developed after academic intelligence during the limited face-to-face learning (PTMT) period that was currently running. Because this intelligence is considered to be directly related to academic intelligence and supports a person's future directly in all situations and conditions. Interpersonal intelligence is considered to be able to help a person to understand and work with others. (1). Interpersonal intelligence involves the ability to understand and cooperate with others. This intelligence involves many skills, such as the ability to empathize with others, the ability to organize a group of people towards a common goal, the ability to recognize and read the thoughts of others, the ability to make friends or establish contact (2).

Through observations carried out at MIN 1 Ogan Ilir, there were some students who still had difficulties in a group, still liked to fight between classmates, some were quiet or passive, lazy in learning and completing tasks given by the teacher both to do at school. as well as at home, lack of manners and ethics when entering the classroom without greeting or knocking on the door and asking for permission first, as well as the lack of interaction between one student and another other than close friends who are considered gangs because teachers and students feel awkward and still getting used to after a long time learning from home not in groups face to face with peers, and now have to get used to the limited face-to-face learning that is applied.

In connection with the above explanation, the research was conducted on the implementation of limited face-to-face learning to improve students' interpersonal intelligence at MIN 1 Ogan Ilir which focused on the implementation process along with the influencing factors.

## **RESEARCH METHOD**

The approach used in this study is a qualitative approach, namely the research method in natural object conditions (natural setting) where the researcher is the key instrument. The technique in collecting data with a qualitative approach is done by triangulation (combined), inductive data analysis, the researcher and the researched relate independently, this is intended so that objectivity can be built, can be classified in a concrete way, observed and measured properly, so that the results of qualitative research are it was found that the researcher emphasized the meaning of the generalization (3). So in this qualitative study emphasizes the meaning in the implementation of limited face-to-face learning to improve students' interpersonal intelligence at MIN 1 Ogan Ilir.

## **RESULT AND DISCUSSION**

### **Result**

The description of the implementation of limited face-to-face learning at MIN 1 Ogan Ilir, especially for fourth grade students, is carried out in accordance with the provisions of the Limited PTM implementation. The learning system carried out pays attention to health protocols and formulates learning activity plans and infrastructure to support the implementation of learning. The stages of implementing the Limited PTM are as follows:

- Planning, at this stage the teacher divides students into study groups which are divided into two study groups, namely groups A and B, each of which consists of 12 students, then makes a lesson schedule for each group with the provision of 3 meetings in one week with students' entry pattern to class is arranged by shift model. Arranging the layout of the classroom benches by maintaining a safe distance from students' seats, modifying the subject matter by reviewing the completeness of the material in the curriculum to adjust to the allocation of 3 hours of lessons for 1 meeting, preparing all the completeness of health protocols ranging from body temperature checkers, hand sanitizers , disinfectants, masks, hand washing tools and soap, ensuring the role of parents in meeting children's nutritional intake to maintain children's body immunity.
- Implementation, at this stage before entering the school environment, it must be ensured that all school residents wear health masks, check body temperature, wash hands using soap and running water that have been provided before entering the classroom and after leaving the classroom, students enter the classroom regularly and keeping a distance, all students are ensured to enter the classroom and occupy the seats provided, break hours are eliminated, extracurricular activities and sports and other activities that provoke close physical activity are still eliminated, school routine culture such as ceremonies, celebrations of religious holidays, as well as other self-development activities are also still abolished.

- Evaluation, at this stage is to review the implementation of Limited PTM activities and conduct socialization to students so that 3M activities, namely wearing masks, washing hands and maintaining distance become habits for school residents, in addition to conducting socialization through making health protocol orderly banners and providing related education. procedures for its application and procedures for school residents entering the school environment, because there are still some students who are not used to and have not used the standard use of masks and other health protocols so that they become obstacles faced during the implementation of Limited PTM, so that improvements and improvements are made to the management of PTM Limited well.

Teaching and learning activities are divided into two shifts, so that in 1 class, they are divided into two study groups consisting of 12 students each. Lesson hours are also reduced by 50% to 3 hours of lessons in 1 meeting, starting at 08.00 am to 11.00 WIB, so that each student gets 9 hours of face-to-face learning in 1 week, because each study group has been scheduled to follow Limited PTM 3 times in 1 week with a rolling system. Student activities at school, especially for learning activities so that there is no play activity, as well as the subject matter received by students is quite compacted and emphasized on assignments that students do in their respective homes. During the learning process at school, it is ensured that student activities are safe, controlled and keep a distance. The teaching and learning activities were carried out quite well, starting with preliminary activities and emphasizing on providing learning motivation and strengthening literacy, so that students could control themselves in the face of the pandemic. Furthermore, in core activities, the teacher conveys subject matter, especially mathematics by conveying the basics or important points of the material, increasing exercises and working on examples of questions, as well as assignments that can be done independently from their respective homes. The final or closing activity by providing student worksheets as evaluation material and providing online follow-up due to limited hours at school resulted in the delivery of subject matter being considered less than optimal.

Student activities in Limited PTM activities have not been able to fulfil the observation points of student activities including asking questions, finding ideas, questioning other people's ideas, learning to understand, studying hard, mastering learning, students being serious in learning activities, students using their time as well as possible when learning, dare to ask questions, dare to express opinions, and dare to solve problems and dare to ask questions or be actively involved during the learning process by developing students' interpersonal skills. It can be seen that each group during the teaching and learning process takes place many students are actively involved in learning activities in the classroom, this happens because the teacher applies the interpersonal development of students in the classroom. In addition, due to the splitting of the class into two groups based on the characteristics of students and heterogeneous groups so that in one study group there are students who are considered to have more abilities, especially in the thematic subjects of civic education (PKN) to balance the class and avoid passive classes. However, based on the results of observations in the field when PTM was limited to the thematic subjects of civic education (PKN), it was more focused on discussions and sharing opinions between teachers and students, students and students so that they could develop students' interpersonal skills.

The implementation of limited face-to-face learning is carried out systematically and follows the guidelines for the implementation of Limited PTM. The school has planned and implemented it in accordance with health protocol procedures, but in terms of implementing the teaching and learning process in the classroom, the delivery of material is quite compact and only conveys the important points and emphasizes the completion of practice questions, so that students are motivated by time and maximize the time spent. available so that they must focus on following the learning process. Teachers take advantage of interactive and innovative learning models so that they can develop students' interpersonal skills. So that this has an impact on students' interpersonal skills and also the acquisition of mathematics learning outcomes which are in the good category.

## **Discussion**

The implementation of limited face-to-face learning in all educational units has been opened since July 2021 through the decision of the Minister of Education and Culture, Minister of Health, Minister of Religion, and Minister of Home Affairs regarding guidelines for holding face-to-face meetings during the Covid-19 pandemic. Two things underlie the implementation of face-to-face learning because all education personnel have been vaccinated and during distance or online learning, the quality of education has decreased and has fallen far behind other countries during the pandemic.

The implementation of limited face-to-face learning is carried out systematically and follows the guidelines for the implementation of Limited PTM. The school has planned and implemented it in accordance with health protocol

procedures, but in terms of implementing the teaching and learning process in the classroom, the delivery of material is quite compact and only conveys the important points and emphasizes the completion of practice questions, so that students are driven by time and maximize time. available to be able to develop students' interpersonal. Teachers make every effort to take advantage of interactive learning models and involve innovative learning media that support the delivery of concrete information to students, so that this has an impact on student activities and also the acquisition of student learning outcomes that are in the good category.

The implementation of distance learning in Indonesia is considered to have decreased compared to other countries during the Covid-19 pandemic. For this reason, the government has begun to set strategies so that learning can be carried out face-to-face. So that a new policy has emerged regarding the implementation of limited face-to-face learning which will be opened from July 2021 with the condition that all education personnel have vaccinated and learning is carried out by limiting meeting hours, as well as implementing strict health protocols. So, in this case, students are divided into two study groups or scheduled based on shifts, with the aim of limiting the number of students in one room. Planning face-to-face learning needs to pay attention to several things that schools can do, including: 1) vaccinating all students and education personnel in schools, 2) Increasing the immunity of students, educators and education staff, 3) Preparing facilities and infrastructure that according to health protocol. Prior to the implementation of limited face-to-face learning, the Ministry of Education and Culture had socialized and published a learning guide book during the pandemic (4).

The role of the learning team, including: 1) Dividing study groups and setting lesson plans for each group, 2) Setting the layout of the room, 3) Providing dividing boundaries and markers for corridors and stairs, 4) Implementing bullying prevention mechanisms for unit residents. education that is stigmatized by covid-19, 5) Prepare all equipment for implementing health protocols.

This face-to-face implementation applies the precautionary principle because it is related to the health and safety of school residents, so the health protocol must be applied strictly in accordance with the limited face-to-face implementation rules. Limited face-to-face learning is a limitation of the number of students in one class, so it is necessary to regulate the number with a rotation system and a capacity of 50% of the normal number of students. Approval of students' parents, implementation of strict health protocols, education personnel have carried out vaccinations and facilities and infrastructure supporting the implementation of health protocols are available.

## CONCLUSION

The implementation of limited face-to-face learning at MIN 1 Ogan Ilir is carried out systematically and follows the guidelines for the implementation of Limited PTM. The school has planned and implemented it in accordance with health protocol procedures, but in terms of the implementation of the teaching and learning process in the classroom, the delivery of material is quite condensed and only conveys the important points and emphasizes the completion of practice questions, so that students are driven by time and maximize time. available to be able to develop students' interpersonal. Teachers make every effort to take advantage of interactive learning models and involve innovative learning media that support the delivery of concrete information to students, so that this has an impact on student activities and also the acquisition of student learning outcomes that are in the good category.

Madrasah Ibtidaiyah Negeri 1 Ogan Ilir is a school that seeks to improve students' interpersonal intelligence in the learning process but has not been maximized, so to maximize this, there are many things that must be addressed starting from program preparation, making programs, giving decrees to teachers who run interpersonal programs, make a guidebook on interpersonal programs so that the program can run in a direction and in accordance with what is expected by the school. Always self-evaluating so that the program continues to advance and keep up with the times so that the impact felt by students in their interpersonal relationships is very good.

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# Inventing Dahlan's Concept of Progressive Approach and Its Implication in Dealing with Misbehaving Students at Schools

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**Abstract.** In the efforts to set the society free from oppression, ignorance and misery, KH Ahmad Dahlan who established Muhammadiyah, made efforts through humanistic approach based on the main mission of prophet Muhammad: to provide mercy and kindness to all humans and nature. This article aims to explore the efforts applied by KH Ahmad Dahlan in educating his students and its implications in recent education to resolve the issues at schools. This article is the result of research with analytic descriptive approach in which the data were collected through library research of articles on journals, manuscripts, magazines, and literature books about KH Ahmad Dahlan. The data were analyzed in analytic descriptive, which is through: finding pattern or theme, finding scientific relation among the thoughts of figures, classifying the thoughts of figures, concluding those thoughts, then formulating the results in order to generalize the thoughts of KH Ahmad Dahlan. Based on the analysis, the research found that KH Ahmad Dahlan applied progressive approach in educating the misbehaving students. The education was carried out by training the students' inner sensitivity (empathy), without violence (patience, sincerity), by listening to students' voice, teaching with fun methods, and by encouraging students to think critically and reflectively.

Keyword: humanism, progressive, misbehaving students, critical, reflective

## INTRODUCTION

In humanistic approach, students are often seen as subjects who are free in determining their life goals, also responsible for their lives and others. The essence of this approach is to humanize humans, which is in this case, a whole-competent- and respectable human who respect cultural diversity, and so on. School is a place to educate children to achieve these goals. Thus, the objective of children's education at school is not only to learn a set of knowledge, but also to socialize with others. This is in line with the objective of education in 2003, those were: developing abilities and forming the characters and civilization in order to educate a nation which aimed to develop students who are religious, kind, healthy, knowledgeable, competent, creative, independent, democratic, and responsible.

The success of students in learning values and morals have an impact on their future life in society. Consequently, schools must create an atmosphere that allows students to learn the values that have been set. Security, calm, and harmonious relationship with teachers and peers are the main keys so that the learning process can be

maximized. Factors which interfere with learning must be minimized by teachers and school principals. One of the factors which interferes with the teaching and learning process is bullying. Bullying occurs because of violating the existing values. As stated by Muliani & Pereira (2018), bullying constitutes an attitude or behavior that is unpleasant to others which is repeated verbally, physically, or socially resulting in physical or psychological harm. While Glew, Rivara, & Feudtner (2007) explain that bullying is an aggressive behavior in which a child or group hurts or disturbs others who are considered weak or powerless to fight back. Bullying, both physical and non-physical, has negative effects in the short and long term. Violence at schools nowadays is categorized into 3 types, namely: violence among friends, violence from teacher to student, and violence from student to teacher. *Komisi Perlindungan Anak Indonesia* (KPAI) or Children Protection Commission of Indonesia noted the existence of 24 violence cases at schools. The perpetrators were both students and teachers. Violence resulted in obstruction of teaching and learning process. The traumatic students would feel uncomfortable at schools, while bullied teacher would find difficulty in helping students to achieve the learning goals maximally. Some previous studies has revealed the causes of violence at schools. Zakiyah, Humaedi, Santoso (2017) revealed that bullying occurred by the influence of individuals, families, playgroups, and the bully's community environment. Meanwhile Herawati dan Deharnita (2019) mentioned that bullying occurred by several factors, including family disharmony (82.3%), the lack of attention from a school towards the other schools (46.8%), and peer ridicule (77.2%). In the psychological perspectives, Damanik (2019) revealed that violence from student to teacher was category of student delinquency which indicates students' misbehavior. In the educational view, this violence was caused by the offense of both values and norms, and lead to unequal social interactions which include: respect for teachers, tolerance among friends, and the decline in the way teachers treat students. This declining moral values indicated the lower humanism at schools.

The learning approach currently implemented should include aspects of humanism. Humanism is often equated with rationalism and liberalism, as the result of the renaissance. However, each of those ideas have different goals. Rationalism promotes sense/thought, while liberalism focuses on competitive competition. Otherwise, humanism is a method implemented as an effort to reinforce the human side.

Humanism is divided into several different concept. O'Neil divided humanism into 2 ideologies, namely conservative ideology which adheres to fundamentalism, intellectualism, and conservatism; and liberalism which is divided into liberalism, liberationism, and anarchism. This research discussed the concept of humanism formulated by KH. Ahmad Dahlan, the founder of Muhammadiyah, which made its concept different from secular ideology. As stated by Ali Syari'ati, humanism is a philosophical idea that views humans as noble beings. Meanwhile, education has goals of human safety and perfection.

Apart from humanism, education is also implemented through progressive approach. Based on the research conducted by Prasetyarini, Hikmat, and Thoyibi (2020), teachers advised bullying students by giving lectures, and not the reflective one. This kind of approach did not make students aware of the issue. Therefore they must be taught to reflect in order to be able to understand, study, and overcome the problem they faced. This reflective thinking is a progressive concept. This is based on the concept that humans are basically good at taking steps towards progress (progressive).

This article aimed to explore the concept of "humanism and progressive" formulated by KH Ahmad Dahlan and project the implementation of this concept in schools as an effort to create free-violence schools.

## METHOD

This article was the result of a simple research using an analytic descriptive approach, which was an effort to explore facts, results, and ideas of a person by using the strategy of collecting, analyzing, interpreting, and generalizing the conducted research. This research was a type of literature (library research) with the data in the form of journals, manuscript, magazines, and library books. Those data were collected through documentation method. Meanwhile, to analyze the data, the author used descriptive analysis technic, by the steps: finding patterns or themes, finding logical relationship between thoughts of the founding figures, classifying those thoughts, concluding those thoughts, and formulating the results in order to generalize the thoughts of the figure.

## 1. The Concept of Humanism According to KH. Ahmad Dahlan

In the perspective of Western thought, humanistic is a learning approach that was born as a reaction toward behavioristic approach. Behavioristic theory put students as passive object who learn mechanically through habituation. The word “humanistic” means “humanity” which is adopted from the Latin, *humanus*, which means “human’s characters” or human nature. Meanwhile, the word “humanism” can be interpreted as a person’s view toward something that emphasizes human dignity and abilities. Behaviorist pioneers included Abraham Maslow, Carl Rogers, David Kolb, Peter Honey and Mumford, and Jurgen Habermas. As stated by Komara (2014), in humanism theory, students are the core of learning with teachers as learning facilitator. The aspects of attitude and knowledge are the requirements to achieve the goal of self-actualization in a supportive environment. Basically, humans are special creatures who have potential and motivation to develop themselves and behavior. The implication of this statement is that every individual has freedom for self-development and its actualization. Students as the core learning interpret the process of their learning experiences independently in order to be able to understand their potential positively and reduce negative self-potential.

As written by Sarnoto and Muhtadi (2019), humanistic education in the Holy Qur’an is based on four views. First, every educational activity is conducted only to get Allah’s blessing. Second, religious knowledge is different from general knowledge. Third, humans have freedom to develop knowledge. Fourth, knowledge is learned integratively in order to be beneficial to daily life. This education has purpose to encourage students to actualize their potential in order to be creative, independent, and fear of Allah.

Humanistic education in Islam is based on the main mission of Prophet Muhammad, which is to give love and kindness to all humans and nature. This concept was used by Ahmad Dahlan as the basis for humanistic educational thinking. He used Surah Ali Imran verse 104 as a modern theological basis for solving problems in human life which contain the values of transcendental humanist education.



Meaning:

Let there be a group among you who call ‘others’ to goodness, encourage what is good, and forbid what is evil—it is they who will be successful. (QS. Ali Imran 104)

According to Hamka (1983: 29), surah Ali Imran verse 104 is “*al amru bi al alma’ruf wa nahyu an al mungkar*” which means encourage to do good things and forbid evils. Encouraging means lecturing. Human life will be meaningful and dynamic with lecturing, therefore, there must be humans who are able to encourage others to do good things and forbid evils.

## 2. Progressive Thinking

The approach to progressive education which adheres to pragmatic philosophical ideology views that philosophy should not only be focused on mere metaphysical concepts, but must be based on experience, investigation, and analysis of experience in a critical way. This thinking grows practical education concept, which is conducted directly or as known as *learning by doing* (Hadiwijono, 1983). Teaching methods suggested in this progressive education are as follows: based on children’s practical experience in real life, encouraging children to work in team (Ali, 2017).

In line with Dewey’s, KH Ahmad Dahlan’s movement in education emphasized sharp thinking and social sensitivity. He argued that education should hone children’s inner sensitivity (emphaty), be carry out without violence (patience, sincerity), be participatory (listening to what children want), use fun methods, and encourage children to think critically and reflectively. This view was reflected from his figure in doing *ijtihad* in overcoming the problems of misbehaving students in his era.

In addition to Surah Ali Imran, KH. Ahmad Dahlan taught humans to free themselves from oppression through his interpretation toward Surah Al-Ma'un. KH Ahmad Dahlan taught educators not to only deliver knowledge to their students, but also encourage them to implement those knowledge in daily life. In this case, education does not only teach cognitive aspect, but affective aspect as well. KH Ahmad Dahlan taught his students to think critically and be emphatic towards any issue around them in a humanist way, or called as in a reflective way.

Conducting education activity called *Fathul-Ashar Miftahu-Sa'adah*. In this activity, KH Ahmad Dahlan guided youths with problem ages. The problematic category referred to group of homeless and unemployed youths. The approach adopted was applied differently in each era, and was different from our society perception and habit. In mentoring those misbehaving youths, KH Ahmad Dahlan applied a fun method. The youth were initially asked to do anything according to their interest, such as playing music and picnic. Over time, those youths were given religious knowledge. This method were effective in mentoring those youths in learning. The fact proved that those youths could recognize their mistake through intelligent guidance. His learning was similar to what was developed by Paulo Freire, it was through problematization and awareness. From that learning, the homeless and unemployed youths began to become aware and gradually change their life style. Some of them, then, became activists of this movement.

The 'Mobile Teachers' program reflected the nature of prophecy who gave change toward kindness. In this program, KH Ahmad Dahlan wanted to show that teachers and students have the same position as humans in front of the Almighty. Progressive thought was reflected by KH Dahlan who tried to change Indonesians' perspective *timba golek sumur* (Javanese saying which means students should find their teacher in learning) into *sumur golek timba* (teacher can come to students to motivate them learning). The previous perspective (*sumur golek timba*) was perceived inappropriate for kyai (Islamic teacher) because it was considered to impose the authority of a *Kiai*. In the 'Mobile Teacher' program, KH Dahlan visited community homes to motivate students to study religion. The prophetic manifestation displayed by this great Kyai was the "Mobile Teacher Movement" which later developed into tabligh, namely recitations in the villages. This religious activity is a socio-religious work with a different trend from K.H. Ahmad Dahlan in his time.

As a mujtahid, KH Ahmad Dahlan's thinking was based on Al-Qur'an and as-Sunnah as well as sharp thinking. K.H. Ahmad Dahlan in overcoming the problems that surround him is Surah al-Ma'un and Ali Imron 104. Many thinkers call his efforts to make progressive changes referred to as "transformative theology" in contemporary Islamic discourse. In the view of KH Ahmad Dahlan, Islamic religious education is not just carrying out a series of ritual worship but also must make serious efforts to overcome the problems that exist around it.

### **3. The Implication of KH Ahmad Dahlan's Humanism and Progressive Concept in Dealing with Students' Misbehavior in Schools**

KH Ahmad Dahlan's concept of humanism and progressive implies that to deal with students' misbehavior, teachers should listen in the students' voice through dialogue, guiding them patiently, sincerely, and teaching with fun, and encourage them to think critically and reflectively.

#### **a. Listening to Students' Voice Dialogue**

The method implemented by KH Ahmad Dahlan is to ignite students' sensitivity and deal with misbehaving students through dialogue, take walks, and implement Al Maun's letter directly in the community. This method is a participatory method. As stated by Sudjana (2000), participatory learning is a learning strategy by involving the activeness of all parties including teachers and students in the learning process. The characteristics of participatory learning include being humanist and horizontal. Humanist refers to the process of coaching students to take place in an open, intimate, directed, mutual respect, mutual help, and mutual learning. Meanwhile, horizontal means that guidance is carried out communicatively in an equal way between the teacher and the child. Teachers want to listen to students' voices well, so that teachers can easily guide students.

#### **b. Patience, sincerity, and fun**

Education is the responsibility of parents, teachers, and society. The way adults educate children will affect children's behavior, so that if adults educate with violence, the children will also do the same. As implied in the

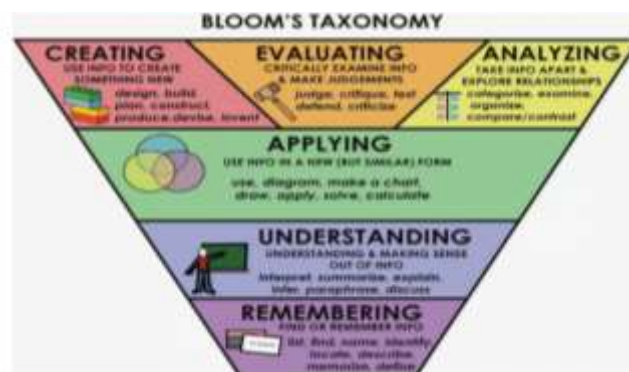
Al Quar'an, education is carried out on the basis of seeking the pleasure of Allah, so teaching must be done with patience, using various strategies according to the characteristics of the child. The activity carried out by KH Dahlan is by inviting children to go around before inviting children to discuss teaching teachers to be patient and teaching children with fun methods. Darmansyah (2010) in DePorter (2000) explains the notion of a fun learning strategy as a way or effort made by teachers to create an effective learning environment, prioritizing children's affective aspects, facilitating children in active learning, and facilitating the learning process. As for Berk (1998), fun learning refers to a pattern of thought or the way a teacher designs and manages the delivery of material in a way that makes it easier for children to learn in a way that is not boring. Deporter, Reardon and Singer (1999) say that fun learning is an effort made by the teacher to change the child's learning environment into a place that encourages children's motivation to learn, participate, and get opportunities for discussion.

### c. Critical Thinking

As stated above, KH Ahmad Dahlan taught humans to free themselves from oppression through his interpretation of Surat Al Maun. KH Dahlan taught the educators by repeating it until they understood the contents of the letter. With his wisdom, the students are able to identify the problems that occur around them. This activity was carried out by KH Ahmad Dahlan and taught teachers to think critically.

Educational experts and psychologists define critical thinking skills with a variety of concepts. Perry (1981) says that critical thinking is concerned with reflective assessment, cognitive abilities, logical thinking skills, and problem-solving abilities. Facione (1990) defined critical thinking as a cognitive process, a purposeful self-regulatory assessment that has two components: cognitive skills (interpretation, analysis, conclusion, evaluation, explanation and self-regulation) and a motivational component (disposition to critical thinking). Meanwhile, Facione, Facione and Giancarlo (1997) classify critical thinking as a skill to analyze, evaluate, conclude, deductive, and inductive.

The activities carried out by KH Ahmad Dahlan teaches teachers to guide children to think critically in solving problems at hand. Critical thinking does not only analyze existing problems but also encourages children to solve their problems. The critical thinking process taught by KH Ahmad Dahlan is in accordance with the category of High Order Thinking Skills known as HOTS. As in the chart below, thinking skills are at the top level, namely analysis, valuation, and creativity.



### d. Reflective

As explained earlier, KH Ahmad Dahlan held an activity called 'Fathul-Ashar Miftahu-Sa' by educating young people who were considered 'naughty' by inviting dialogue from heart to heart. The dialogue by KH Ahmad Dahlan was carried out by asking what they were doing, why they did naughty things, how to find a way out of their problems and so on. This strategy is able to make the young people aware of what they are doing and get back on the right path. In fact, many of these troubled youth are active in Muhammadiyah.

This youth awareness process teaches teachers to do reflective thinking in solving problems. In reflective thinking, children have the awareness and ability to actively control their learning, access previously unknown knowledge, and how they meet their own knowledge needs (Sezer, 2008). Critical thinking skills involve several thinking skills that are intended to get the desired results. Reflective thinking helps to integrate these thinking skills by

assisting assessment (Shermis, 1999). The important role of reflective thinking is to act as a tool to encourage thinkers during problem solving situations because it provides an opportunity to rethink what has been done and think of the most effective way to achieve the goals that have been set (Rudd, 2007). So, educators can apply reflective strategies to guide students in thinking critically (Shermis, 1999).

## CONCLUSION AND SUGGESTION

From the results of the analysis above, it can be concluded that the humanist approach taught by KH Dahlan is implemented to free humans from the shackles of ignorance, poverty and misery. Education is carried out not by violence but by making students sensitive to problems and guiding children to find their own solutions to the problems they are facing. Education is carried out by training the child's inner sensitivity (empathy), is carried out without violence (patience, sincerity), is participatory (listening to children's voices), with fun methods, and encourages children to think critically and reflectively. This approach can be used as an example in guiding students with problems by awakening them, guiding them to understand, realize and seek solutions to find the best way to do good.

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# Herb-Strata Vegetation Species Diversity in Ancient Mujil Volcano Yogyakarta as Biology Learning Source in Senior High School

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**Abstract.** This research is intended to understand the vegetation species in herb strata which have the highest and lowest Importance Value Index (IV), the diversity of vegetation species of herb strata, the relevance between measured abiotic environment condition to the stand grouping pattern of vegetation species of herb strata, and analyze the research result as a biology learning source of first-grade senior high school in biodiversity material. The sampling in this research utilizes plotless method (Point Intercept). Based on the descriptive method, this research result has potential is analysed as biology learning source for senior high school. The research result shows that there are 29 species of herb strata vegetation in the study area with the highest IV comes from *Cynodon dactylon* (27,91%) and *Cenotheca lappacea* (0,50 %) as the lowest IV. Diversity index ( $H'$ ) vegetation species of herb strata is relatively low ranging between 0.11-0.14. The abiotic environment condition correlated with the stand grouping pattern vegetation species herb strata are the soil humidity, soil pH, and the light intensity, while the abiotic factors which are not correlated are air humidity, air temperature, and soil temperature. This study result has a potential to be the learning source for the first-grade senior high school biology subject in the biodiversity study material.

**Keywords:** *Ancient Mujil volcano, species diversity, Learning Source, Herb Strata Vegetation*

## INTRODUCTION

Learning source is everything that is intentionally designed or not that could be utilized independently or together to help the learning process of the learners (Hafid, 2011). Learning resources are all sources in the form of data, human and any forms that can be used by students for learning, either separately or in combination to make it easier for students to achieve learning goals or achieve certain competencies (Cahyani, A, 2019). The learning source contains materials utilized and needed in the learning process such as printed books, printed media, electronic media, speakers, and surrounding environment which could increase the involvement of the learners in the learning process. The environment can be used as a learning resource if it is used optimally. The existence of environmental potential in each different area requires the ability to utilize environmental potential learning resources as a learning resource. The learning process is expected to be more interesting and students' understanding and knowledge will increase after interacting directly with biological objects. Utilization of the environment as a source of learning biology can create and increase one's awareness of the environment (Hendriani, 2005). The environment as a learning resource is grouped into three, namely the social environment, the natural environment and the artificial environment. The social environment is an environment related to human interaction and community life such as culture, education, and value systems. The natural environment is everything that is natural, such as geographical conditions, flora, fauna, and natural resources. The artificial environment is an environment that is intentionally created for certain purposes that

are beneficial to human life. The relationship and interaction between humans and the environment is very close. Humans and the environment influence each other, both material and immaterial, life and death. The process of reciprocal relationships that influence each other between the environment and living things form a system called an ecosystem). The environment, when used as a learning resource, has advantages such as not boring learning activities, more meaningful learning, varied material being studied, and more comprehensive learning. One of the learning processes that could be made as an alternative in local potential utilization balanced with the contextual approach will ease the learners to understand the material that will be given with something real in the environment. One of the materials that have to be mastered by the first-grade high school according to the curriculum 2013 is the biodiversity. The environment can be used as a learning resource outside the classroom. This material is included in 2013 Curriculum is written in KD 3.2 which is analyzing observation data regarding levels of biodiversity (genes, species and ecosystem).

One of the environment that can be made as a learning source is the Ancient Mujil volcano located in Girimulyo sub-district, Kulon Progo district with an elevation of 265 msl (mean sea level) and area of 18 Ha. Mount Mujil is close to Mount Prau and Mount Ijo, geographically, it is directly close to Pengasih and Kokap sub-districts in the south, Kalibawang and Samigaluh in the north and directly close to Purworejo Regency in the west, Nanggulan in the east. Mount Mujil is located in the Menoreh highlands which stretches from north to south, this makes Mount Mujil has different characteristics from the mountains of southern Java which generally extends from south to east, and the soil in the mountains contains minerals in the form of hydrothermal magnetic deposits formed at high temperatures, and high pressure (Hartono, 2015). Mount Mujil is or remains of an ancient volcano where this area is composed of volcanic breccia rocks, igneous rocks and basalt andesite. In addition, with the presence of andesite rocks, a dome with a dip leading to the east is formed, indicating that this volcano was active in its time. Its geological attractiveness will affect the diversity of species in the Mujil Ancient Volcano area. This proves that once there was magma in the area that had been saturated, such as sulphide and arsenopyrite. According to Hartono & Pambudi (2015) Mujil volcano is one of the ancient volcanoes which is detached from the volcano system in the Kulon Progo mountains. Ancient Mujil volcano is the remaining of an ancient volcano where this region is composed of volcanic breccia rocks, igneous rocks, and basalt andesite. Based on the preliminary observation of Ancient Mujil volcano region there are many vegetation species in particular herb strata. In the education field, this region is very attractive if it is made as a biology learning source which is quite contextual for the first-grade senior high school students for the biodiversity learning material. Hence, a study is needed about the Herb-Strata Vegetation Species Diversity in Ancient Mujil Volcano Yogyakarta as Biology Learning Source in Senior High School.

## RESEARCH METHODS

This research is included an explorative research species. The data sampling method in this study uses plotless method which is point intercept. To understand the relevance between the measured abiotic environment condition (soil humidity, soil pH, light intensity, air temperature, soil temperature, and air humidity) with the stand grouping pattern of herb-strata vegetation, cluster analysis is utilized. Vegetation parameters measured are dominance, frequency, relative dominance, relative frequency, importance value index, and diversity index. Based on Barbour, et. al (Handayani, 2018) the formula which are used to find the vegetation parameters are as follow:

- Frequency =  $\times 100 \%$
- Relative Frequency =  $\times 100 \%$
- Dominance (cover) =  $\times 100 \%$
- Relative dominance =  $\times 100 \%$
- Importance Value Index (IV) = Relative Frequency + Relative Dominance
- Species Diversity Index can be calculated using Diversity Index Shannon Wiener (Fachrul, 2012):

$$H' = -\sum p_i \log p_i$$

Annotation:

$H'$  = Diversity Index

$p_i$  =

$n$  = i-th importance value of a species

$N$  = Amount of importance values of a species

Based on the results of exploratory research. Furthermore, the results will be studied descriptively to determine the potential of the research results as a source of learning biology for senior high school First Grade on the material of biodiversity ecosystem level.

The study of potential biology learning sources referred to Djohar's opinion (Suhardi, 2012) which takes into account the:

- a. clarity of potential and availability of the objects and issues raised,
- b. conformity with learning objectives,
- c. clarity of targets and purposes of the material,
- d. clarity of information to be revealed,
- e. clarity of exploration guidelines, and
- f. clarity of benefits to be achieved.

In addition to Djohar's opinion, the potential learning source was examined in accordance with Dick and Carey (Supriadi, 2015) criteria as follows:

- a. The availability of local sources
- b. The availability of fund, resources, and sufficient facility to conduct a learning source
- c. The flexibility, practicality and learning source security factors for a relatively long period.
- d. Cost effectiveness for a relatively long period

## RESULTS AND DISCUSSION

### A. Importance Value Index (IV)

Based on the research result shows that in all of the study area there are 29 herb strata vegetation species with the highest and lowest IV can be seen in the Figure 1. below:

Figure 1. Graphic of Importance Value Index (IV) herb-strata vegetation species in all of the study area

Based on the Figure 1. It can be known that the herb-strata vegetation species that has the highest IV is *Cynodon dactylon* with 27.91% and the lowest IV is *Cenotheca lappacea* with 0.50%. *Cynodon dactylon* which has the highest IV means that this plant has a vital role in the Ancient Mujil volcano. Biodiversity with important functional roles at varying levels of this hierarchy. Communities have functional which is uniquely important (Barbour et al, 2009; Drury.C & Lirman.D. 2017). *Cynodon dactylon* is important because it is well-distributed in all region. Based on Jayadi (Kendarto, 2018) *Cynodon dactylon* is a weed in plants that has the better ability in surviving compared to the other species of grasses such as manila grass and others. Furthermore, Turgeon (Paripurno,2014) stated that *Cynodon dactylon* is a perenial grass of warm season that can be grown in tropical and subtropical climate. This species of grass came from America and Australia which was then spread to Asia. This grass has a characteristic of gray-ish green color, sharp hairy leaves, have branches, and fast spreading. Based on the study result the pH average which is measured in the study area I is 6.46, study area II with 6.21 and study area III with 6.28. The soil pH measured in the Ancient Mujil volcano region is suitable for the soil pH needed for the growth of *Cynodon dactylon* plant. According to Zakaria (Kendarto, 2018) *Cynodon dactylon* is able to adapt on pH ranging from 5.5 to 7.5. The average of measured soil temperature in the study area I is 28.3, study II with 28.9 and study area III with 28.1. Based on Pioh (2013) the soil temperature is a very influential factor to the growth and progress of the plant. According to Zakaria (Kendarto, 2018), *Cynodon dactylon* is able to grow well in a soil temperature around 20.4 - 33oC, so that it may give the plant to grow well in the area. The averages of soil humidity in study area I, II and III are 68.7%, 59.1%, and 61%, respectively. Soil humidity is one of the factors affecting the structure and composition of a plant. A plant could grow well in a soil with high soil humidity which is around 60 – 70% (Irwan, 1997). *Cynodon dactylon* could grow well in the Ancient Mujil volcano region due to the suitable measured abiotic environment conditions which include soil pH, soil temperature, and air temperature to the optimum growth so that this plant can be found in all study area.

The plant that has the lowest IV is *Cenotheca lappacea* with 0.50% and only found in study area I. *Cenotheca lappacea* is a weed from Poaceae family in form of clumped grass that can be strongly grown to a height of 125 cm, and this plant is able to live in the lowland until 1200 msl (Anonymous, 2013). *Cenotheca lappacea* is a plant from Poaceae Family. According to Tjitrosoepomo (Arisandi, 2015), a good temperature for the growth of Poaceae Family ranges from 19 – 27oC with an optimum temperature of 23oC, air humidity from 40 -85%, and soil pH at around 6-7.8. Based on Fitriany Rizka Ayu Mei, et al (2014) stated that the optimum air

humidity for a plant to live is about 40-85%. The surrounding temperature is one of the most important factor because it affects the metabolism process of a plant. Centotheca lappaceae could not live properly due to the measured abiotic condition such as air temperature which is not suitable to the general condition of the plant's growth. The measured abiotic condition result which is the air temperature with 28.3-33oC is not suitable for the plant as the optimum temperature for the growth of Poaceae Family is 19-27 oC. According to Arief (1994) a plant needs a temperature of 15-25 oC to optimally grows, if the temperature is too high or low could result in the death of the plant. Replacing the rainy season and summer, compared to other types of physiognomy. Thus, the environment situation of habitat changes continuously year (Spellerber 1992; Kleinhenz et al 1996; Sung-Yeol Kim, Moon-soon Kim, Youn-Mi Ryu, Seung-lak An, 2019).

#### B. Diversity Index (H')

Based on the research results show that in all study areas the diversity index of strata herb vegetation species can be seen in Figure 2. below:

Figure 2. Graphic of Diversity Indeks (H') herb-strata vegetation species in all of the study area

Diversity Index is a value which represents a species diversity of a community, obtained from a species resources which are weighted with the species equality (Hardjosuwarno, 1990; Marini et al, 2011; Sureshkumar Jeyalatchagan et al, 2020). Diversity Index can be translated as a vegetation parameter which is very useful to compare variety of plant community, particularly to understand the effect of environment factor disturbances inside the community, the diversity index can be known (Fachrul,2012)

Overall, the diversity index of herb-strata vegetation diversity in Ancient Mujil volcano region is relatively low at around 0.11-0.14. This is in accordance with the Fachrul 's statement (2012) who stated that H' value <1 shows that the diversity of the species is low, if the H' is around 1-3 it shows that the diversity of a species in the region is moderate and if it is higher than 3 then it can be said that the species diversity in a community is relatively high. Handayani, T. (2018) mentioned that the species diversity of a community is affected by the size of the species diversity, the amount of species and the spread rate of each plant.

Even though the plant species which exist in all of study area is relatively abundant (29 species), but the diversity index of the herb-strata vegetation is generally low in this area. This may be caused by the existence of several herb-strata vegetations which strongly dominate in various study areas, such as in study area I, II, and III are dominated by Oplismenus sp, Ottochloa sp. and Synedrella nodiflora plants. According to Indriyanto (2006) when a species diversity in a vegetation is low, then it can be happened because the area is only dominated by certain plants only. The low value of Diversity Index can also be caused by the species distribution which is equally-distributed in every study area.

Another factor affecting the Diversity Index of herb-strata vegetation species is the interference from the local society such as planting a certain herb species e.g. Kaemferia galanga and cutting several herbs to be taken as animal feed, so that it disturbs the stability of ecosystem and resulting to the low rate of diversity. Based on Odum (Yuniar, et. al., 2015) the diversity is identical with a stability of ecosystem, if the diversity of an ecosystem is high, therefore the condition of the ecosystem tends to be stable.

#### C. Cluster Analysis

Based on the results of research in all study areas shows that cluster analysis of the abiotic environment can be seen in Table 1. below:

Table 1. Results of the Abiotic Environment cluster analysis.

	Cluster	Error	F		Sig.	
	Mean Square	Df	Mean Square	Df		
Air_temperature	3.392	1	3.717	28	.913	.348
Soil_temperature	.199	1	1.113	28	.179	.676
Soil_humadity	7.792	1	36.146	28	.216	.646
Air_humadity	234.388	1	13.981	28	16.764	.000
pH_Soil	.219	1	.027	28	8.025	.008

Light_Intencity	115645.125	1	2164.217	28	53.435	.000
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The result obtained from the cluster analysis that the abiotic factors correlated with the stand grouping pattern of herb-strata vegetation are soil humidity, soil pH, and the light intensity with values of each are 0.00 ; 0.08 ; 0.00, respectively. The other abiotic factors such as air temperature, soil temperature, and air humidity are not correlated with the stand grouping pattern of vegetation with values of 0.348, 0.676, and 0.646, consecutively. If the significance  $> \alpha$  (0.05) then  $H_0$  is accepted (measured abiotic factor is correlated with the stand grouping pattern) and if the significance  $< \alpha$  (0.05) then  $H_0$  is rejected (measured abiotic factor is not correlated with the stand grouping pattern).

#### D. Analysis of Research Result Potential as a Biology Learning Source for First-grade High School in the Biodiversity Material.

According to Djohar (Suhardi, 2012) the Biology research result can be made as a learning source if it fulfills the requirements of a learning source. The following is an analysis of potential learning resources from the results of research on the diversity of vegetation types of herbaceous strata in the Ancient Mujil Volcano area as a source of learning biology for high school students.

1. The Clarity of potential, the availability of object and the problem which is taken  
The object used in this study is the herb-strata vegetation in Ancient Mujil Volcano Region, Kulon Progo. The reason of the choice of herb-strata plants as the objects in this research is because the plant is easy to find, be recognized, and identified based on its morphology and it is very easy to be found in the local environment. The relevance of the problem taken with its potential as a learning source of Biodiversity material is that the Ancient Mujil Volcano is not yet utilized by the nearest schools as a learning source of biodiversity material with contextual basis.
2. The suitability with the learning objective  
Learning objectives of the 2013 Curriculum is written in KD 3.2 which is to analyze the observation data regarding various level of biodiversity (genes, species, and ecosystem), which is that the students could mention the herb-strata vegetation species, students are able to mention the example of herb-strata vegetation species which has a vital role and the least important role, and also the students are able to explain the concept of biodiversity in the ecosystem level.
3. The Clarity of the material target and its subject  
The clarity of the material target in this research is the biodiversity material for first-grade high school particularly ecosystem-level diversity, while the subject target of this study is the first-grade high school students.
4. The clarity of the information explained  
Based on the research that has been done, the clarity of the information which can be explained are in form of facts and concepts. Moreover, the fact obtained is the finding of 29 plant species of herb-strata in the Ancient Mujil volcano Kulon Progo volcano region with the highest average of Importance Value Index (IV) belongs to *Cynodon dactylon* with 27.91%, while the herb vegetation with the lowest average of Importance Value Index is *Cenotheca lappacea* with 0.5%. The concept which is obtained from this study is the biodiversity especially in the ecosystem level. According to Eurika. Novy & Akhmadi. Arief.N (2016) The Curriculum analysis is done by adjusting the process and research product with the core curriculum standards in 2013. Based on the analysis of processes and products (facts, concepts, principles and procedures) study, the results of the research on attractant compound Basil flower (*Ocimum basilicum*) toward fruit flies can be used as a Biology learning resource of 11th grade at KD. 3.6 Curriculum 2013 vocational high schools.
5. The Clarity of Exploration Guidance  
According to the research result, it is required to have a clear and coherent exploration research guidance starting from the choice of study area, research object, work procedure, tools and materials, data collection, data analysis, and conclusion making. The research result can be utilized to support the achievement of KD 3.2. which is to analyze the observation data regarding various biodiversity levels (genes, species, and ecosystem) in particular on the biodiversity ecosystem material level.
6. The Clarity of the Obtained Result  
The clarity of the obtained result in the choice of learning source should be based on the objectives to be achieved in the learning process. A good learning source ideally could give a meaningful experience to the students so that it could increase the skill of students in the cognitive, affective, and psychomotoric area. This can be realized through a contextual learning, in which one of them is by presenting an authentic and concrete learning source which is close to the students through the utilization of environment-based learning source in

the surrounding area. According to Najmulmunir (2010), a learning source is differentiated into 2, which are learning source which is purposely designed for learning (by design) and the learning source which are utilized. The by-design learning source is a learning source which is specifically made or developed as an instructional system to give a directed and formal facility, while the by-utilization learning source is a learning source that cannot be specifically designed for learning purpose and its existence can be found, implemented, and utilized for the learning needs. Ancient Mujil Volcano Region, Kulon Progo district is one of the local potential that can be utilized as a biology learning source for first-grade high school.

Other than the learning source requirements above according to Djohar (Suhardi, 2012), an assessment is also done regarding learning source requirements according to Dick and Carey (Supriadi, 2015), which are explained below:

1. The availability of local sources  
The choice of learning source has to consider the availability of the local sources. It means that if a learning source is not available then it has to be bought or made. Ancient Mujil Volcano Region is a region which can be used as a learning source alternative because it provides objects such as herb-strata vegetation species which can be utilized as learning source in the material of ecosystem-level biodiversity. Ancient Mujil Volcano Region can be directly used as a learning source without any further procurement or making and can be straightly used because it is already provided by the nature.
2. The availability of fund, resources, and sufficient facility to conduct a learning source  
Costs and resources needed to use the Ancient Mujil volcano Kulon Progo Region as a learning source in Biodiversity material are relatively low. This due to the distance of the Ancient Mujil Volcano to the school area which is quite close, so that it can save costs, transportation, and resources. The facility used to support the Ancient Mujil Volcano region as a learning source is relatively simple such as gauge, thermometer, Thermohygrometer, and observation table
3. The flexibility, practicality and learning source security factors for a relatively long period.  
Ancient Mujil Volcano Region have a flexibility, practicality, and learning source security factor for a long period. This shows that this region does not need complicated process and stages to be used as a learning source and easy be observed, and also a region in which its sustainability is still preserved makes Ancient Mujil Volcano Region can be used as a learning source for a long-term period.
4. Cost effectiveness for a relatively long period  
Financing needed to make the Ancient Mujil Volcano as a learning source is relatively cheap and effective. This due to the location of Ancient Mujil Volcano that is easily accessible and its utilization as a learning source does not require a complicated process hence saving the cost needed.
5. The description above explains that the surrounding environment can have potential as a source of learning for high school students. According to Boleng, D.T. and Lumowa, S.V.T (2019) Most high school biology teachers (64.0%) say that natural resources available on land in East Kalimantan such as plantations can be used as learning media for senior high school biology learning. The results are potential to use as learning materials for first grade senior high school. The aspects include object availability and the issues in question; suitability with the learning objectives; aims and purposes; information clarity; exploration guidelines; and the outcome (Handayani, T & Nurhidayat. 2019; Handayani T. Moro, Hendro K.E, 2019; Handayani.T, Muhammad S. Wibowo, Sulisworo.D. 2019)

## CONCLUSION

Based on the research result it can be concluded as follows:

The herb-strata vegetation species found in the Ancient Mujil Volcano Region, Kulon Progo are in total 29 species. The species with the highest Importance Value Index (IV) is *Cynodon dactylon* with 27.91% and the lowest IV comes from *Cenotheca lappacea* with 0.50%. The diversity of herb-strata vegetation species in Ancient Mujil Volcano Region, Kulon Progo is relatively low because the  $H'$  ranges between 0.11-0.14. According to the cluster analysis it is found that the stand grouping pattern is divided into two clusters such as: Cluster 1 and Cluster 2. The abiotic environment factor correlating to the stand grouping pattern of herb-strata vegetation is the soil humidity, soil pH and the light intensity, while the abiotic environment factors which are not correlated to the stand grouping pattern are air temperature, soil temperature, and soil humidity. Based on the descriptive analysis method, this process and research result are potential to be a biology learning source for first-grade high school in the biodiversity of ecosystem level material.

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