



# Implementation of the Blended E-Learning Model in Improving PAI Learning Outcomes for SMA Negeri 1 Mamuju Students

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## ABSTRACT

The objectives of this research are 1) to determine the implementation of blended e-learning media models at SMA Negeri 1 Mamuju. 2) find out the PAI learning outcomes of students at SMA Negeri 1 Mamuju who use the blended e-learning media model. The type of research used is qualitative research, and the research instruments used are observation, interviews, and documentation. The study lasted five months and took place at SMA Negeri 1 Mamuju. The primary data source was from interviews with the principal, 2 PAI teachers (MIPA and IPS), and 25 students of SMA Negeri 1 Mamuju who had medium grades, while the secondary data source was taken from recommended books, journals, or written works. The data analysis technique used is data reduction, data presentation, and conclusion drawing, and the data validity technique used by researchers is the credibility test. The results of this research show that: 1) Implementation of the use of the blended e-learning model at SMA Negeri 1 Mamuju, the learning concept implemented by PAI teachers at SMA Negeri 1 Mamuju in the implementation process was carried out in two models, namely online and face to face, carried out three times. For online and five times for face-to-face learning in six classes in one semester, this is by the composition of the blended e-learning learning pattern. In implementing the blended e-learning model, teachers at SMA Negeri 1 Mamuju implemented it in 3 stages: planning, implementation, and evaluation. 2) PAI learning outcomes of students at SMA Negeri 1 Mamuju using the blended e-learning model, the learning outcomes of SMA Negeri 1 Mamuju students in PAI subjects improve student learning outcomes by looking at the responses of students who like the implementation of blended e-learning. -learning as a method in the learning process can attract students' attention when the learning material takes place in class.

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## 1. INTRODUCTION

Education is a process of maturation and development of physical, biological, and psychological human aspects. Humans' physical and natural elements will undergo a process of development, growth, and aging. Meanwhile, parts of human psychology through education are matured, developed, and made aware.

Online learning is a model used for distance learning implemented since the mid-1960s by open universities in the United States and England. Materials such as lectures and simulations have been made into video form but were then developed using the internet, DVDs, and CDs, making learning using teacher video call facilities with students, making it easier for students to learn and explore knowledge in the internet world.

Education in schools, especially PAI teachers, plays a role in educating children, not only teaching science but also instilling the values of faith in children's souls, educating children to carry out religious values in their lives, and educating children to have noble character. Teachers have a vital role in developing

students because teachers are the second parents for students at school who educate, guide, teach, and train students. This shows that Islamic religious education is essential to apply to children because Islamic religious education is a conscious effort made by educators to prepare their students to believe, understand, and practice the teachings of the Islamic religion through guidance, teaching, and training activities that have been implemented. Designed to achieve predetermined goals.

Humans in today's global era will always be in touch with technology. Technology has influenced humans in their daily lives, so if you are technologically illiterate, you will be late in mastering information and left behind in getting the opportunity to advance. Communication has an essential and fundamental role, especially as society is heading towards the era of information or knowledge society. It is not only society that is influenced by global era technology, but also schools, including elementary schools, middle schools, high schools, and even universities, are experiencing its development. Moreover, increasingly sophisticated technology has become widespread, and the approach to learning has changed in the age of knowledge. People can learn anywhere, anytime, and with anyone. So, teachers must use technology as much as possible in teaching and learning, such as operating and utilizing internet applications, Zoom, Classroom, Google Meet, and other e-learning.

From time to time, the implementation of e-learning during the performance of distance learning media began to feel its shortcomings; students began to complain about difficulties in understanding the lesson material, and parents complained about learning schedules that were not appropriate, such as learning schedules that were supposed to be in the afternoon being postponed to the afternoon schedule, and Many parties are worried about the condition of their children who are no longer disciplined in following lessons due to the lack of direct interaction between students and teachers. In the learning process, the function and role of teachers cannot be shifted by technological developments because apart from teaching science, teachers also educate and accustom students to have good ethics, values, and personality. Apart from that, teachers are also role models for students to shape their character.

However, online learning still requires face-to-face learning, called blended e-learning, combining online knowledge with face-to-face learning. Research conducted by Dziuban, Hartman, and Moskal shows that blended e-learning can improve learning outcomes and increase students' interest in education compared to complete understanding using online learning, and it was found that blended e-learning is better than face-to-face learning.

Blended e-learning is a learning model that keeps up with the times. This learning model is implemented by combining face-to-face or face-to-face learning with computer-based learning, meaning that the learning process is carried out using a technological approach by combining face-to-face learning resources with teachers and those published on computers, cell phones, or mobile phones. , satellite television channels, video conferences, and other electronic media.

Its implementation in the online proportion learning process in blended e-learning is intended to convey content that typically becomes material for discussion. Learning using a blended learning system gives students more opportunities to increase their choice of learning methods using different media and flexible times. In particular, the technology used in the blended process involves online learning. However, online communication can provide various forms of interaction that are more reflective than just interactions carried out in the classroom. In face-to-face learning, physical interaction can help make it easier to resolve various misunderstandings and make students feel comfortable with each other when they communicate online.

Understanding the background above, by initial observations made by researchers at SMA Negeri 1 Mamuju, is proven by the existence of complaints from both students and their parents regarding the implementation of e-learning, which is no longer effective. So, the teachers at SMA Negeri 1 Mamuju use blended e-learning as a solution to this problem because, according to the teachers at SMA Negeri 1 Mamuju, through blended e-learning, teachers can still interact with students and continue to carry out their function as teachers and can take advantage of technology that is still through the use of e-learning.

SMA Negeri 1 Mamuju not only carries out face-to-face learning, but this school also utilizes technology-based learning or e-learning. So, students' needs can still be met by interacting or communicating with teachers directly or surfing the internet via gadgets or computers to explore learning material.

Therefore, this research aims to determine the implementation of the blended e-learning model in improving PAI learning outcomes for SMA Negeri 1 Mamuju students.

## 2. METHOD

The type of research used is qualitative research, and the research instruments used are observation, interviews, and documentation. The study was for five months and took place at SMA Negeri 1 Mamuju. The primary data source was from interviews with the principal, 2 PAI teachers (MIPA and IPS), and 25 students of SMA Negeri 1 Mamuju who had medium grades, while the secondary data source was taken from recommended books, journals, or written works. The data analysis technique used is data reduction, data presentation, and conclusion drawing, and the data validity technique used by researchers is the credibility test.

### 3. RESULTS AND DISCUSSION

#### 3.1. Analysis of the Implementation of the Use of Blended E-Learning Model Media at SMA Negeri 1 Mamuju

Implementation is an action or implementation of a plan prepared carefully and in detail. Implementation is carried out after the planning is considered perfect. According to Nurdin Usman, implementation refers to activity, action, action, or the existence of a system mechanism. Implementation is not just an activity but an activity planned to achieve a desired goal.

Learning implementation can be interpreted as implementation or application in learning. In general, learning implementation is an action or implementation of a plan prepared carefully and in detail in the learning process. In learning activities, there are three stages, namely: Pre-instructional stage, Instructional stage, evaluation stage, and follow-up.

The term blended e-learning is also known as the hybrid learning concept, which combines face-to-face, online, and offline learning, but recently it has changed to blended e-learning. Blended means a mixture or combination, while e-learning is learning. According to Graham, blended e-learning is a blend or mix of various learning, namely combining face-to-face learning with traditional learning concepts, which educational practitioners often carry out through delivering material directly to students with online and offline learning, emphasizing technology use.

Based on the research objectives, the research results describe the implementation of blended e-learning media models at SMA Negeri 1 Mamuju. Find out how the SMA Negeri 1 Mamuju school, both madrasa heads and teachers, start from preparing, implementing, and evaluating the current process of using blended e-learning. Interviews were conducted on February 27, 2023, and ended March 1, 2023.

Implementing blended e-learning at SMA Negeri 1 Mamuju is one solution after the pandemic. Learning can take place offline, even with limited capacity. Blended learning is also learning that has a positive impact on both educators and students and can also keep up with educational developments. So far, learning with blended e-learning has always been well received by education, as researchers found that learning with combined e-learning students and parents of students can accept it well and participate in learning enthusiastically. Blended e-learning is also learning that develops innovation. Apart from that, blended e-learning can encourage students to become more independent by utilizing various sources that can broaden students' insight.

Based on research conducted by researchers through interviews, it was stated that the reason for using the blended e-learning learning method from the combined e-learning theory itself was applied because, initially, the implementation of blended e-learning was an effort by the government to face the era of the industrial revolution 4.0, the government encourages the use of e-learning methods in the learning system at the secondary school level and at the tertiary level.

With instructions from the government to present an independent curriculum, SMA Negeri 1 Mamuju then implemented a digital-based learning system or e-learning. However, in its implementation at SMA Negeri 1 Mamuju, they still need to implement complete e-learning but combine it with face-to-face or regular learning. Called conventional learning patterns. From this, researchers can conclude that the learning pattern implemented by SMA Negeri 1 Mamuju is a blended e-learning model, namely a learning pattern that combines face-to-face or conventional learning patterns with digital-based learning patterns or e-learning.

Apart from that, blended e-learning was implemented because they saw the difficulty of online learning due to the pandemic, so finally, schools took the initiative to carry out learning from home through blended e-learning, with blended e-learning helping teachers carry out their obligations as teachers. However, because blended e-learning has a good impact on learning at school, blended e-learning continues to be used today.

The blended e-learning model at SMA Negeri 1 Mamuju is implemented in all classes. This will show the school internet's role in education and improve a better learning management system. So, PAI teachers at SMA Negeri 1 Mamuju plan the implementation of learning (RPP) by determining methods, media, and strategies and adapting them to the learning objectives. The Islamic religious education teacher at SMA Negeri 1 Mamuju, in implementing the blended e-learning learning model, prepared two different lesson plans because online and offline learning uses other methods, strategies, and media.

Furthermore, PAI teachers at SMA Negeri 1 Mamuju must also determine applications that can support their learning before carrying out online education. In deciding and choosing the application to use, PAI teachers at SMA Negeri 1 Mamuju consider several things, such as prioritizing students' abilities and educators' skills. Apart from that, choose an application that doesn't require a lot of money and has a strong signal. The applications you use most often are WhatsApp and Google Classroom. However, PAI teachers at SMA Negeri 1 Mamuju use WhatsApp more often because it is simple.

So, many things need to be considered before carrying out a learning activity. Such as selecting a learning model, making a learning implementation plan (RPP), evaluating methods, strategies, learning

directions and objectives, the media used, and considering the applications used to carry out online and offline learning.

The results of interviews conducted by researchers show that the learning concept implemented by PAI teachers at SMA Negeri 1 Mamuju in the implementation process was carried out in two models, namely online and face-to-face, three times online or five times for face-to-face learning in six classes. One semester, this is by the composition of the blended e-learning learning pattern, namely 75% for traditional or face-to-face learning patterns and 25% for online learning. So, from the implementation of combined e-learning theory in improving learning capabilities in PAI subjects at SMA Negeri 1 Mamuju in the digital era, several points can be analyzed, for example, the blended e-learning learning pattern carried out at SMA Negeri 1 Mamuju in the learning pattern carried out at SMA Negeri 1 Mamuju allocates three meetings for e-learning and five times for face-to-face learning which is carried out in 12 classes traditional education and 25% for e-learning.

Implementing blended e-learning at SMA Negeri 1 Mamuju, especially in PAI subjects, also uses a 40/60 composition. This allocates 40% of the time for face-to-face learning in class and 60% for online learning, which is used for discussions by reviewing material presented or assignments. According to the instructions in the guidebook, there is more online learning than face-to-face learning in class.

Looking at implementation theory it can improve student learning outcomes in the digital era. This can be proven in the blended e-learning learning pattern, which combines e-learning and face-to-face learning patterns. In one's learning capability, there are several interconnected points, namely verbal information, intellectual skills, cognitive strategies, attitudes, and motor skills, in applying the five aspects of capability in the blended e-learning theory.

Some of these aspects are included in blended e-learning in an e-learning-based learning pattern, namely cognitive aspects and verbal information because these two aspects are more inclined towards e-learning. This is due to the existence of an e-learning learning pattern, as researchers found that the way places more emphasis on assignments from PAI teachers at SMA Negeri 1 Mamuju and asking questions from students after studying the material that has been provided. This shows that verbal information is in the form of knowledge that students must master. According to Semler in Hadion Wijoyo et al:

Blended learning joins the best parts of internet learning, organized up close and personal exercises and certifiable practice. Online learning systems, classrooms, training, and on-the-job experience have significant drawbacks. The blended bearing approach assesses the strengths of each to counter the others' weaknesses.

Blended learning combines the best parts of Internet learning, face-to-face learning, and verifiable practice. According to Driscoll in Ali, four concepts of blended e-learning are identified: 1) Combining or mixing web-based technology modes, for example, live virtual classes, collaborative learning, streaming video, audio, and text. 2) Combining pedagogical approaches, for example, cognitivism, constructivism, and behaviorism, to produce optimal learning with or without technology. 3) Combining all forms of learning technology, for example, videotape, CD-ROM, and web-based film training led by a face-to-face instructor. 4) Mixing or mixing actual learning technologies to create harmonious learning and work effects.

Besides that, blended e-learning-based learning makes it easier for students to access and learn whenever and wherever they want to know. This is due to a good and efficient technology utilization system because the learning is well systemized in WA accounts, classrooms, Google form, Zoom, etc. However, in the learning process, it is not only the knowledge aspect that students must master. But other elements must be learned, such as spiritual and social attitudes and skills, so that students become good people in hard and soft skills.

Therefore, blended e-learning still focuses on face-to-face learning patterns. This is so students can behave well and have adequate skills in the digital era. The learning levels that fall into the blended e-learning learning pattern in the face-to-face learning category are intellectual skills, motor skills and attitudes, cognitive aspects, and verbal information. The five elements of learning capability according to the overall model are included in the learning pattern. This is because, in the face-to-face learning pattern, the teacher also provides verbal information in the form of scientific knowledge. However, what is outside of e-learning is direct contact or relationships with teachers and students.

Face-to-face learning itself is by the results of research that has been conducted showing that the role of a teacher is vital because the teacher's role is not only to transfer the knowledge they have but also to provide an excellent example to their students.

Traditional or face-to-face learning indirectly provides excellent opportunities for teachers to carry out their role by providing examples for students. This aims to ensure that students can imitate and emulate the good attitudes that exist in their teachers. In other words, a teacher is a central figure in learning, and different social perspectives can be developed through discussion and respecting each other's income. Apart from the attitude aspect of face-to-face learning patterns, which also involve skill aspects, the research analysis results show that face-to-face learning involves skill aspects. Teachers in secondary school environments usually use assignments outside of school, such as practical assignments. In this case, students are expected to be able to identify a problem and provide a new and contextual solution accepted by the

entire community.

Applying the blended e-learning learning model in Islamic Religious Education at SMA Negeri 1 Mamuju is an innovation found to overcome the learning conditions at SMA Negeri 1 Mamuju, which are getting worse daily after the COVID-19 pandemic has struck. The background is the teachers' concerns regarding students' condition when learning is only carried out continuously online. Because teachers feel that more than online learning is needed to maximize students' understanding of the material presented. In the research that has been carried out, researchers have found that the implementation of blended e-learning at SMA Negeri 1 Mamuju according to the results of the research that has been carried out has three stages, namely:

First, in the pre-instructional stage (initial activities), the Islamic Religious Education teacher at SMA Negeri 1 Mamuju begins the lesson by providing an introduction, such as asking how the students are doing, taking attendance, asking where the discussion at the previous meeting was, asking the students which material they don't understand, and repeating a little of the material discussed at the last meeting.

This stage aims to determine how far students' understanding has progressed regarding the material presented at the previous meeting before continuing to discuss the following material. Apart from that, teachers also need to know the condition and condition of their students by asking how they are doing and taking attendance.

Second, namely, the instructional stage (core activities), is the learning implementation stage. The implementation of offline learning at SMA Negeri 1 Mamuju is carried out by reducing the number of students who enter one lesson hour, namely by dividing it into two sessions. In this case, offline learning in Islamic Religious Education subjects at SMA Negeri 1 Mamuju uses lecture and demonstration methods. The lecture method is used to explain written material. The demonstration method is used for material that requires practice in presenting it, such as funeral prayers, ablution, and tayamum. In one hour of class, the time given is only 45 minutes, which is relatively short if used for learning. With this, Islamic Religious Education teachers use strategies by explaining directly the discussion points so that the material is still delivered well, even in a reasonably short time.

Such a strategy is quite adequate, as proven by many students who like learning using this strategy. It can also be seen that students are more enthusiastic and enthusiastic when learning takes place. Although some are still less excited about studying, some are sleepy, and some are chatting with their friends sitting next to them. Due to these learning problems, teachers were moved to restore their students' enthusiasm for learning by being told that sleepy students were told to wash their faces first, and students who were chatting with their seatmates were moved to a seat some distance away from them.

Implementing online learning at SMA Negeri, 1 Mamuju uses a teacher-centered strategy. Delivery of material is done by the teacher sending the material thoroughly and concisely. Then, the students are asked to read and understand it; in the middle of the time, the teacher will ask about their understanding of the material they have read. Even though only a few people responded and answered correctly, at least some students were still enthusiastic and enthusiastic about following the lesson.

Third, namely the evaluation and closing stages, evaluating Islamic Religious Education learning at SMA Negeri 1 Mamuju using pre-test (before starting learning), post-test (after learning), daily tests, and mid-semester and end-semester assessments. Thus, apart from preparing learning tools, teachers must also prepare teaching materials related to essential points that will be discussed during face-to-face learning in class and also prepare learning equipment or media that will be used to support teaching and learning activities, including online learning. In this regard, PAI teachers at SMA Negeri 1 Mamuju created a WhatsApp group for further interaction with students and created a PAI group on Google Classroom to deliver reinforcement material and assignments.

Based on the data described in the results of this research, the implementation of blended e-learning-based PAI learning at SMA Negeri 1 Mamuju can have a positive impact in the form of independent learning. Several independent learning attitudes were found in students when blended e-learning took place, namely: (a) being free, (b) self-confidence, (c) discipline, (d) responsibility, (e) creativity and initiative, and (f) self-control. Thus, PAI teaching and learning activities using the blended e-learning model in Islamic Religious Education subjects are compelling. In the context of learning implementation, it is closely related to learning methods, learning media, learning design, and technology, as in learning planning.

The conclusion from the analysis of implementing the blended e-learning model at SMA Negeri 1 Mamuju in the 2022/2023 academic year is the increase in students' motivation, especially in learning Islamic Religious Education. This can be seen through student learning evaluations and student attendance during the learning process. Various research studies show that blended e-learning has a high impact on results compared to online and face-to-face learning because blended e-learning combines or mixes conventional education with traditional knowledge by developing various learning media. Blended e-learning is an alternative solution to overcome the weaknesses of online learning and face-to-face learning to produce a series of education that is effective, efficient, and enjoyable for students without throwing away old learning theories. Students who still need to be technologically literate can be taught at school by applying technology

to speed up and simplify the learning process.

### 3.2. Analysis of PAI Learning Results of Students at SMA Negeri 1 Mamuju Using Blended E-Learning Model Media

Assessment is essential in learning, as is the case with learning based on the blended e-learning model. Based on observations made by researchers, evaluations carried out by Islamic Religious Education class teachers include online and face-to-face assessments. Teachers always observe students' attitudes or behavior in the online learning process through WhatsApp groups and video calls. Starting from the presence of students, the discipline of students when active in the WhatsApp group according to the specified time, the activeness of students during the learning process, and the student's responses. In face-to-face learning, attitude assessments are also carried out regarding the learning process in a designated place, both during discussions, expressing opinions, and other activities that can be observed.

Attitude assessments are also carried out during the online and face-to-face learning process. So before starting learning, teachers usually remind them that students' attitudes in the learning process will be assessed. Then, there is also the use of Google Forms to evaluate students' understanding of the material they have studied. In the Google form, there are questions regarding the learning that has been done.

In every lesson, the teacher should try to know the results of the learning process. The importance of understanding the results can be a reference for teachers to find out to what extent the learning process that has been carried out can develop students' potential. In other words, if the learning achieved good results, the teacher succeeded in the learning process, and vice versa. One way to find out the results achieved by teachers in the learning process is through evaluation. Evaluation is a systematic process of collecting, analyzing, and interpreting data to determine whether a student has achieved the knowledge or skill targets formulated in the teaching objectives. Evaluations carried out by teachers include learning evaluations.

Evaluation of the teaching implementation process can be seen from, among other things, including students' interest or attention in following lessons and students' activeness or participation during the learning process. A teaching and learning process based on good will encourage students to learn better than learning without interest. Interest arises when students are interested in something because it suits their needs or feels there is something meaningful for them to know. However, it will also be challenging to succeed in learning without active drawing. Interest can be implied through attention and participation in an activity. Students interested in a subject pay greater attention to the issue and become involved in studying something they are interested in.

Apart from that, Islamic Religious Education teachers also assess students' discipline in collecting assignments. So, students who submit work according to the specified time will be different from students who submit assignments beyond the time limit. Meanwhile, skills assessment can be observed when carrying out practical activities at school. It can also be seen from students' practice based on the assignments given, which are uploaded via online media or collected by the teacher during face-to-face learning. Teachers also continue to have an attitude assessment journal, which contains the teacher's notes regarding students' attitudes in face-to-face and online learning, which the teacher observes in detail. Meanwhile, skills assessment is followed by teachers through practical activities carried out during face-to-face learning. Teachers also carry out checks on the performance or product results that students have made on specific tasks.

Based on field research, researchers saw that many students were enthusiastic and active in the learning process. This can be seen when the teacher conducts questions and answers with the students. Then, the students scramble to answer. Although some were late for class during the first period, not focused and not paying attention to the teacher's explanations, some were sleepy, and some were chatting with classmates. For this reason, teachers always try to restore students' concentration and activeness in learning so that learning can be conveyed well and students can also receive lessons from the teacher. Therefore, the teacher reprimands them.

Remind students to leave early and prepare their needs at night so they are not late, move seats for students who like to chat, and occasionally reprimand sleepy students. If they are still tired, the teacher sends students out to get ablution water. In this way, students will pay more attention to the teacher's lessons so that active and effective learning can be achieved and they can understand the subject matter.

The second component of blended e-learning is online learning. Online learning at SMA Negeri 1 Mamuju does not patent the applications that must be used in online education, but the school has provided several application options for online learning that teachers can use, and teachers are free to choose the applications they can master themselves. The Principal of SMA Negeri 1 Mamuju also allows using other applications to support online learning. Therefore, each teacher may add additional applications to support their learning, for example, WhatsApp groups, YouTube, and others.

Likewise with the researcher's observations in the field, when face-to-face learning was carried out, students were active and enthusiastic about taking part in the lesson, shown by enthusiastically answering questions from the teacher at the beginning and end of the study, and they also actively asked if there was

anything they did not understand.

Based on the results of interviews that have been conducted, researchers can analyze the learning outcomes of SMA Negeri 1 Mamuju students in PAI subjects by looking at the responses of students who like the implementation of blended e-learning as a method in the learning process that can attract students' attention during the material. Learning takes place in class.

From the interviews with 26 students who were samples or subjects, researchers could see that 12 students liked applying the blended e-learning model in the learning process. Meanwhile, ten students wanted the combined e-learning learning model. This still showed a positive response, which influenced their learning outcomes. And those who didn't like blended e-learning were four students. This indicates that implementing the combined e-learning model in the PAI learning process can improve student learning outcomes.

From the results of interviews, which have also been conducted orally with several students, conclusions can be drawn, including 1) Students feel more effective following the blended e-learning model, which uses the Google Form and Google Classroom applications because students do not have to record the material. Learning, but they can immediately see it applied in the application used by teachers to send material files. 2) Students feel they can more easily understand the material because they can ask questions directly at face-to-face meetings and have the teacher answer them immediately. 3) Students feel more structured and focused on the learning process because the teacher can provide materials and assignments promptly according to learning hours. So that students can be motivated and enthusiastic to do their assignments so they are on time in submitting them. 4) Students feel happy because they can learn new things, including how to use technology well.

Based on this analysis of students' learning outcomes using the blended e-learning learning model, according to Nana Sudjana, student learning outcomes are essentially changes in behavior resulting from learning in a broader sense, including cognitive, affective, and psychomotor aspects. Several aspects that are included in blended e-learning in the e-learning-based learning category are mental aspects or cognitive strategies and verbal information; these two aspects are more inclined towards e-learning because e-learning learning patterns, as in research findings, emphasize assignments from teachers and question and answer discussions with students in the form of material that has been distributed and explained. This shows that verbal information is in the form of knowledge that students must master.

Learning outcomes are evidence of students' success, where each learning activity can cause a unique change in themselves. In this case, learning includes process skills, activeness, motivation, and learning achievement. This is evident from the semester one assessment sheet of PAI teachers at SMA Negeri 1 Mamuju, showing that the semester one grades of class Likewise, semester two scores show the scores of students whose assignment scores, UTS and UAS scores show scores of 70 and above, 80 and above and 90 and above with the learning model using the blended e-learning model. Thus, the discussion indicates that the effectiveness of the combined e-learning model can make the learning experience more exciting and eliminate students' boredom in the learning process.

The main factors that support the success of blended e-learning must consider pedagogy and instructional design related to the best way to utilize technological tools, how to facilitate interaction between students, how to motivate students, and how to organize material that is best delivered via the internet compared to face-to-face. The blended e-learning learning model is practical to implement, but there are still shortcomings.

The combination of face-to-face learning and blended e-learning not only equips students with the ability to understand the material, but more than that, this learning model can improve communication and interpersonal skills, problem-solving, critical analysis, and other skills students need. With the ease of technology, the limitations of class meetings can be solved with blended e-learning. Blended e-learning is not as simple as a combination of direct learning and online teaching, but more than that, it is an element of social interaction. When students are required to collaborate more often online, they share problems at a general level. Diverse students then form their problem solutions. With blended e-learning, Islamic religious education learning, which used to be monotonous and one-way, will become exciting and interactive, and everyone will be involved in fun learning.

The results of research that researchers have conducted also found that factors support and hinder the application or implementation of the blended e-learning media model in improving PAI learning outcomes for SMA Negeri 1 Mamuju students. This cannot be separated from the influencing factors influencing the success of teaching and learning activities. As previously discussed, there are two influencing factors: internal and external.

Internal factors include physical factors (physiology), psychological factors, and physical and mental development factors. Meanwhile, external factors include the natural environment, socio-cultural environment, and non-social or instrumental environment. Internal factors hamper the blended e-learning Islamic Religious Education at SMA Negeri 1 Mamuju are the decline in students' enthusiasm and motivation to learn. Apart from that, the length of online learning makes the habits of previously disciplined students

less disciplined, especially at the start of class in the morning, because, in online education, students do not have to prepare themselves in advance like during offline learning, this makes students get used to this and When offline learning is carried out, quite a few students are late for various reasons. Some need to remember. Some say they accidentally overslept.

Due to this problem, the principal and teachers of SMA Negeri 1 Mamuju were moved to overcome it by frequently reminding students, starting one day before the starting day, in the evening, and even in the morning before they were scheduled to enter face-to-face classes. Meanwhile, to overcome the problem of student enthusiasm and motivation to learn, Islamic religious education teachers overcome this by consistently inspiring students at the end of each lesson. This is done routinely by Mr and Mrs teachers. Apart from that, Islamic religious education teachers also contact the parents of students who have problems to find out the student's background or reasons for the pain. The solutions implemented by the Islamic religious education teacher effectively overcome obstacles that hinder the teaching and learning process at SMA Negeri 1 Mamuju.

External factors that hinder the process of blended e-learning activities in Islamic Religious Education at Mamuju State High School are network problems and money to buy internet quota. Network problems are the main problem that hinders the online learning process. The condition of the network in the teacher's environment is good, but it does not necessarily mean that the state of the network in the student's environment is also good. Meanwhile, the factors that support the successful implementation of the blended e-learning learning model in Islamic Religious Education at Mamuju State High School include the use of appropriate strategies in learning, adequate facilities and infrastructure, and the most important thing is the student's enthusiasm for learning in participating in learning.

Conclusions from the researcher's analysis of supporting and inhibiting factors. Keeping factors for implementing the blended e-learning model in PAI subjects at SMA Negeri 1 Mamuju are adequate facilities and infrastructure, use of methods, and use of appropriate applications in online learning. Meanwhile, the inhibiting factor, namely blended e-learning in Islamic Religious Education, is the internet network problem. Despite the application or implementation of the blended e-learning learning model in Islamic religious education subjects at SMA Negeri 1 Mamuju, most PAI teacher and student interviews said that the performance of the combined e-learning model had an impact on increasing students' learning enthusiasm and motivation. Meanwhile, students also prefer face-to-face learning to online learning because, in this learning, students and teachers can interact and meet directly. It will be easier if students want to ask questions or provide arguments during education.

Apart from that, students' understanding of the material will also be more straightforward. Therefore, apart from increasing students' learning enthusiasm and motivation, implementing the blended e-learning model also affects student learning outcomes, especially in Islamic religious education (PAI) subjects.

Linked to the theory of blended e-learning in the enriched-virtual model and the characteristics of blended e-learning, blended e-learning can help teachers or students get a learning environment that suits each student's learning style. This explanation can stimulate student learning achievement if the combined e-learning model is implemented well. Therefore, it is unsurprising that many schools and universities have implemented or are considering the blended e-learning model. However, it must still be noted that the success of blended e-learning takes time to happen. Apart from that, paying attention to assessments in blended e-learning is, of course, different from face-to-face learning assessments. Assessment in blended e-learning includes face-to-face and online learning. Practical techniques that can be used to assess blended e-learning are as follows: 1) Providing assessments in general, communicating continuously with feedback to students as a means of adding assessment to the learning itself. 2) Include dynamic interactions defined by group work, collaboration, and high levels of interaction through discussion. 3) Modify traditional assessment tools such as essays, answers to questions from discussions, and projects that require demonstration of acquisition and problem-solving abilities, and. 4) Use of alternative assessments such as performance assessments using e-portfolios.

The use of blended e-learning learning methods significantly impacts the learning process. This can be seen from implementing learning by Islamic religious education teachers who use combined e-learning media. This makes it easier for students to re-access learning completed weeks ago. This blended e-learning can also be accessed anywhere, making it easier for teachers to monitor students submitting assignments. Apart from that, the teacher gives lessons to measure the extent of students' understanding of the explanation of the material provided by the teacher.

The implementation of the blended e-learning learning model at SMA Negeri 1 Mamuju is an alternative way used to overcome the learning conditions at SMA Negeri 1 Mamuju, which are increasingly unfavorable due to the pandemic outbreak that has hit throughout the world and hampered all fields, especially in the field of education, which until now we still feel it.

Learning using blended e-learning has a significant impact on students. Their attitude in class can prove it. Some students who don't bring cell phones have more difficulty than friends who bring cell phones. Therefore, students who do not bring cellphones must write on paper or books, while others directly apply



the blended e-learning.

#### 4. CONCLUSION

This study concludes that the implementation of the use of the blended e-learning media model at SMA Negeri 1 Mamuju with the learning concept carried out by PAI teachers at SMA Negeri 1 Mamuju in the implementation process was carried out in two models, namely online and face to face, carried out three times for online or online and five times for face-to-face learning in six classes in one semester. So, several points can be analyzed from the implementation theory in improving learning capabilities in PAI subjects at SMA Negeri 1 Mamuju in the digital era. For example, the blended e-learning learning SMA Negeri 1 Mamuju learning pattern carried out at SMA Negeri 1 Mamuju allocated three meetings for e-learning and five times for face-to-face learning in six classes in one semester. This is by the composition of the blended e-learning model learning pattern, namely 75% for traditional learning patterns and 25% for e-learning learning.

PAI learning outcomes of students at SMA Negeri 1 Mamuju Using the Blended E-Learning Media Model in implementing the blended e-learning model in the PAI learning process can improve student learning outcomes.

#### 5. IMPLIKASI

This research discusses implementing the blended e-learning media model, especially in improving PAI learning outcomes for SMA Negeri 1 Mamuju students. There are still many things that could be improved in this research. Therefore, the researcher asks for guidance to study the science that discusses implementation in more depth. Blended e-learning model media improves PAI learning outcomes for SMA Negeri 1 Mamuju students.

Things that need to be improved in this research for further research are that researchers must examine more deeply what things are involved in implementing the blended e-learning media model in improving PAI learning outcomes for SMA Negeri 1 Mamuju students.

#### 6. REKOMENDASI

Research related to implementing the blended e-learning media model in improving PAI learning outcomes for SMA Negeri 1 Mamuju students provides an interconnected relationship between teachers and students. For this reason, it is necessary to implement good things in everyday life because it is exciting and improves the learning outcomes of students who are in the golden age.

In this research, carrying out the role of a teacher directly will have a good influence on students because the efforts made to improve student learning outcomes directly provide an example of the skill of being a teacher, not only as an example to emulate but also the teacher's skill in improving growth and development. Student achievement.

As a student, you should be extra in your studies, both at home and school, so that you can become a better student in the future, not only in terms of attitudes or character values but also in improving your learning outcomes to achieve your goals or expectations. Planned.

In connection with the various limitations of this research, this research still has many things that could be improved. Therefore, in future research, it is hoped that it can produce something more optimal and of better quality.

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