Islamic Religious Education Learning Innovation Based on Blended Learning in the Digital Era: Case Study at SD Negeri Kunci 02 Sidareja

*Mungalim[1,] Choeroni[2], and Asmaji Muchtar[3]

[1,2,3] *Sultan Agung Islamic University Semarang*

Corresponding author:
mungalim.mungalim@belajaragama.id

Abstract. This study aims to examine the learning innovations of Islamic Religious Education (PAI) based on blended learning for grade V students at SD Negeri Kunci 02, Sidareja District, Cilacap Regency. The blended learning model combines face-to-face and online learning by leveraging digital technology, creating a learning experience that is flexible, interactive, and adaptive to the challenges of the digital age. This study uses a descriptive qualitative approach with data collection techniques through observation, interviews, documentation, and learning outcome tests. The results of the study show that: 1) the implementation of blended learning at SD Negeri Kunci 02 is well carried out. Teachers use various digital media such as learning videos, Google Classroom, and WhatsApp Groups. Face-to-face learning is used to reinforce concepts, while online learning is used to deepen material and students' independent activities. 2) Factors supporting success include teachers' readiness in digital literacy, the availability of technology devices in schools, and parental support. However, there are also obstacles such as limited internet access at students' homes, increased teacher workload, and low digital literacy among some parents. 3) In terms of effectiveness, the implementation of blended learning has been proven to improve student learning outcomes. Average student scores increased significantly, and affective and psychomotor skills also developed. Students are more active in online discussions, show enthusiasm for learning, and apply religious values in daily life. Thus, blended learning not only improves academic understanding, but also supports the formation of religious character. This study concludes that blended learning is an effective and relevant learning innovation for PAI learning in elementary schools, and has great potential to be applied more widely in the context of digital-based education.

Keywords: learning innovation; Islamic Religious Education; blended learning; digital era

INTRODUCTION

The development of information technology in the digital era has brought significant changes in the education system, including in the learning strategy of Islamic Religious Education (PAI). Education no longer only takes place in conventional classrooms, but has transformed following technological advances by utilizing online learning. One of the widely used approaches is blended learning—a learning model that combines face-to-face learning and online learning in one complementary system (Graham, 2006). This model offers flexibility in the management of study time and provides a wider interactive space for students to actively participate.

In this digital era, an educator is required to continue to innovate so that the learning process remains relevant, interesting, and effective. Mastery of educational technology is key, including the use of learning management systems (LMS) such as Google Classroom, Moodle, or Edmodo. Additionally, interactive apps such as Kahoot, Quizizz, and Mentimeter can be leveraged to increase student participation. Learning innovation is key to the challenges of modern education. The use of new methods, technologies, and approaches is more relevant, integrated, and effective. The main goal of this innovation is to create an engaging, more personal and meaningful learning experience for all students. In other words, keeping in mind that it is fraught with future changes, learning innovation is not only a choice, but also an urgent need to create a superior generation that is willing to compete globally. To help innovate in the world of Education.

Learning innovation is key to the challenges of modern education. The use of new methods, technologies, and approaches is more relevant, integrated, and more effective. The main goal of this innovation is to create an engaging, more personal and meaningful learning experience for all students. In other words, if we consider it full of future changes, innovation learning is not only a decision-making process, but also an urgent need to create a great generation that is willing to compete globally. Create engaging and interactive learning experiences to support innovation in education. Technology, a student-centered approach to learning, and the use of creative elements can improve student learning outcomes.

For example, some students respond more to visual learning, while others prefer auditory and kinesthetic learning. Innovation opens up opportunities to meet these diverse needs. Innovation can bring new teaching methods that are more effective when transferring knowledge. A more adaptive approach in context will help students to better understand and memorize information. Innovation in learning often emphasizes the development of 21st-century skills such as critical thinking, creativity, cooperation, and communication. It helps students prepare for ever-changing global requirements as they innovate. Innovations in technology in particular have opened the door to long-term lessons and online learning. This can improve not only the student learning experience but also the efficiency of the institution's management, especially for those who are far away or have limited innovation mobility. Using a learning management system, data analysis, and management automation can save time and resources.

Analysis of problems that may arise in the implementation of Islamic Religious Education Learning Innovation Based on Blended Learning in the Digital Era for Grade V Students at SD Negeri Kunci 02, Sidareja District, Cilacap Regency, Central Java Province in 2024/2025: 1. Infrastructure and Technology Problems. a). Limited Internet Access: Not all students have stable internet access, especially in areas that still experience network limitations. b). Availability of Digital Devices: Students from underprivileged families may not have devices such as smartphones, tablets, or laptops to participate in online learning. c). Technology Support in Schools: Schools may not have adequate facilities, such as computer labs, Wi-Fi, or Learning Management Systems (LMS). 2. Teachers' Readiness in Using Technology. a). Lack of Teacher Training: Not all teachers have the skills to manage digital-based learning and e-learning technology. b). Difficulties in Compiling Interactive Materials: Teachers may have difficulty in creating material that is interesting and in accordance with a blended learning-based curriculum. 3. Challenges in the Learning Process. a). Lack of Face-to-Face Interaction: Online learning can reduce direct interaction between students and teachers, so it can affect the understanding of religious concepts in depth. b). Student Participation Rate: Not all students have high motivation to learn when learning online, so there is a risk of their lack of activeness and engagement. 4. Evaluation and Assessment of Learning Outcomes. a). Difficulties in Assessing Student Comprehension: Blended learning-based learning requires a different assessment method than conventional learning, especially in measuring the affective and spiritual aspects of students. b). Honesty in Online Exams: There is a risk of cheating in online-based exams if not properly supervised.

An innovative learning environment will encourage students' creativity in exploring their potential in PAI learning. Factors such as lack of social interaction, lack of direct supervision from teachers and parents, or lack of practical experience can affect students' interest and enthusiasm in learning and applying religious concepts. This also causes changes in students' ethics and mentality during distance learning, because teachers are unable to control and interact by seeing directly what students do during class hours. Sometimes students are just absent virtually but are not active when the learning process begins. Effective education involves accommodating students' different learning styles. Learning style refers to an individual's preferences and tendencies in processing, understanding, and remembering information. Each student has a unique learning style, such as visual, auditory, kinesthetic, or a combination of the three. These differences can affect the way students interact with learning materials and understand them effectively.

Blended learning has many definitions, one of which is given by Bielawski and Metcalf in Husamah in the Declaration which states "Blended learning is a learning model that combines face-to-face learning with online learning, where the concept is in the form of material that can be delivered in class and online (Simarmata, 2018).

In this pandemic condition, e-learning is the mainstay strategy of educators in the PJJ process because e-learning has many advantages, but in this case the researcher hopes that learning using e-learning will continue to be carried out to support innovation in learning activities in Islamic Religious Education subjects at SD Negeri Kunci 02 in Class V (Five).

Not all students have access to digital devices such as smartphones, laptops, and tablets, especially for students from families with poor financial situations. In addition, the school's technological infrastructure such as internet networks and supporting devices is not enough. Teachers, students, and parents may not yet understand how to use technology for learning. While it can be challenging for teachers to create interactive digital materials, students and parents can open up and understand barriers when accessing materials delivered online.

In the context of PAI learning, the implementation of blended learning is both a challenge and an opportunity. Challenges arise from the aspect of infrastructure, the readiness of human resources (teachers and students), to parental support. On the other hand, blended learning is also an opportunity to improve the quality of religious education through a more contextual and modern approach, as well as shaping students' religious character through digital media that is familiar with their daily lives (Garrison & Kanuka, 2004).

SD Negeri Kunci 02 Sidareja District, Cilacap Regency, is one of the elementary schools that tries to apply the blended learning model in PAI learning for grade V students. However, the implementation of blended learning cannot be separated from obstacles such as internet limitations, teacher readiness, and parental involvement in accompanying children during online learning.

Various previous studies have shown that the application of blended learning has a positive impact on improving the quality of learning, including in Islamic Religious Education subjects. Masruroh Lubis (2020) in his research explained that the use of blended learning combined with e-learning media is able to increase the flexibility of the teaching and learning process, strengthen interactivity between teachers and students, and foster students' religious character more effectively. In addition, Chaeruman (2020) also stated that the blended learning model is a strategic solution in bridging the limitations of learning space and time, especially during the adaptation period of new habits. According to him, blended learning is able to build contextual, collaborative, and student-centered learning. Another relevant research was conducted by Wijaya (2021), who found that the blended learning approach is not only able to significantly improve student learning outcomes, but also supports the development of digital literacy skills that are urgently needed in the current era of technological transformation.

This study aims to analyze: (1) how to implement blended learning in PAI learning in SD Negeri Kunci 02, (2) what are the supporting and inhibiting factors, and (3) how effective this model is in improving learning outcomes and shaping students' religious character. The findings of this study are expected to be a reference for policy makers and education practitioners in developing innovative learning strategies that are in accordance with the demands of the times

RESEARCH METHODS

This study uses a descriptive qualitative approach, which aims to describe in detail and in depth the implementation of blended learning in Islamic Religious Education (PAI). This approach was chosen because it was able to provide a contextual picture of the learning process and dynamics in the field, especially at SD Negeri Kunci 02, Sidareja District, Cilacap Regency. This qualitative research design provides flexibility for researchers to explore teacher perceptions, student experiences, and challenges faced in the application of blended learning.

The research subjects consisted of PAI class V teachers, school principals, class V students, and some parents of students. The data collection technique is carried out by purposive sampling, which is to select subjects based on certain criteria that are relevant to the focus of the research. Data collection techniques include observation, in-depth interviews, documentation, and learning outcome tests. Observations were made during the face-to-face and online learning process, to see student interaction, involvement, and media use. Interviews were conducted with PAI teachers and school principals to explore information related to the implementation of blended learning strategies, the obstacles faced, and the results obtained.

Documentation data in the form of learning records, digital materials, student assignment results, and attendance at online and face-to-face activities. The learning outcome test was used to measure changes in students' cognitive abilities after participating in blended learning, by comparing scores before and after the application of this model.

Data analysis is carried out through the Miles and Huberman model which includes three stages: data reduction, data presentation, and conclusion drawn. Data reduction is carried out by sorting out important

information that is relevant to the research objectives. The presentation of data is carried out in the form of narrative and thematic. Meanwhile, conclusions were drawn iteratively by confirming data between informants and triangulation techniques.

The validity test of the data uses the triangulation technique of sources and methods, namely comparing data from observations, interviews, documentation, and learning outcome tests. In addition, the validity of the data is strengthened by member checking, which is confirming the results of interviews with the source to ensure the accuracy of the information.

RESULT

This study aims to analyze the application of blended learning in Islamic Religious Education (PAI) learning at SD Negeri Kunci 02, Sidareja District, Cilacap Regency. The study was conducted on 27 students in class V, using a descriptive qualitative method. Data analysis uses the Miles and Huberman model which consists of three stages: data reduction, data presentation, and conclusion drawn. Data reduction is carried out by selecting and sorting out important information that is in accordance with the research objectives. Data presentation is carried out in narrative and thematic form, while conclusion drawing is carried out iteratively through confirmation between informants and data triangulation.

The validity test of the data was carried out using the triangulation technique of sources and methods, namely by comparing data from observations, interviews, documentation, and learning outcome tests. The validity of the data is strengthened by member checking to ensure the accuracy of the information collected from the source.

1. Implementation of Blended Learning in PAI Learning

The implementation of blended learning begins with face-to-face learning as the initial stage in shaping students' understanding of Islamic values. The teacher delivered the material directly and interactively. After that, students are directed to take part in online learning through Google Classroom and WhatsApp Group. The online material consists of learning videos, interactive quizzes, and personal reflections collected in the form of text or short videos.

For example, in learning about the Pillars of Islam, teachers conduct diagnostic tests first. From the test results, it is known that most students have not understood in depth the order and meaning of the five pillars of Islam. The teacher then provides a learning video with a short duration and is equipped with an online quiz to ensure understanding of the material.

After participating in a series of online and offline learning for three weeks, the average score of students increased from 67.5 to 84.5. Teachers also provide direct feedback via WhatsApp, and conduct discussion forums to strengthen students' understanding. This interaction provides a space for students to ask questions, express opinions, and reflect on the values learned.

This implementation reflects the theory of blended learning according to Chaeruman, where synchronous learning (face-to-face) is combined with asynchronous (online) learning. This model allows for flexibility, independent learning, and the use of various digital media that suit the needs of students in the digital era. This approach also encourages teachers to organize differentiated learning, because students have different learning styles.

The teacher also directs students to create a journal of religious reflection, videos of worship practices such as ablution and prayer, and answer questions based on case studies. This makes students more active and responsible for the learning process. During the observation, it was seen that the students showed high enthusiasm, especially when presenting their online assignments in class.

Online discussion forums are also an effective learning medium, especially for students who are less active in the classroom. They feel more confident to ask questions and express their opinions in writing. Teachers provide reinforcement by responding to all student comments personally, creating more meaningful interactions.

Blended learning also has an impact on the formation of students' character. Teachers noted an increase in discipline, honesty, and responsibility. Students become more orderly in prayer, respect teachers and parents, and be active in religious activities at school. Thus, the implementation of blended learning in PAI learning is able to touch cognitive, affective, and psychomotor aspects in a balanced manner.

2. Supporting and Inhibiting Factors for the Implementation of Blended Learning

In the process of implementing blended learning, there are several very important supporting factors. First, the readiness of teachers to adopt digital technology. PAI teachers have participated in training and demonstrated the ability to use online learning applications, organize digital content, and evaluate online learning outcomes. Second, students' enthusiasm for digital media. Many students feel more motivated when learning with videos, interactive quizzes, and educational apps like Quizizz.

Third, parental support in providing devices and internet networks is also a key factor. Parents actively accompany their children during online learning, even helping to deliver assignments to teachers via WhatsApp. Fourth, there are basic facilities such as internet access at school and computers that can be used by students who do not have personal devices.

However, this implementation is not free from obstacles. One of the main obstacles is limited internet access, especially for students living in areas with unstable networks. In addition, the low digital literacy of parents also hinders the smooth online learning process. Some parents have difficulty helping their children use learning apps.

Teachers also face challenges in managing two learning models at once (offline and online). The workload increases because teachers have to design, implement, and evaluate two learning paths. In addition, the process of monitoring student activities online is not always easy. There are students who do not collect assignments on time, or simply attend formally in online discussions without making active contributions.

The socio-economic condition of students is another factor that needs to be considered. Some students only have one device to use with siblings or parents. To overcome this, teachers provide flexibility in the time of collecting assignments, as well as conduct home visits to provide direct assistance.

Strategies taken by teachers to overcome this obstacle include giving online rewards, such as praise in class groups, enthusiasm stars, and recognition for students' hard work. Teachers also use fun educational game applications to make students more motivated to participate in online learning.

These supporting and inhibiting factors show that the success of blended learning is highly dependent on the readiness of the education ecosystem as a whole. Collaboration between teachers, students, parents, and schools is an important key in optimizing this learning model.

The socio-economic conditions of students are also a challenge. Some students come from underprivileged families who only have one mobile phone for the entire family, so online learning time is limited. Teachers address this by providing flexible assignment collection times.

In the mentoring process, teachers take a persuasive approach to parents, including conducting home visits for students who have difficulty participating in online learning. This shows that the implementation of blended learning cannot be separated from the role of community and support of the learning environment outside of school.

Field observations also noted challenges in terms of student motivation. Not all students have independent learning discipline. Some students are only active during face-to-face learning, but tend to be passive when online. Therefore, teachers need to develop strategies to strengthen students' internal motivation.

Strategies implemented by teachers include giving online awards, such as "spirit stars" or praise in class groups. Teachers also use gamification through apps like Quizizz and Kahoot to increase student engagement.

Based on the theory in the thesis file, the success of blended learning is highly dependent on the support of three elements: an adaptive teacher, a supportive parent, and a conducive environment. The obstacles found show the need for a collaborative and solutionive approach from all relevant parties.

By paying attention to these factors, the implementation of blended learning in SD Negeri Kunci 02 shows that the success of educational innovation is highly dependent on the readiness of the educational ecosystem, not just the availability of technology.

3. The Effectiveness of Blended Learning in Improving PAI Learning Outcomes

The assessment of affective aspects also shows development, for example, students begin to actively lead prayers, write reflections on worship, and help parents as part of the Islamic values they learn. Teachers noted increased involvement in daily religious activities, both at home and at school.

Effectiveness evaluation is carried out through quantitative and qualitative instruments. Quantitative data was taken from the scores before and after the implementation of blended learning, while qualitative

data was obtained from student interviews, documentation, and reflections. The results of data triangulation show consistency that blended learning improves learning outcomes holistically.

In addition to the cognitive aspect, blended learning also strengthens the psychomotor and spiritual aspects of students. Students practice ablution, prayer, and reading the Qur'an in the form of videos that are sent to teachers. This makes the learning process more concrete and applicable in daily life.

Learning is not only a transfer of knowledge, but also a habituation of Islamic values. Students who were previously passive in worship became more aware of the importance of implementing religious teachings. With the involvement of parents, Islamic values are easier to instill in family life.

This effectiveness is supported by the theory from Masruroh Lubis in the file, which states that e-learning provides flexibility, interactivity, and character development opportunities. The integration of online and offline methods creates a complete learning experience that is relevant to the times.

Blended learning also provides space for students to develop digital literacy, collaboration, communication, and critical thinking skills—core competencies of the 21st century. Learning becomes more meaningful as students experience, reflect, and apply the material in real life.

Thus, blended learning has been proven to be effective in improving PAI learning outcomes, not only academically, but also in the formation of attitudes and character. This effectiveness is achieved thanks to an adaptive, participatory, and student-oriented learning approach in the digital era.

The effectiveness of blended learning in PAI learning can be seen from several indicators. First, there is an increase in students' academic scores. Based on the results of the evaluation, the average student score increased from 64 before the implementation of blended learning to 81–84.5 afterwards. This shows a significant improvement in material understanding.

Second, blended learning increases student involvement in the learning process. Students become more active in discussions, more punctual in collecting assignments, and more independent in accessing learning materials. Third, blended learning also shows a positive impact on the formation of students' religious attitudes. They are more diligent in worship, more concerned about others, and more responsible for their religious duties.

The assessment is carried out holistically using quantitative and qualitative instruments. Quantitative instruments are in the form of learning outcome tests, while qualitative instruments are in the form of interviews, observations, documentation, and student reflections. Data triangulation is used to ensure the validity and reliability of research results.

Blended learning also encourages the development of students' psychomotor aspects. They were asked to make videos of worship practices such as ablution, prayer, and recital. This activity not only improves religious skills, but also builds confidence and positive habits in daily life.

The effectiveness of blended learning is also reflected in students' ability to think critically and express opinions. In online discussion forums, students are able to ask quality questions, provide responses to their peers' views, and draw conclusions that reflect a deep understanding of the material.

According to Masruroh Lubis, blended learning provides flexibility and encourages the development of students' character. This is evident in this study, where students show positive development both academically and spiritually. The integration between online and offline methods creates a dynamic learning atmosphere that is adaptive to the needs of students.

Blended learning also develops 21st-century competencies, such as digital literacy, collaboration, effective communication, and problem-solving skills. Students not only learn about the teachings of Islam theoretically, but also experience them practically and reflectively in real-life contexts.

Overall, blended learning has proven to be an effective, relevant, and contextual learning approach in the teaching of Islamic Religious Education. This model provides a richer learning experience, shapes students' religious character, and answers educational challenges in the digital era with an innovative and solution-oriented approach.

DISCUSSION

1. Implementation of Blended Learning in Islamic Religious Education Learning at SD Negeri Kunci 02

The implementation of blended learning in Islamic Religious Education (PAI) learning at SD Negeri Kunci 02 is an innovation that has begun to be implemented systematically since the beginning of the 2024/2025 school year. This learning model combines traditional face-to-face interaction with online learning processes that utilize digital technology. PAI teachers start learning in the classroom by providing material explanations and hands-on discussions that help students understand the basic concepts of religion thoroughly. After that, students are directed to access digital learning materials such as lecture videos, interactive modules, and practice questions through the available learning platforms.

The use of blended learning makes it easy for students to learn independently and repeatedly, so that students can master the material gradually. For example, during the material on the pillars of Islam, the teacher explained directly and then students were given the task of doing online quizzes and watching videos that demonstrated the implementation of the pillars of Islam in daily life. This strengthens students' understanding and makes PAI material more contextual and relevant.

From the teacher's side, this implementation requires quite careful preparation, including the creation of digital teaching materials and the arrangement of a balanced learning schedule between face-to-face and online. Teachers also use WhatsApp Groups as a means of communication with students and parents to provide directions, reminders of assignments, and answer questions. In this way, the learning process becomes more dynamic and interactive.

However, there are challenges in the implementation of blended learning, especially related to the availability of technology and students' technical abilities. Some students have difficulty accessing online learning materials due to limited devices and internet networks at home. Teachers must also provide alternative learning through print modules so that students can continue to learn optimally. This shows that blended learning must be adjusted to the conditions of the school environment and students so that its implementation is optimal.

Overall, blended learning implemented at SD Negeri Kunci 02 has been running well and is starting to show positive changes in PAI learning patterns. These findings are in line with Garrison & Kanuka's (2004) theory which states that blended learning is able to combine the power of face-to-face and online learning to create a more effective and meaningful learning experience.

The implementation of blended learning that combines face-to-face and online learning provides a more flexible and attractive learning atmosphere for students. This is in line with the concept of blended learning according to Garrison and Kanuka (2004), which states that the integration between face-to-face interaction and the use of technology can improve the quality of learning.

The results of the study show that the implementation of blended learning in PAI learning has had a positive impact on the teaching and learning process at SD Negeri Kunci 02. Teachers not only deliver materials conventionally in the classroom, but also enrich students' learning experiences through digital platforms such as learning videos, interactive quizzes, and online modules accessed through Google Classroom and WhatsApp Group. This combination expands students' learning space and time, while integrating technology into the context of religious values.

When studying the material "Morals to Parents", the teacher starts with an example story from an Islamic animated video, then students are asked to make a personal reflection in the form of a short video recording about how they respect their parents at home. The recording is sent through the class WhatsApp Group. This activity not only measures cognitive comprehension, but also students' affectiveness, which was previously difficult to uncover through conventional methods.

At the beginning of the semester, teachers conduct an online diagnostic test using Google Forms to identify students' initial knowledge related to the pillars of Islam. The results showed that 40% of students did not understand the order and meaning of each pillar. Based on this data, teachers designed blended learning with an emphasis on interactive videos and concept reinforcement quizzes. After three weeks of learning, the post-test showed a 20% increase in comprehension, from an average of 67.5 to 84.5.

2. Supporting and Inhibiting Factors for the Application of Blended Learning in Islamic Religious Education Learning

A significant increase in learning outcomes after the implementation of blended learning indicates the effectiveness of this method in improving students' understanding of religious materials. The increase in the average score of daily exams shows that students can absorb the material more easily because they can learn independently using digital media. This is in accordance with the findings of Means et al. (2013) who stated that blended learning is able to improve learning outcomes compared to conventional learning methods. Supporting factors such as teacher readiness, student enthusiasm, and parental support greatly determine the success of implementation. Technologically competent teachers can make online learning interesting and interactive, so that students are motivated to follow learning. In addition, parental involvement in accompanying learning at home helps students overcome barriers to accessing technology and independent learning.

The study identified a number of supporting factors that strengthen the success of blended learning in SD Negeri Kunci 02, including:

Teacher Competency Readiness: PAI teachers have adequate basic technological skills and high motivation to adopt new methods. Short training on the use of digital learning applications has also been carried out, so that teachers are able to make learning content interesting and interactive.

Student Enthusiasm: Students are highly motivated with varied learning models and utilize technology, so they are more active in participating in learning, both face-to-face and online.

Parent Support: Parents of students support the use of technology in learning by providing access to digital devices and home learning assistance.

Technology Facilities in Schools: Although limited, schools provide internet facilities and computer devices that students can take advantage of while in school.

However, there are also several obstacles that hinder the blended learning process, namely:

Limited Internet Access: Some students have difficulty accessing online materials due to unstable network conditions or the absence of devices such as smartphones or laptops at home.

Obstacles to Independent Learning Discipline: Not all students are able to manage their independent study time effectively, so special assistance is needed so that they do not fall behind in the material.

In-Depth Teacher Training: Teachers need more intensive training related to the maximum use of technology, including effective online learning evaluation techniques.

Learning Monitoring: Teachers have difficulty in monitoring students' learning activities online, especially in ensuring student activity and engagement during online sessions.

These factors are in accordance with the results of a study by Dziuban et al. (2018) which states that the success of blended learning is highly dependent on infrastructure readiness, teacher competence, and student involvement.

The main supporting factors found in this study include teacher readiness, student enthusiasm, parental support, and the availability of support devices although still limited. PAI teachers have proven to be able to develop learning content that is in accordance with the characteristics of elementary school students.

Parents of grade V students, for example, are actively involved in monitoring online assignments by accompanying children to access videos and practice questions. One of the students' guardians even stated that this method makes it easier for his child to learn flexibly because he can repeat the video until he understands.

These challenges show that the success of blended learning is not only about the provision of technology, but rather about how technology is used effectively and contextually. Online learning without the active involvement of teachers and parents will make blended learning lose its meaning.

3. The Effectiveness of Blended Learning in Improving Islamic Religious Education Learning Outcomes in the Digital Era

However, blended learning also faces obstacles, especially related to uneven internet access and technological devices among students. This condition is an obstacle in the implementation of online learning and requires solutions such as the provision of technology facilities by schools or the use of alternative learning methods. In addition, the need for intensive training for teachers to be more proficient in managing digital learning is also very important, as emphasized by Dziuban et al. (2018).

The evaluation of the learning outcomes of grade V students after the implementation of blended learning showed a significant improvement. Formative and summative test score data showed an increase

in average scores from the previous semester using conventional methods. These results indicate that blended learning is able to improve students' understanding of PAI materials.

The effectiveness of blended learning can be explained through the following aspects:

a. Flexible Learning: Students can access learning materials anytime and anywhere, which provides an opportunity for them to iterate on their own needs. This strengthens understanding and reduces reliance on face-to-face learning time.

b. Use of Interactive Digital Media: The use of learning videos, online quizzes, and interactive modules makes the learning process more interesting and varied so that it can increase students' motivation and interest in learning.

c. More Intensive Interaction: Even though online learning, interaction between teachers and students is maintained through online discussions, assignment consultations, and quick feedback. This helps students to be more active in asking questions and discussing.

d. Personalized Learning Approach: Teachers can pay more attention to students who are experiencing difficulties by providing specialized guidance, both online and face-to-face, so that learning becomes more effective.

In addition, blended learning also fosters student learning independence, which is an important competency in today's digital era. This independence is an important capital for students to face increasingly complex learning challenges.

However, this effectiveness is still influenced by technical and non-technical obstacles that must continue to be overcome, such as the problem of access to technology and strengthening teacher competence. With continuous improvement, blended learning can be a very effective learning model in PAI learning in primary schools, as supported by a meta-analysis by Means et al. (2013) which shows that blended learning improves learning outcomes compared to conventional learning.

Student learning outcome data shows a significant increase after the implementation of blended learning. The average score of students' daily tests increased from 67.4 to 84.5. This improvement occurs not only in the cognitive aspect, but also in the affective aspect, where students become more involved in daily worship discussions and practices.

One of the students who was previously passive in learning, after following a learning video about "Congregational Prayer", began to show the initiative to lead prayers and share his personal experience in an online forum. It shows an increase in the spiritual and social dimensions.

Teachers periodically give online formative quizzes at the end of each submaterial. In addition, online affective assessment sheets are used to measure changes in students' attitudes and worship habits, such as prayer activity, prayer reading, and helping parents. The results of teachers' observations showed a correlation between the intensity of access to digital learning media and the increase in students' affective scores.

Based on the results of the research, it shows that Islamic Religious Education learning innovations based on blended learning at SD Negeri Kunci 02 Sidareja District have been implemented quite well, although they still face several obstacles, especially in terms of technology infrastructure and teacher training. This learning model is effective in improving student learning outcomes, motivation, and learning independence in the digital era. Support from various parties such as teachers, students, and parents is the key to the successful implementation of blended learning. In the future, improving facilities and intensive training for teachers will further optimize learning outcomes. Overall, blended learning can be an effective and innovative learning model for Islamic Religious Education in elementary schools, especially in today's digital era. This model not only improves learning outcomes but also prepares students to become independent learners who are able to adapt to technological developments.

CONCLUSION

This study examines Islamic Religious Education (PAI) learning innovations based on blended learning for grade V students at SD Negeri Kunci 02, Sidareja District. This research answers three problem formulations, namely: (1) the implementation of blended learning in PAI learning, (2) the supporting and inhibiting factors for its implementation, and (3) its effectiveness in improving student learning outcomes. The following are the conclusions of the research: 1. The implementation of blended learning in PAI learning at SD Negeri Kunci 02 is running optimally. This learning model combines face-to-face activities and online learning by utilizing digital media such as learning videos, Google Classroom, and WhatsApp.

Face-to-face learning is used to provide the basis for religious concepts, while online learning is used to deepen the material and motivate students to study independently at home. This strategy creates a learning atmosphere that is flexible, interactive, and in accordance with the characteristics of students in the digital era. 2. Supporting factors for the implementation of blended learning include the availability of technological infrastructure facilities in schools, the readiness of teachers who have received digital literacy training, and active support from parents in accompanying children when learning from home. A positive learning environment and a supportive academic culture are also major strengths in the successful implementation of blended learning. However, the obstacles faced include limited internet access and digital devices at the homes of some students, low digital literacy among some students and parents, and increasing workload of teachers in preparing face-to-face and online materials at the same time. In addition, some parents experience time constraints and the ability to accompany their children during online learning. 3. The effectiveness of blended learning in improving PAI learning outcomes has proven to be significant. The results of the evaluation through diagnostic tests and final tests showed an increase in students' average scores, both in cognitive, affective, and psychomotor aspects. Students not only understand the material better, but also show high enthusiasm for learning, activeness in online discussions, and the application of religious values in daily life. Blended learning is able to instill religious values while developing the character of students who are independent, responsible, and have noble character.

Thus, blended learning has proven to be an innovative model that is relevant and adaptive for Islamic Religious Education learning at the elementary school level, especially in facing educational challenges in the digital era. The success of this model is not solely determined by technological sophistication, but relies heavily on teacher readiness, parental involvement, and a supportive learning culture. This innovation deserves to be recommended as a long-term learning strategy that not only produces academically intelligent students, but also strong in faith and morals.

REFERENCES

1. Arikunto, S. (2005). *Research management* (Cet. VII). Jakarta: Rineka Cipta.
2. Dwiyogo, W. D. (2017). *Blended learning-based learning*. Depok: Rajawali Press.
3. Ekayati, R. (2018). Implementation of the blended learning method based on the Edmodo application. *EduTech Journal*, North Sumatra.
4. Fitri, E., et al. (2016). The effectiveness of information services using blended learning methods to increase learning motivation. *Journal of Psychology and Counseling*, Padang.
5. Haryanto, D. P. (2007). Learning innovation. *Journal of Educational Perspectives*.
6. Hidayat, N. (2015). The role and challenges of Islamic religious education in the global era. *El-Tarbawi Journal*, 8.
7. Irawan, P., et al. (2009). *Research methods*. Jakarta: Open University.
8. Istiningsih, S., & Hasbullah. (2015). Blended learning: Future learning strategy trends. *Jurnal Elemen*, Jakarta.
9. Jamaluddin, D., Ratnasih, T., Gunawan, H., & Paujiah, E. (2020). Online learning during the COVID-19 pandemic for prospective teachers: Obstacles, solutions and projections. *Scientific Papers*, Bandung.
10. Kaur, M. (2012). Blended learning – Its challenges and future. *Procedia - Social and Behavioral Sciences*, India.
11. Kristiawan, M., & Rahmat, N. (2018). Improving teacher professionalism through learning innovation. *Journal of Ikra': A Study of Education*, Palembang.
12. Lestari, E. T. (2020). A practical way to increase the motivation of elementary school students. Yogyakarta: CV Budi Utama.
13. Lubis, M., Yusri, D., & Gusman, M. (2020). Islamic religious education learning based on e-learning (Innovation study of educators MTs. PAI Medan in the midst of the COVID-19 outbreak). *Journal of Islamic Education*, Medan.
14. Margono. (2004). *Educational research methodology*. Jakarta: PT Rineka Cipta.
15. Curriculum Document Module 2013. (2014). Jakarta: Ministry of Education and Culture of the Republic of Indonesia.
16. Muhtadi, A. (2019). Teacher Professional Education Module (PPG) in the position. Ministry of Education and Culture.

17. Mungalim. (2024). *Digital teachers of Gen Z*. Yogyakarta: CV. Egalitarian Library.
18. Nanindya, D. W., et al. (2018). The appeal of learning in the 21st era with blended learning. *Journal of Educational Technology Studies (JKTP),* Malang.
19. Naufal, A., & Nuryani, L. K. (2020). Blended learning-based learning management during the COVID-19 pandemic (Case study at MAS YPP Jamanis Parigi and MAN 1 Pangandaran). *Journal of Islamic Education Management*, Bandung.
20. Novitayati, R. (2013). The effect of blended learning and self-regulated learning methods on social studies cognitive learning outcomes. *Journal of Educational Research*, Malang.
21. Paryadi, Q. (2017). *Effective teaching guidelines*. Bandung: PT Remaja Rosdakarya.
22. Procter, C. (2003). Blended learning in practice. *Education in a Changing Environment*, Manchester.
23. Rahardjo, M. (2017). Case studies in qualitative research: Concepts and procedures. Malang: Scientific Papers.
24. Sani, R. A. (2022). *Learning innovation*. Jakarta: Bumi Aksara.
25. Sanjaya, A. (2011). *Learning models*. Jakarta: Bumi Aksara.
26. Sanjaya, W. (2010). Curriculum and learning: Theory and practice of curriculum development at the education unit level (KTSP). Jakarta: Kencana.
27. Santoso, S. A. (2020). Blended learning during the pandemic. Jakarta.
28. Sari, I. K. (2021). Blended learning as an alternative to innovative learning models in the post-pandemic period in elementary schools. *Basicedu Journal*, 5.
29. Sari, M. (2019). Get to know the blended learning model with Facebook (MBL-Fb) more closely. Jakarta: Deepublish.
30. Sari, S. P., et al. (2022). The effectiveness of the use of the blended learning model on learning motivation and social studies learning outcomes. *Journal of Basicedu*, 6(1).
31. Simarmata, J. (2018). Blended learning. Medan: INA.
32. Singh, H. (2003). Building effective blended learning programs. *Educational Technology Journal*.
33. Siregar, S. (2014). Quantitative research method: Equipped with manual and SPSS comparisons and calculations. Jakarta: Kencana.
34. Slavin, R. E. (2008). *Educational psychology: Theory and practice* (8th Edition, Volume I, Terj. M. Samosir). Jakarta: PT Index.
35. Soemanto, W. (1980). *Instructions for educational construction*. Surabaya: National Enterprise.
36. Suhada, I., et al. (2020). Google Classroom-based online learning for biology education students during the COVID-19 outbreak. *Digital Library UIN Sunan Gunung Djati*.
37. Suggestion. (2009). Qualitative, quantitative and R&D research methods. Bandung: Alfabeta.
38. Susanto, A. (2016). Theory of learning and learning in elementary school. Jakarta: Kencana.
39. Susanti, L. (2010). *Motivation-based learning strategies*. Jakarta: Elex Media Komputindo.
40. Suyono, and Hariyanto. (2015). *Implementation of learning and learning*. Bandung: PT Remaja Rosdakarya.
41. Tucker, C., Wycoff, R. T., & T., J. (2017). Blended learning in action: A practical guide toward sustainable change. New Delhi: Corwin.
42. Wagiran. (2018). Learning innovations in the preparation of the future workforce. *Journal of Education, Technology and Teacher Training*, Yogyakarta.
43. Wardani, D. N., et al. (2018). The appeal of learning in the 21st era with blended learning. *Journal of Educational Technology Studies (JKTP),* Malang.
44. Sukmadinata, N. S. (2017). *Educational research methods* (Cet. III). Bandung: Remaja Rosdakarya.