Exploration of Islamic Religious Learning Innovation Technology with the iLearning Approach

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### **Abstract**

The field of education has an important role for a country in producing high-quality young generations so that they can be responsible for advancing the country. This important role is in line with the function of education, which is to develop abilities and shape the character and civilization of a dignified nation in order to educate the nation's life. Seeing the importance of education for the nation's next generation, it is necessary to innovate quality learning methods from childhood education to education in lectures. In this study, it will focus on improving the quality of learning methods, especially in Islamic religious lessons with the approach ilearning -which has been intensively developed for several years. Researchers will explore learning application innovations with an assessment focus seen from the feasibility component of learning applications, with the resulting structure covering 4 factors: Parental control, contribution to development skill, efficiency and motivation.

In this study, the assessment will be carried out by means of interviews in the form of a questionnaire to 100 data and the population calculation method, namely slovin, will be used in this study. The results of this study found an innovative learning application that meets the four assessment criteria. In this study, the dojo application has met 4 learning application assessment criteria by successfully occupying the first position in the four assessment categories. The assessment of parental control gets a percentage of 47%, the assessment of the role of skill development factors gets a percentage of 28%, the efficiency factor gets a percentage of 31% and the last assessment factor is the motivation factor where in the assessment of this factor the dojo application gets a percentage of 31%. Judging from this assessment, the dojo application can be stated as an application that is close to the learning application criteria in accordance with 4 (four) important factors in a learning application.

Keywords: Education, Islam, Dojo, Ilearning, Innovation.

# 1. Introduction

Along with the times, humans are required to adapt and move faster than in the past. The changes in the times experienced by humans today are the very rapid development of science and technology in the era of globalization [1] [2]. The emergence of technology is a breakthrough that makes it easier for humans to do their jobs. Especially information and communication technology [3] [4]. In the advancement of information and communication technology there is a positive impact that we can get, among others, we can get accurate and up-to-date information around the world via the internet, we can communicate more cheaply and quickly by telephone [5].

With the extraordinary technological developments and benefits that can facilitate human work, there is a need for innovation to optimize the use of technology in various fields. Utilization that is currently being intensified is in the field of education [6], this is because information technology is considered to be able to increase the motivation of students from early childhood education to college [7] [8] and can provide an example to the younger generation that technology has good benefits for humans by applying technology as an interactive learning medium [9].

The development of technology that is currently being intensively applied is the method ilearning. Where in this approach ilearning is an innovative learning method that combines 4 important components in teaching and learning activities, namely starting from studying, praying, working, and playing [10] [11]. Where with this method approach ilearning, it is necessary to have support in supporting the learning process, namely a media used for teachers and students as an intermediary for delivering material information to be delivered (Figure 1) [12] [13].

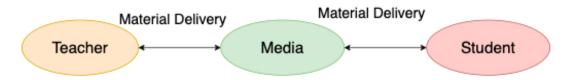


Figure 1. iLearning Approach

In terms of the media referred to in the i-learning approach method itself is a communication intermediary used by teachers to deliver material and from the students' side to get learning materials [14]. Where in supporting this ilearning approach method in the last few decades the development of an LMS (Learning Management System) which can be used as a medium for this approach method ilearning [15]. LMS itself is software used for teaching and learning activities that can be operated on electronic media. With the development of this LMS, it can support the performance of the application of the ilearning learning method to achieve an interactive teaching and learning process so that it can make children more active and motivated in carrying out education science [16] [17].

Judging from the increase in the application of the ilearning method and also the development of the LMS. in this study will focus on exploring the LMS that has been developed and used for the teaching and learning process in the field of education, especially for Islamic religious learning. This LMS assessment will assess the feasibility of learning support media, with a structure that includes 4 factors: Parental control, contribution to development skill, efficiency and motivation. This research is deemed necessary to support the quality of Islamic religious learning in the educational environment of the nation's children. because in Islamic religious education itself plays a role in shaping the character of students. This can be seen from the linkage of Islamic education with character where in terms of character itself is connected and exchanged with the terms ethics, morals, and or values and is related to moral strength, has a "positive" connotation [18]. While the notion of Islamic religious education is learning that functions to improve noble character and increase the strength of the faith that is believed by each individual student [19]. This shows that Islamic religious education has a close relationship with the character development of students in schools as seen from the necessity of school education lessons from primary, secondary and tertiary level education [20]. The importance of Islamic religious education with the character of the nation's children, it is necessary to optimize Islamic religious education in order to produce the next generation of the nation with noble character [21].

In this research, it will be divided into several sections. Chapter 2 willsome of the previous research that has been done (literature review discuss), chapter 3 will discuss the methods used in the research, chapter 4 contains a chapter on the results and discussion of the research that has been carried out, and chapter 5 or the last chapter will describe the conclusions in outline of the overall content, this research.

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## 2. Literature Review

In chapter 2, we will discuss prior research related to exploratory research on educational applications to see the advantages and disadvantages of previous research.

The first research is discussing the use of Google Classroom learning applications, where in the Google classroom research it is used in junior high school education, in its application Google Classroom is used to collect online assignments given by teachers to students. From the use of google classroom, there are results from research which states that its use makes it easy for teachers to assess assignments and minimize the collection of certain papers or textbooks [22].

The second study discusses the use of technology in education in the form of using computer video games as learning media. In this study, we will apply computer video to universities in Thailand, because the application of computer video is considered to be able to help education in Thailand because it provides easy understanding of the material and provides interactive learning. This study has 3 objects examined to assess the effectiveness of the application of computer video games in education, including 1) Assessment of whether the application of computer video games is effective in learning media 2) Studying whether university learning styles are suitable for implementing computer video games in education. 3) investigate the factors that may influence the application of video games in education in Thailand. The end of this study obtained a percentage of 52.6% from 400 respondents who stated that computer video games can be applied as learning media [23].

The third research on the development of learning applications that is used is Moodle, where in this study, Moodle learning applications are used in high school level learning in Sakatiga. From this study, through the application of Moodle, it was found that with this application it could increase the effectiveness of the teaching and learning process, namely by making it easier for teachers to deliver learning materials and also making it easier for teachers to evaluate their students in mastering the material that has been given [24].

The fourth research is the application of the zoom meeting application. In this study, the teacher uses the breaking rooms feature as a learning method, with the use of these breaking rooms being considered to help the learning system be more interactive and can make students comfortable and enjoy learning. Through the implementation of the break room, students can choose the room they desire and can find different friends in the room. With this break room method, it will provide a new learning atmosphere for students every day [25].

The next research that will be appointed is the application of discord learning applications. In this study, the use of discord at the educational level of lectures where initially the application of discord was used for the association of gamers for communication, the teacher made an innovation by changing the use of discord which was only as a communication for gamers into a learning application. In its own use, students feel that learning becomes more interactive and enjoyable, but in its application, discord has drawbacks because it cannot be used for presentations such as zoom meetings [26].

The sixth study discusses the application of gamification ineducation Merdeka Campus. This study aims to obtain techniques that can motivate students in learning as well as in facing the challenges of learning in the 4.0 era. Gamification is a learning method that is considered to be able to answer the problem of appropriate learning techniques for students, with the gamification method students will get a badge reward for achievements in all learning activities carried out. The application of this Gamification technique got a score of 92.5 indicating that the independent campus system of learning with the gamification method provides positive benefits for students [27].

The last research is the use of google classroom as a medium for early childhood education learning. In the use of Google Classroom, it provides interactive learning from teachers with their students. For the implementation of google classroom in early childhood education, it is necessary to have parental assistance to guide their children during the

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teaching process and educators must provide fun and interactive learning materials so that students stay focused and can understand the material presented [28].

Of the 7 (seven) literatures described above, there is no visible learning application that has dual functions that are used as a medium of communication between teachers and parents as well as learning media. Therefore, in this study, we will explore educational application innovations that can act as communication media as well as learning media that are focused on being applied to Islamic religious education, which will be attached to the results and discussion section [29].

### 3. Method

In order to support the smooth running of research, exploration of learning innovation applications for Islamic religious learning will involve 100 data through interviews in the form of filling out questionnaires which are disseminated through social media such as whatsapp, instagram, facebook, and twitter. Of the 100 data that will contribute to the success of the Exploration of Islamic Religious Learning Innovation Technology research with the iLearning approach consisting of teachers, parents, and school children who later on from this data will assess utilization from different perspectives [30].

In this research method, the sample calculation method will be used using Slovin calculations to calculate the number of samples to be used, provided that the data is 100 people in the population with a set margin of error of 2% or 0.02.

$$n = \frac{N}{(1 + Ne^2)}$$

$$n = \frac{100}{(1 + 100 \times 0.02^2)}$$

$$n = \frac{100}{(1 + 100 \times 0.0004)}$$

$$n = \frac{100}{(1 + 0.04)}$$

$$n = \frac{100}{(1.04)}$$

n = 96, 15 is rounded up to 96

From the Slovin calculation above, it can be concluded that from 100 people in the population there are 96 people to be the minimum benchmark for sample data used in exploratory research on early childhood learning applications. The second method used to support the smooth running of this research, there is a descriptive method. The descriptive method itself is an accurate, actual and systematic description of research based on the sample in the study [31].

# 4. Results and Discussion

This discussion stage will compare 4 (four) feasibility factors for learning applications to be used in Islamic religious learning. This research data is taken based on the results of filling out questionnaires from 96 samples that will assess learning applications starting from the dojo class application, zoom meeting, google classroom,

edmodo, whatsapp group, Google Meet. The results of the first assessment that will be presented is the factor of **parental control**.

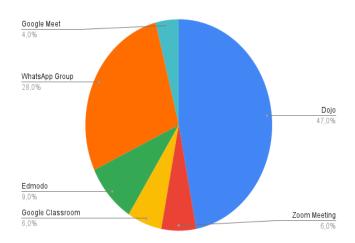


Chart 1. Assessment of Parental Control Factors

Judging from the chart presented above, it can be seen that the dojo application occupies the first position with a percentage of 47% where this percentage states that the dojo application was chosen by 45 people from the total sample of 96 people. Based on this assessment data, the selection of the dojo application occupies the first position because in this dojo application parents can be invited into the application (Figure 1) and also parents can control the child's development based on the educator's report through the dojo application as shown below (Figure 2).

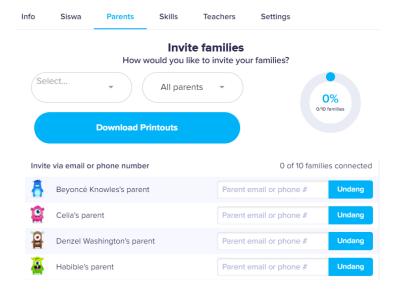


Figure 1. Parent's Invitation to Class

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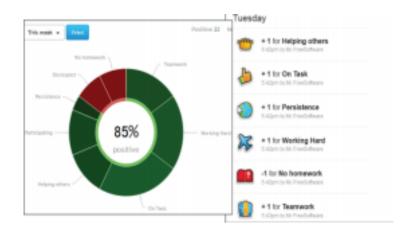


Figure 2. Student Progress Report The

The second assessment is the role of learning applications in **contributing** to the **development of** *skills in children*.

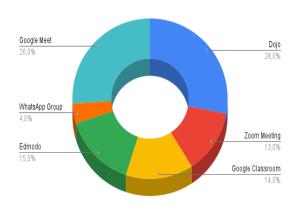


Chart 2. Assessment of the Role of Child Development Factors

Based on the results of data filling out the questionnaire, from 96 samples there were 27 people who chose the dojo class application or 28%, 25 people chose the Google Meet application or 26%, for the third position the Edmodo application received a vote of 15% of the 15 samples, the fourth position was Google Classroom, which received 14% votes from 13 people from 96 samples. The fifth position is the zoom meeting which was chosen by 12 of the total sample or 13%. The last position was occupied by learning media through whatsapp groups which received a percentage of assessment of 4% or as many as 4 people who chose this learning from 96 samples. The selection of the dojo class application is due to the type of learning provided by this application, there are various types of assignments (Figure 3) ranging from worksheet assignments, text, drawing, photos, and videos. With these advantages in the form of many assignment options that can be presented, the sample pays more attention and is interested in the dojo class application [26]. And even this assignment can be uploaded to the dojo class application so that later students will evaluate each other's results of completing assignments from each individual (Figure 4).

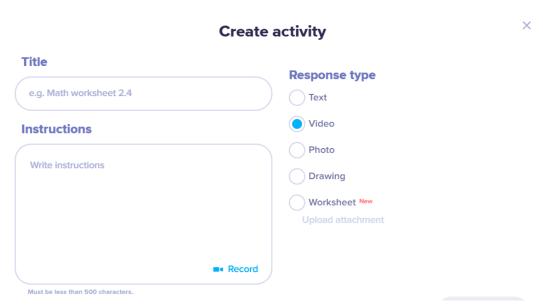


Figure 3. Type of learning activities Dojo Application

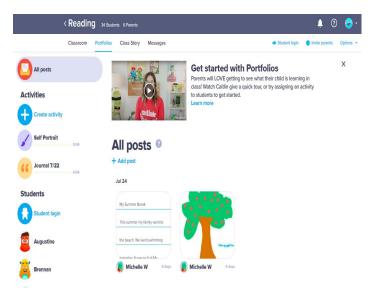


Figure 4. Video upload feature

The third factor that is used as an assessment point in this study is the efficiency factor. This efficiency factor is very important in learning applications, because it can make users comfortable and make it easier for teachers or students' guardians to access learning application media.

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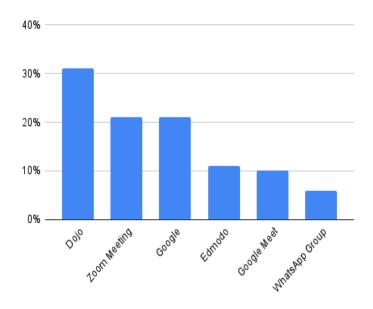


Chart 3. Efficiency Factor Assessment

In this efficiency factor assessment, the first place was the dojo class application with a percentage of votes of 31% or there were 30 people out of 96 samples who chose the dojo class application. Based on the assessment of the efficiency factor of the dojo class application, it occupies the first position because compared to other applications in this assessment, the dojo class application has a multifunction where in the dojo class application the teacher can invite parents to establish communication about the child's development and in this application the teacher can provide reports on the child's activity during learning using the dojo class application can also function as a media for collecting assignments because in the dojo class application it provides assignments and task collection features that can be posted. While the other five applications are considered less interactive and efficient in the teaching and learning process for high school students, because the functions they have are still focused on one-way functions, for example learning media using zoom meeting media and google meetings can only be used by teachers to deliver learning materials, student presentations and subsequent assignments such as assignments in the form of text or drawings cannot be collected or carried out on learning media, zoom meetings and google meetings. Even the google classroom learning media is still inferior when compared to the dojo class application, because the assignment instructions in the google classroom application are still in the form of text, while the assignment instructions in the dojo class application can use video (Figure 5). So that the instruction in the form of this video can be said to facilitate the teaching and learning process of Islamic religious lessons, because the teacher can also provide direct examples of the pronunciation and sound procedures of the letters hijaivah and tajwid in Islamic religious lessons.

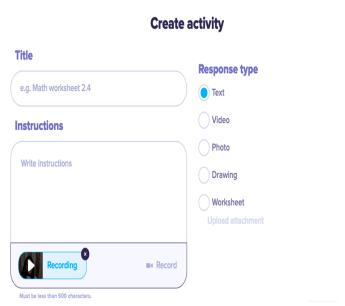


Figure 5. Instructions in the form of Video

The final assessment for the feasibility of a learning application that will be assessed in this study is the motivational factor provided in the learning application. This motivational factor is very necessary in a learning application because of the features that can increase the enthusiasm of students in carrying out education.

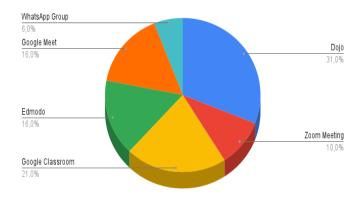


Chart 4. Assessment of Motivational Factors

In this assessment of motivational factors, the first position was occupied by the dojo class application which received a percentage of the vote of 31%, the placement of the first position was because the sample in this study assessed that the dojo class application was very different from the other five applications, the sample in this study This is interested in the features that exist in the Dojo class application, namely the system *feedback* that is packaged in the form of icons for each task completed by high school students. (Figure 6). The use of this feedback system can increase children's motivation to be enthusiastic in completing tasks as well as possible.

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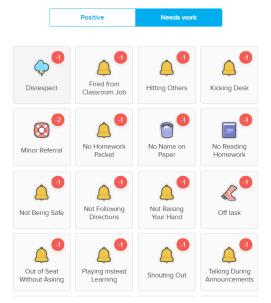


Figure 6.icon Feedback Dojo Application

## 5. Conclusion

The emergence of technology is a breakthrough that makes it easier for humans to do their jobs. With the development of this technology, humans are required to adapt and move faster than in the past. This development is followed by the widespread use of technology in the field of education in the form of learning applications. The development of these learning applications continue to increase with the implementation of learning method ilearning that requires a media in disseminating information. From the development of technology and learning methods, it is necessary to adapt to Islamic religious learning which plays an important role in producing quality young generations, because with Islamic religious lessons it is closely related to the formation of the character of the nation's children who have noble character. Seeing the importance of optimizing Islamic religious learning in the nation's children, it is necessary to increase research that raises the assessment of learning applications that have been formed to assess the feasibility of an application.

With the contribution of 96 samples of data, in this study an assessment with 4 (factors) is important in the assessment of learning applications, namely parental control, contribution to development skill, efficiency and motivation. Where in this study the dojo application met 4 learning application assessment criteria by successfully occupying the first position in the four assessment categories. The assessment of parental control gets a percentage of 47%, the assessment of the role of development factor the skill child gets a percentage of 28%, the efficiency factor gets a percentage of 31% and the last assessments factor the motivation factor where in this factor the dojo application gets a percentage of 31%. Judging from this assessment, the dojo application can be stated as an application that is close to the learning application criteria in accordance with 4 (four) important factors in a learning application. Through the results of this study, it is hoped that the dojo application can be popular to be used as an innovation for Islamic religious education by utilizing all the features available in the dojo application, starting from the wealth of types of assignments, reports on student progress to the guardians of students, as well as the ease of assignment instructions or materials delivered in the form of videos.

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