

## Development of Edpuzzel as an Interactive Media in Muraja'ah Program for Junior High School Students

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### ABSTRACT

**Background.** One of the factors that influence the success of the implementation of learning programs is the teacher, the teacher is believed to be one of the dominant factors that determine the level of student success in achieving results in the learning process

**Purpose.** This study aims to develop Edpuzzle as an interactive media that matches the eligibility criteria of media and materials to improve students' muraja'ah abilities.

**Method.** This type of research is R&D with a 4D development model whose stages are. Define, Design, Development and Disseminate.

**Results.** Overall, the interactive learning video media product tawaasilul aayat method in middle class tahfizh subjects at SMPs IT Tahfizh Adzikra Padang is "Very Valid" so it deserves to be tested in tahfizh learning, especially in the field of muraja'ah.

**Conclusion.** Based on the data processing process carried out, this study showed the results obtained by 3.62 or 72.3% of the first stage of media experts with the category "Valid", 4.15 or 83% of the second media experts of the first stage with the category "Very Valid".

### KEYWORDS

Edpuzzle, Muraja'ah, Tawaasilul

### INTRODUCTION

One of the factors that influence the success of the implementation of learning programs is the teacher (Zhang dkk., 2019), Teachers are believed to be one of the dominant factors that determine the level of student success in achieving results in the learning process.

Problems related to teachers in the learning process are usually in the problem of inadequate qualifications and abilities of teachers, the use of methods, selection and involvement of learning media and varied techniques for learning implementation (Chen dkk., 2020). By mastering the ability to manage learning through good learning media, teachers will be able to provide solutions to various difficulties faced by students (Humprecht dkk., 2020). Currently, many learning media have been developed to be used as a means of support by teachers in supporting the teaching and learning process of

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students at school and can also be used as a bath learning tool The learning process does not always take place in schools (Humprecht dkk., 2020). The use of this learning media is expected to be right on target and in accordance with the target competencies or learning objectives needed. In this case, the additional media should be used or made by yourself through criteria that are in accordance with learning and the target or learning objectives to be achieved.

As stated by Miarso (2004: 458) that learning media is (Spence, 2020): "Everything that is used to channel messages and can stimulate the thoughts, feelings, attention and willingness of students so that it can encourage a deliberate, purposeful and controlled learning process (Azizi dkk., 2020)." The involvement of learning media in the learning process is expected to affect student learning outcomes, the more concrete Learning that is organized and felt by students then learning will be more effective, This is illustrated by Edgar Dale in Sadiman.

According to Briggs in Ekayani (2017) learning media is a physical means to convey learning content / materials such as: books, films, videos and so on. In line with that, Arsyad in Hardianti & Asri (2017: 125) also stated that there are several types of learning media that can physically convey learning content, Such as: books, tape recorders, tapes, video cameras, video recorders, movies, picture slides (picture frames), photos, pictures, graphics, television and computer.

In this study, one of the media that will be developed to improve students' muraja'ah ability is Interactive Media (Mancino dkk., 2020). According to Wisada & Sudarma (2019: 141), in general, learning media are grouped into three types, namely visual media, audio media, and audiovisual media (Ali dkk., 2019). Video media is included in the type of audiovisual media and has its own advantages and advantages compared to audio media and visual media. If visual media can only be seen visually and audio media is only limited to hearing / auditive, then audiovisual media allows students to receive learning more complex with the display of images and sound at once in one form of media (Ahmed & Le, 2021). Rusman (2012: 220) stated the advantages of video media in the learning process, namely: (1) video can be member received more evenly by students (Malecki dkk., 2021); (2) videos are great for explaining a process (Carico dkk., 2021); (3) the video can overcome space and time limitations, is more realistic and can be repeated or stopped as needed, as well as; (4) can give a deep impression so as to influence students' attitudes.

Furthermore, Interactive Media is a learning media in which it combines elements of sound, motion, images, text, or graphics that are interactive to connect learning media 370). In this case, the use of interactive learning videos can engage and connect students directly with the media they are using (Haseeb dkk., 2019). Yasa, et al., (2017: 201) said that a media is said to be interactive if there is involvement between students and the media, so that students do not just see or listen to the material in the media.

Through the use of Interactive Media in the learning process, it can provide experience Then students will find it difficult to understand and digest what is conveyed by the teacher.

The use of Interactive Media can be used in learning, one of which is to improve the ability of muraja'ah students in the Tahfizh program at the Tahfizh Adzikra Padang IT Junior High School. The Tahfizh program at SMPS IT Tahfizh Adzikra Padang is one of the school's flagship programs where the objectives of this program are (Selman dkk., 2020): to create students memorizing the Qur'an which is the hafizh and hafizhah of the Qur'an (minimum 3 juz) (Abrams & Greenhawt, 2020). In the process of learning tahfizh students are grouped into three classes based on the ability to read and memorize the Qur'an. First (Felszeghy dkk., 2019), the Ibtida'i class (tahsin class) is a class intended for students who are still difficult or not fluent in reading the Qur'an and require tahsin (reciting or reciting verses Qur'an well and correctly) first (Gokbulut, 2020). Second, Wustha class (middle class) is a class intended for students who have not been consistent in their Qur'an

recitation and still have difficulty achieving their memorization target. Third, Tsanawi class (advanced class) is a class intended for students who have begun to be consistent in reading the Qur'an and have emerged motivation to complete the memorization target (Ismail dkk., 2019). Of the three classes that researchers observe and make a panel class Wustha class (middle class) is a class intended for students who can read the Qur'an well but are not consistent in their reading and still have difficulty in achieving the target of memorizing the Qur'an. Based on the results of a researcher interview with one of the tahfizh teachers at SMPS IT Tahfizh Adzikra Padang, namely Ustadzah Bustin, M.Pd., students have problems when memorizing or repeating memorization. Many influencing factors such as students have not consistently read the Qur'an, how to memorize students, methods used, and media used.

Based on the results of observations that researchers made. During the process of tahfizh activities, the first thing students do is to continue memorizing each Qur'an with special memorization demands in the middle class every day which is a minimum of three lines, after finishing memorizing students come forward to deposit His memorization to the teacher. Regarding muraja'ah activities, students do it independently either at school or at home (Martínez-Jiménez dkk., 2021). Based on the observations of researchers, when viewed from how students memorize, most of them only want to fulfill the demands of memorization / ziyadah without any muraja'ah activities back while at school.

Based on the data obtained by the researchers, when ziyadah activities / add memorization in School 56.25% of students have problems in a noisy / crowded environment, 31.25% of students are constrained by ziyadah time which is only a short time of approximately one hour, sleepy and not focused when memorizing, and 12.5% of students have personal problems such as shortness of breath when chanting verses of the Qur'an.

In contrast to ziyadah / adding memorization activities, when muraja'ah activities / repeating memorization, 31.25% of students have sleepy problems and fatigue when Activities, 18.75% of students are constrained by a noisy / crowded environment, 18.75% of students feel lazy or not in the mood, and 12.5% of students are not smooth / stammering when doing muraja'ah (Ibrahim Hamada, 2022). When viewed from the media used by students when memorizing or repeating memorization, most of them only use the Qur'an media without the help of other media that can be used to avoid obstacles experienced by students it is when memorizing or repeating the memorization of the Qur'an. According to data obtained by researchers 68.75% of students when doing muraja'ah activities at home do not use any media other than the Qur'an, 18.75% of students only use murottal speakers, and 12.5% of students other than media speakers also use Mobile / Youtube media (Mohd Yusof dkk., 2023). This shows the lack of media that can be utilized / used by students while performing muraja'ah activities memorize the Qur'an (Facal, 2020). So, researchers can conclude that students need special media that can support their process in doing muraja'ah or repeating memorization, both at school and at home. This is concluded based on data related to what students need during muraja'ah, 37.5% of students answered their needs, namely learning media.

As we know, in a learning process there are a number of components that are interconnected with each other in order to achieve goals. According to Ali (Suda, I.K. 2016) there are several components in question, which include (Garza dkk., 2023): (1) objectives, (2) teaching materials / materials, (3) methods, (4) tools / media, and (5) evaluation. Because learning is a system, the success of learning is largely determined by the extent to which the effectiveness of each component interacts.

Media as one component of the system has a function as a means of non-verbal communication. As one component of the system, it means that media absolutely must exist or must be utilized in every learning (Ratrout & Köprülü, 2022). It is said that because if one component of the system does not exist, then the results to be obtained will not be maximal (Urinboyev, 2023). Therefore, it is necessary to conduct research on the development of interactive learning media (Mani dkk., 2019), one of which is audiovisual media or video furniture in this research, the development of interactive media will be carried out using the main application, namely Edpuzzle (Sharif Matthews & López, 2019). Edpuzzle is a website that can help select learning videos, then edit, cut, record sound, and add questions (Praetorius dkk., 2020). This interactive media creation is also combined with several other applications such as Canva (image processing), KineMaster and/or Wondershare Filmora (video processor), and Cool Edit Pro (sound processor). With the development of this interactive media, it is expected to help students improve the ability to memorize the Qur'an and achieve an independent and fun learning process.

According to Amaliah (2020: 37), Edpuzzle is an application and video-based learning media that can be used by all educators to make lessons as interesting as possible, videos can be taken from Youtube (Chatterjee dkk., 2021), Khan Academy and Crash The course is then entered into the Edpuzzle application and educators can ask questions and also track whether their students watch the videos given and how familiar students are with the material provided. In addition, Edpuzzle allows users to import videos from Youtube and add interactive components, such as closed selections and open-ended questions as questions to check students' understanding. In addition to relying on videos that are from Youtube, teachers or Educators can also import videos that have been made by themselves directly through drag and drop then edit them as needed.

This study aims to develop interactive media using the Edpuzzle application in accordance with the eligibility criteria of media and materials to improve students' muraja'ah abilities. The Edpuzzle application allows students to use android devices such as mobile phones. Based on the data obtained by the researchers 87.5% of students Have a mobile phone, 75% of which are under parental supervision with an average usage limit of two to three hours (Li & Li, 2022). The utilization of android by students at home is mostly used by students to play games. So, with this interactive learning video will further help students in learning and improving their abilities muraja'ah independently at home (Barlott dkk., 2020). The instruments used in this study are documentation, questionnaires and assessment formats. Questionnaires are used to see the results of validity tests generated by interactive media (Xiao dkk., 2019). The data obtained is then analyzed descriptively quantitatively to determine the quality of the interactive media products developed.

## RESEARCH METHODS

The method used in this study is the Research and Development (R &D) research method with the Four D (4D) development model which consists of four main stages, namely define, design, development, and disseminate. For data processing, validity tests and media practicality tests are carried out using instruments in the form of assessment questionnaires and the results obtained are then described based on the criteria for interpretation of dala scores

## RESULTS AND DISCUSSION

This type of research is development research or often referred to as Research & Development (R&D). This research process is carried out using a 4D model with stages that have

been adjusted to the needs of researchers. Trianto (2012) states that the 4D development model consists of four stages, namely define, design, development and disseminate.

The first stage of the study is the define stage. This stage aims to establish Basic problems faced in research, then conduct an initial analysis to facilitate the development process. The second stage is design, in this second stage researchers begin to design media starting from the initial design such as storyboards. The third stage is development, this stage is the most important stage because at this stage we will obtain data for the results of the research. At this stage the process carried out is the development of media that has been made at the design stage. Development is carried out based on the results of revisions and input from the validation process to media experts and material experts. Media experts from this study are two lecturers majoring in Curriculum and Educational Technology who are experienced in the media field, namely Mr. Dedi Supendra, S.Pd., M.A. and Mrs. Novrianti, S.Pd., M.Pd. Meanwhile, material experts were carried out by middle-class tahfizh subject teachers at SMPs IT Tahfizh Adzikra Padang, namely Mr. Fajril Huda, S.Ag. Furthermore, the practicality test of this research was carried out by 16 students of the middle tahfizh class (wustha). Media trials by students are carried out using each student's mobile phone, so that the required devices do not experience problems. Overall, the interactive learning video media product tawaasilul aayat method in middle class tahfizh subjects at SMPs IT Tahfizh Adzikra Padang is "Very Valid" so it deserves to be tested in tahfizh learning, especially in the field of muraja'ah. The data obtained was 3.62 or 72.3% from the first media expert in the first stage with the category "Valid", 4.15 or 83% from the second media expert in the first stage with category "Very Valid". After revising the first stage of media, researchers showed the media back to the media expert for revision and the results obtained were 4.3 or 86% of the first media expert in the second stage with the assessment category "Very Valid", 4.92 or 98.4% of the second media expert in the second stage with rating category "Very Valid", 4.78 or 95.7% of material experts with assessment category "Very Valid". For practicality, it obtained an assessment of 4.86 or 96.6% with the assessment category "Very Practical".

The validity used in this study consists of two types, namely logical validity and empirical validity. Logical validity contains the word "logical" which means reasoning against The validity of a media obtained from the results of reasoning that follows existing theories and provisions. Researchers use this logical validity to test validity for media experts and subject matter experts.

After testing the validity of the product by media experts and material experts and getting results worthy of trials, then a media practicality test was carried out by piloting the media to middle class students at SMPs IT Tahfizh Adzikra Padang which consisted of of 16 students. The validity used is empirical validity. Empirical validity contains the word "empirical" which means experience. An instrument can be said to have empirical validity if it has been tested from experience. So, empirical validity is obtained from student experience after conducting trials on previously developed media.

Based on the results of trials on interactive learning video media of the tawaasilul aayat method in the middle class as many as 16 students as respondents from the questionnaire distributed, the results of the scores obtained were "Very Practical" by obtaining an assessment of 4.86 or 96.6%. The results of this study can be categorized as Very Valid and Very Practical in accordance with the opinions of Riduwan and Sunarto (2013) which states that the range of values of 4.86 or a percentage of 96.6% is categorized as Very Valid.

The last stage of the study is the disseminate stage. At this stage, researchers disseminate products that have been assessed and practical. The distribution of products is adjusted to the needs and conditions in the research process. The dissemination process was in the form of giving leaflets



to grade IX A students at SMPs IT Tahfizh Adzikra Padang, who Contains syntax or steps in using interactive learning video media that has been developed. The disseminate sheet can be seen in appendix 10, p: 193.

The purpose of this development research in learning is to create a learning process that is more interesting and can stimulate student interest and student motivation in improving their abilities in terms of muraja'ah. Thing This is in accordance with Nasution's opinion (2013) about the benefits of a medium in learning, one of which is so that the teaching process attracts more students' attention so that it can foster motivation in learning. The product produced from this research is in the form of interactive learning videos using android / mobile phones so that the learning process can be done by students anywhere and anytime. It is appropriate with Darmawan's opinion (2013) about mobile learning, which is an alternative learning service that can be implemented anywhere and anytime. By utilizing smartphones, students can access learning both at school and at home.

Based on the discussion above, it can be concluded that interactive learning video media tawaasilul aayat method in tahfizh subjects in the middle class can be used in The learning process as an alternative learning media that can be used as a learning resource for students because it is in accordance with media eligibility criteria.

Based on the objectives and development procedures that have been used, data on the results of research conducted are obtained as follows:

#### 1. Define Stage

When viewed from the media used by students when memorizing or repeating memorization, most of them only use the media of the Qur'an without the absence of Other media assistance that can be used to avoid obstacles experienced by these students when memorizing or repeating the memorization of the Qur'an. According to the data obtained by the researchers 68.75% of students when doing muraja'ah activities at home do not use any media other than the Qur'an, 18.75% of students only using murottal speakers, and 12.5% of students in addition to media speakers also use Mobile / Youtube media. This shows the lack of media that can be used by students when carrying out muraja'ah activities to memorize the Qur'an. So, it can be concluded that students need special media that Can support their process in performing muraja'ah or repeating memorization, be it at school or at home. This is concluded based on data related to what students need during muraja'ah, 37.5% of students answered their needs, namely learning media.

#### 2. Design Stage

The process carried out at the design stage is the creation of book specifications

Interactive digital including storyboard design for Storyboard is basically the flow of making learning videos / media that contains an outline of the content in each plot from the beginning of creation to completion, and storyboard is a more explanation Details / complete of each flow carried out when developing learning video media.

#### 3. Development Stage

At this stage of development, there are two steps taken by researchers, namely:

##### a. Validity Test

Based on the data processing process carried out, this study showed results obtained by 3.62 or 72.3% from the first stage of media experts with "Valid" category, 4.15 or 83% of media experts second stage first with "Very Valid" category. After revising the first stage of media, researchers showed the media back to media experts for revision and the results obtained were 4.3 or 86% of the first media experts in the second stage with categories "Very Valid" rating, 4.92 or 98.4% of the second media experts in the second stage with the "Very Valid" assessment category, 4.78 or 95.7% of material experts with the "Very Valid" assessment category.

#### b. Practicality Test

For practicality, an average rating of 4.86 or 96.6% was obtained with the "Very Practical" assessment category. Overall Edpuzzel products as media Interactive in the Muraja'ah Program Junior High School Students are "Very Valid" and "Very Practical"

#### 4. Dissemination Stage

At this stage, researchers disseminate products that have been assessed and practical. The distribution of products is adjusted to the needs and conditions in the research process. The dissemination process was in the form of giving leaflets to class IX A students in SMPs IT Tahfizh Adzikra Padang which contains syntax or steps in using interactive learning video media that has been developed.

The purpose of this development research in learning is to create a learning process that is more interesting and can stimulate interest students and students' motivation in improving their abilities in terms of muraja'ah. This is in accordance with Nasution's opinion (2013) about the benefits of a media in learning, one of which is so that the teaching process attracts more students' attention so that it can foster motivation in learning. The product resulting from this research is in the form of interactive learning videos using android / mobile phones So that the learning process can be done by students anywhere and anytime. This is in accordance with Darmawan's opinion (2013) about mobile learning, which is an alternative learning service that can be carried out anywhere and anytime. By utilizing smartphones, students can access learning both at school and at home.

Based on the discussion above, it can be concluded that interactive learning video media tawaasilul aayat method in tahfizh subjects in the middle class can be used in the learning process as an alternative learning media that can be used as a learning resource for students because it is in accordance with media eligibility criteria.

## CONCLUSION

Based on the data analysis that has been done, the following conclusions can be drawn:

1. The process of developing Edpuzzel as an Interactive Media in the Muraja'ah Program to improve the muraja'ah ability of middle class students (wustha) at the Junior High School Level begins with the stages of defining, planning, development, and Spread. Validation with media experts and material experts, revision based on suggestions and comments from experts, practicality testing, and subsequently produce the final product.
2. The validation results were carried out to three experts in their fields, two as media expert validators, and one person as material expert validators with an average data acquisition obtained of 4.3 or 86% from the first media expert with the category "Very Valid", 4.92 or 98.4% of media experts were second in the "Very Valid" category. So it can be concluded that Edpuzzel's media product as an interactive media in the Muraja'ah Program developed based on the values given by the two media validators as a whole is declared "Very Valid". Validity test results The material on the Edpuzzel product as an Interactive Media in the Muraja'ah Program that has been developed as a whole is declared "Very Valid" with an average of 4.78 or 95.7%.

From the results of practicality trials to students as test subjects, it shows that from the aspect of practicality, the media obtained an assessment of 4.86 or 96.6%. So that the media can be categorized as "Very Practical" to apply. So it can be concluded that the results of the assessment of Edpuzzel media as an interactive media in the Muraja'ah Program for middle class students of

tahfizh subjects at the junior high school level that have been developed are very valid and very practical.

## AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Writing - original draft.

Author 4: Data curation; Investigation, Formal analysis.

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