

DEVELOPING A 3D-MEDIA SIMULATION TO IMPROVE HAJJ SPIRITUAL INTELEGENCE IN THE GRADE XI SMK MUHAMMADIYAH

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Abstract: Islamic religious education is one of the subjects that not only delivers theoretical science, but also need a real practice in everyday life. Likewise, Hajj is not only theory at the school to meet the target of the curriculum, but is also expected to practice correctly to fit the guidance. One of the lessons of Islam is pilgrimage. The Hajj is a series of activities of construction, service, and protection against the pilgrims. All of those should be implemented so that pilgrims can carry out a whole series of ritual in worship and reaching for the Hajj to be accepted. In practice, there are various problems encountered such as not all pilgrims get a coaching, services, and protection adequately, because various shortcomings in organizing the pilgrimage. The purpose of this research is developing the learning media in the form of 3D-video objects in order to ordinance the pilgrimage on the students of Class XI SMK Muhammadiyah to enhance spiritual intelligence. This is an R&D type of research referring to the model of development of the Borg and Gall. The technique of data collection by observation, interview, question form, instrument development models and instruments to measure their effectiveness. Technique of data analysis includes descriptive analyses descriptive qualitative and quantitative. The results include the innovation of Hajj learning simulation with virtual reality so it can increase spiritual intelligence. hang the correct implementation of the pilgrimage and one of the solutions to reduce problems during Hajj.

Keywords: hajj, virtual reality, simulation, spiritual intelligence

INTRODUCTION

Hajj is an act of worship that must be implemented for Muslims who can afford it. It is the culmination of the Hajj rituals in the tenets of Islam. Hajj also integrates the landscape of Sharia in it and plays role as the strength of the syiar to non-violent. It is again reflected in the process of standing, performing the sa'i, and the jamarat. Almost every Muslim has the desire to perform the Hajj. The ever increasing list of prospective pilgrims can be found in Indonesia.

Education is believed to be able to impart knowledge and values contained therein. Thus man can improve his ability in practicing Hajj. Islamic religious education is a subject that not only gives theoretical science, but need a real practice in everyday life. The subjects of jurisprudence being one of the material a very important religious education as the Foundation in the practice of worship. Likewise with Hajj not only theory at the school to meet the target of the curriculum, but are expected to know and understand it so as to make the provision when the Hajj. Then the material about the

Hajj need to be taught at all levels of education. However, in order to understand, it is quite difficult because of the need of high imagination, especially for students who have never know the place of execution of the Hajj in Saudi Arabia.

The Hajj is a series of activities of construction, service, and protection against the pilgrims should be implemented so that pilgrims can carry out a whole series of ritual in worship and reaching for the Hajj will be accepted. On the implementation of the actual Hajj there are various problems that arise unexpectedly in advance. Such cases happened since a few years ago. Here are the Hajj tragedies ever happened, they are:

Darul Point (1995:161) mention the disaster in Mina, Saudi Arabia that occurred on July 2, 1990 by the Hajj tragedy Mina tunnel. Pilgrims died were trampled as it passes through the tunnel linking Al Maasin City between Mecca and Mina. Pilgrims died as much as 1,426 people, mostly pilgrims from Indonesia as many as 649 people.

Similar incidents happened again after a 15 year, precisely on 24 September 2015. The victim at the event this time were more as released by news agency Associated Press about casualties in that event, mentioned at least 2,411 people dead.

In the same month also happens to the incident with the fall of a huge crane (crane) in the Grand Mosque complex. I.e. on September 11, 2015. The Government of Saudi Arabia stated that wind storm which led to the collapse of a large crane (crane). This incident take its toll 107 people were killed and 238 injured.

The question of the Organization of the pilgrimage continues to happen every year, i.e. the placement of pilgrims which are far apart and different places that complicate the officer and the supervisor of the Hajj. Never mind the lack of facilities for connecting a antasa officer or supervising the Hajj to communicate so many pilgrims who lost or left out after prayers at the Masjid Al-Haram or after throwing the pebbles.

It's not just happening in foreign countries, but also within the country there is still the problem of organizing the Hajj. It became actual issues and talkeb by many parties who failed to finish. Those issues are firstly, the interest savings from the initial deposit pilgrims of hajj candidate. The Fund's initial deposit pilgrims reach 40 trillions with flowers averaging 1.5 – 2 trillion every year. The Fund was controlled by the Ministry of Religion being used to subsidize the pilgrims depart for Hajj flights. Funding was very prone to the occurrence of corruptions.

Second, Dana Abadi Umat (DAU) is a funding obtained from the results of the Development Fund of the eternal people and of the rest of the operational costs of the Organization of the Hajj and other lawful sources and they are not binding. DAU is already achieving more 2.5 tilions of Rupiah and has been frozen since 2005. DAU is used for the benefit of the people which includes the Ministry of Hajj, education and propagation of religious, economic, social development as well as a means of worship.

Third, the waiting list of prospective pilgrims are very long. Data referred to by the Ministry of religion (Kemenag) RI that waiting list (waiting list) prospective pilgrims until April 2018 reached 3.7 million. Shortest waiting list 11 years until the longest 30 years and each year is always increasing.

Fourth, bailouts of Hajj performed a variety of financial institutions that become a trend in the community. Actually it is in fact already violating the terms of the *istitha'ah* of the Hajj. Despite the pretext of accounts receivable (*qard*) or renting service (*ijarah*), in Islam it is forbidden. The reason the practice of bailouts is damning for prospective pilgrims because in a waiting period or after the return from the Hajj should pay installment receivables.

Fifth, a certificate of the rituals conducted before leaving for Hajj less intensive and impressed formality. This impact for prospective pilgrims who have no ability and mastery of the substance of the rituals and *manafi ' Hajj*. Whereas ability in the rituals of Hajj and *manafi ' will* have an impact on the quality of the pilgrimage. *Istitha'ah* terms which should include the mastery of science and knowledge of religion is not reached.

Of all the various problems concerning the Organization of the Hajj, started in Saudi Arabia that had occurred over time, for the Organization of the Hajj in Saudi Arabia and in Indonesia that hasn't been fullest, this research hopefully able to provide one of the solutions to develop a 3D learning media in teaching and learning so that students become active, practical, effective and the results of the study are also optimal. It is expected to be able to encourage the research of 3D media development practices in ordinance to improve Hajj spiritual intelligence within students.

APPROACH & RESEARCH METHOD

Materials/Research Subject R&D (research and development) which means this product-oriented research. Development model in this study through the stage of conceptual models, theoretical model, hyphothetical model and final model. At this stage of conceptual model is the analysis contains a mention of the product components in detail. The theoretical model is a model that describes the framework of thought based on relevant theories and supported by empirical data. The hyphothetical model is a model that has already gotten input from experts through discussion. The final model is a model that has already tested the empirical basis. Research development refers to the development model of the Borg and Gall. Thw improved models from Borg & Gall (1983:775) consists of 10 steps, namely research and information gathering, planning, early forms of products, product trials, field trials beginning, revision of main products, field trials the main revision of product operations, operational field trials, revision of the final product, and implementing the products. The technique of data collection is by observation, interview, and asking questions through forms. Instrument data collection starting from the introduction, instrument development models and instruments to measure their effectiveness. Technique of data analysis includes descriptive analyses descriptive qualitative and quantitative. Quantitative descriptive analysis of data used to analyze the data in the form of comments, suggestions, criticisms of the now interviews and discussions. For quantitative descriptive analysis of data is used to analyze the data that contains the elements such as mean, median and mode.

RESULTS AND DISCUSSION

a. Introduction

The process of preliminary information to look at issues facing teachers and students in learning with its implementation. This process is done by giving the question form and interviews with teachers and students. To clarify information conducted discussion between student teachers and a team of experts. This discussion consists of four Islamic religious education teachers, 4 students and 3-person team of experts. Discussion of the results obtained the following results:

Table 1 Discussion of the results

| No | Source | The weakness | Solving |
|----|----------|--|--|
| 1 | School | The lack of facilities, media/props are not appropriate | Provide media/props are required. Optimization of the ability of the students. Training and supervision on a religious teacher. Improve the competency of teachers. |
| 2 | Students | The competence of the students are weak, There is no learning targets, the difference between theory and practice | |
| 3 | Teachers | Lack of mastery of the material, the delivery of the material insufficient (text book), | |

b. Media development

1. Results validation and revision of the draft media

There have been some noteworthy inputs which include the model: (1) introduced the media that will be used, (2) prepare the amount of media that will be used in learning, (3) make the steps clear learning implementation.

2. The results of the validation and revision of the plan of implementation of the Learning.

The execution plan is created for teachers in the Learning process of learning using virtual reality media. Validation and qualitative revision shows that there are needs to be revised. These includes: measures of learning remains unclear, learning objectives are not in accordance with the indicators of achievement of the learning. For quantitative revision indicates that the validator assesses the average draft of implementation with means 5.52. The learning can be used with little revision.

3. The results of the validation and revision of product in the form of virtual reality media.

Guide media used consists of: a guide for students, a guide for teachers. Guide to using virtual reality media validated and obtained the following data:

Table 2 Virtual Reality Media Validated

| No | Description | Validator | | | | Total |
|----------|--|-----------|-----|-----|-----|-------|
| | | 1 | 2 | 3 | 4 | |
| 1 | Using language that is in accordance with the rules | 4 | 4 | 5 | 4 | 17 |
| 2 | Use words and phrases that are easy to understand | 5 | 4 | 4 | 5 | 16 |
| 3 | The presentation of the material in chronological order | 4 | 4 | 4 | 4 | 16 |
| 4 | Components of the model clearly stated | 5 | 4 | 5 | 4 | 18 |
| 5 | The stages of the use of the media is easy to do | 5 | 5 | 4 | 4 | 18 |
| 6 | The content of material on the media to clarify the material in the Handbook | 4 | 4 | 4 | 5 | 17 |
| 7 | Material in accordance with the guidance that Saheeh and acceptable | 5 | 5 | 4 | 5 | 19 |
| 8 | The time it takes enough in using the learning media | 4 | 4 | 4 | 4 | 16 |
| 9 | Media quality is very good and easy to use | 4 | 3 | 4 | 3 | 14 |
| 10 | Media easy to obtained and applied | 5 | 4 | 4 | 3 | 16 |
| 11 | General assessment of product <i>virtual reality</i> | B | B | B | C | |
| Total | | 45 | 41 | 42 | 39 | 167 |
| Average | | 4,5 | 4,1 | 4,2 | 3,9 | 4,2 |
| Criteria | | L | L | L | CL | L |

After validation of the feasibility by 4 validator compared with media video simulation of the Hajj with virtual reality, it shows above average 4. There are 3 that shows the average value of 4 (good) and write down the value of B (can be used with a little revision). There is 1 that gives the value 1 (enough) and write down the value of C (can be used with the revisions being).

c. Effectiveness

1. Observation) aspects of Knowledge

On the pretest was conducted and knowledge post-test. The aspects rated was the magnitude of the mastery learning materials controlled by students. The pre-test obtained prior learning with virtual reality, while the post-test i.e. information obtained after the application of the virtual reality of the media. Once the media is applied, it will note their effectiveness for enhancing knowledge of students. Information obtained in the form of the conversion value of low, medium, high and very high.

Table 3 The Form Of The Conversion Value

| No | Category | Score range | Test Of Knowledge | | | |
|----|--------------|-------------|-------------------|-------|-----------|-------|
| | | | Pretest | | Posttest | |
| | | | Frequency | % | Frequency | % |
| 1 | Very high | 91-100 | 0 | 0 | 4 | 3,80 |
| 2 | High | 76-90 | 21 | 20,00 | 47 | 44,76 |
| 3 | intermediate | 61-75 | 30 | 28,57 | 38 | 36,19 |
| 4 | Low | ≤ 60 | 54 | 51,43 | 16 | 15,24 |

From table 4 above we can note that aspects of the knowledge of the pretest with posttest experience is increased. Very high category 3.70%, 20.76% high, medium low while the 7.62% 36.19% decline rate means that the knowledge of experienced a significant increase.

2. Spiritual aspects of intelligence Observations)

To get the information the students include spiritual intelligence: the vision, the presence of Almighty God, pray or Dhikr, quality of patient, the tendency to do good, empathy, soulless big and serving with a happy ending. From observation data that attitude will be retrieved results with less conversion, simply, good and very good.

Table 4 The Students Include Spiritual Intelligence

| No | Indicators Of Spiritual Intelligence | Assessment | Object | Average | SB | Description |
|----|--------------------------------------|------------|--------|---------|------|-------------|
| 1 | Have a vision of the future | Pretest | 105 | 58,77 | 6,21 | C |
| | | Posttest | 105 | 59,03 | 7,50 | B |
| 2 | The Presence Of God | Pretest | 105 | 58,03 | 5,56 | C |
| | | Posttest | 105 | 61,40 | 5,80 | B |
| 3 | Pray or Dhikr | Pretest | 105 | 59,47 | 3,42 | K |
| | | Posttest | 105 | 62,87 | 4,90 | C |
| 4 | Quality of patient | Pretest | 105 | 58,43 | 5,68 | K |
| | | Posttest | 105 | 58,77 | 6,91 | B |
| 5 | The tendency to do good | Pretest | 105 | 59,47 | 4,88 | C |
| | | Posttest | 105 | 62,33 | 4,50 | B |
| 6 | Big heart | Pretest | 105 | 58,30 | 7,33 | K |
| | | Posttest | 105 | 60,03 | 5,42 | B |
| 7 | Serve with happy | Pretest | 105 | 60,40 | 6,64 | C |
| | | Posttest | 105 | 62,87 | 4,20 | B |

Based on table 5 above all the subject were experiencing an increase between pretest with posttest. Of the eight intelligence attitudes that there are three attitudes that have elevated high i.e. pray and to di zikr have average (3.40) which means increasing from less be enough. The presence of God average (3.37) than enough increase to either. The tendency to do good with average (2.86) than enough increase to either ones.

CONCLUSION

The results of this research are with the development of virtual reality simulation practice media Hajj on learning will improve knowledge and spiritual intelligence. Media innovation learning with virtual reality media greatly influences on the attitude of the learners.

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