Analysis of Students' Needs for Multiple Intelligences Interactive Learning Media with Islamic Values

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Article Info	Abstract
	The research problem is how are the steps for analyzing the needs of interactive learning media based on multiple intelligences that integrate with Islamic values to be developed. This research aims to describe the Interactive Learning Media Needs Analysis based on Multiple Intelligences integrated with Islamic values. This type of research is qualitative research. This research was conducted to analyze the need to make Inspiring Presentation Interactive learning media with HTML5. The data collection technique in the research was conducted using interview techniques with 6 class VII students and 3 Mathematics teachers. Based on the needs analysis and the material analysis results, no interactive learning media contains the nine multiple intelligences that we know as Multiple Intelligences that integrate with Islamic values. So it needs to be further developed from the results of this research to obtain good learning media as needed.

INTRODUCTION

Learning media are all teaching tools that are useful in a teaching and learning process to explain learning material to facilitate the achievement of the learning objectives that have been formulated [1]. According to Bullock in Pemansyah & Muwarningsih, new technology in the world of education creates opportunities for educators or teachers to use technology to support teaching and learning processes and activities in and outside the classroom [2]. In the current digital era, interactive learning media is expected to provide convenience for teachers and students in the teaching and learning process. According to previous research, the teacher's pattern and teaching method still seemed monotonous by only giving assignments as practice questions using applications already used, such as *WhatsApp* and *Google Classroom* [3].

Technology positively impacts the implementation of learning during the current pandemic [4]. The positive impact of technological developments on the learning process is that it helps the implementation of learning to be more effective and efficient both within and outside the network [5]. Using technology in the online learning process during a pandemic is a solution that answers the challenges teachers face [6]. Therefore, a teacher needs to be able to utilize technology that can support the learning process. During the current pandemic, the ability of teachers to utilize technology-based learning media is an essential requirement. This requires teachers to have skills in developing media in conveying material and implementing learning assessments [7].

Interactive Multimedia Learning Media One interactive learning medium that can be used in teaching and learning is I-spiring Presenter [8]. I-nspiring Presenter is a tool that can convert presentation files into flash and SCROM/AICC formats, forms that can be used in LMS (*Learning Management System*) e-learning [9]. The ease with which you can use this application because apart from its easy-to-use feature in applying using Microsoft Power Points there is also a *free version* (free).

The I-spiring Presenter learning application can be an interactive learning media solution during the Covid-19 Pandemic [10]. Based on Metro City Statistics data from JHU CSSE Covid-19, data on new cases and deaths reached their highest position on July 18, 2021, reaching 44,721 new cases with an average of 50,039 per seven days. Therefore, online-based Study From *Home learning* is an effort to prevent and reduce the transmission of the Covid-19 virus in the city of Metro. A teacher is required to be able to create and create good learning media to support both offline and online (*Hybrid*) learning processes. Learning using applications is modern learning, which is very suitable for use according to the needs of the current digital age.

In the era of 5.0, Islamic values must not fade, and we must maintain them. Islam is the teachings that Allah SWT has revealed to Humans, which was revealed through His Prophet Muhammad SAW [11]. The Islamic values referred to in this study are *akhlakul karimah*. In the science of sociology, morality is equated with morality, ethics, social behavior, manners, and human karma in social life. According to Abdurahman, *akhlakul karimah* is the Guidance of the Prophet Muhammad SAW, followed by friends and scholars who are loved by humankind and give happiness in the world and the hereafter [12]. Akhlakul karimah broadly consists of morals to Allah, morals to Rasulullah SAW, morals towards oneself, and morals towards parents and teachers. However, no learning media integrates *Multiple Intelligence* with Islamic values for the character of the nation's children who have good morals.

Agustin's research discusses the theory of multiple intelligences by Gadner [13]. His results concluded that to help develop interpersonal intelligence, the role of parents and teachers is needed. In Omerin's research, he discussed the critical role of character education for students [14]. In his research, it is still a literature study discussing character education strategies through multiple intelligences. Winti's research on developing critical thinking skills by implementing multiple intelligence-based collaborative problem-solving strategies (Multiple Intelligences) [15]. In his research, he obtained data on critical thinking skills, mathematical and logical intelligence, and mastery of concepts. From the analysis of previous research, there has been no need for analysis research on the development of digital Multiple Intelligence teaching materials integrated with Islamic values.

Based on the Prasurve that the researchers carried out at SMP Negeri 3 Metro, from the results of teacher and student interviews, it was found that the school had used the independent learning curriculum, in which the learning included character values that were included in learning, but there were no learning media that could support those values. Character values as in learning media based on Multiple Intelligence Integrated with Islamic values. Schools have also used interactive media such as *YouTube*, *Zenius*, *Quiziz*, and *Chrome/web*, but the teachers themselves have never made or used interactive media, the I-spiring Presentation application with HTML5. In learning mathematics, students still lack good learning resources that can be studied anytime, anywhere, using only a smartphone. The primary source of learning in schools, mainly mathematics

textbooks, still uses printed books published by schools. There are no learning media that connects Multiple Intelligences with Islamic values. So students still have difficulty fulfilling the completeness of learning mathematics, for example, comparative material.

Based on the background of the problems above, this research will design student learning trajectories using interactive digital teaching materials based on Multiple Intelligence Integrated with Islamic values carried out at SMP Negeri 3 Metro. This research focuses on the Analysis of the Needs of Interactive Learning Media Based on Multiple Intelligences Integrated with Islamic Values for Mathematics teaching materials for class VII students on Comparative material.

METHOD

This research type based on measurement and data analysis is qualitative research, which seeks to analyze social life by describing the social world from the point of view or interpretation of individuals (informants) in a natural setting [16]. Qualitative research on the needs of I-spiring Presentation learning media with HTML5 based on Multiple Intelligence integration with Islamic values in Mathematics Learning. This research was conducted within six months. Research time starts from April to September 2022. The research stage of analyzing the needs will be carried out in June 2022.

The target or objective of this study is the Analysis of Needs for Interactive Learning Media based on *Multiple Intelligence* integrated with Islamic values in terms of the analysis of the needs of Mathematics teaching materials for VII grade students on Comparative material. The subjects in this study were three mathematics teachers and students of class VII SMP Negeri 3 Metro, which was limited to one class. Six students were randomly selected. The choice of research location was based on the facilities provided by the school, and the learning model usually carried out during the transition period.

This research focuses on the analysis stage, which consists of needs analysis and material analysis, followed by the *design stage*. The steps of this research are as follows:
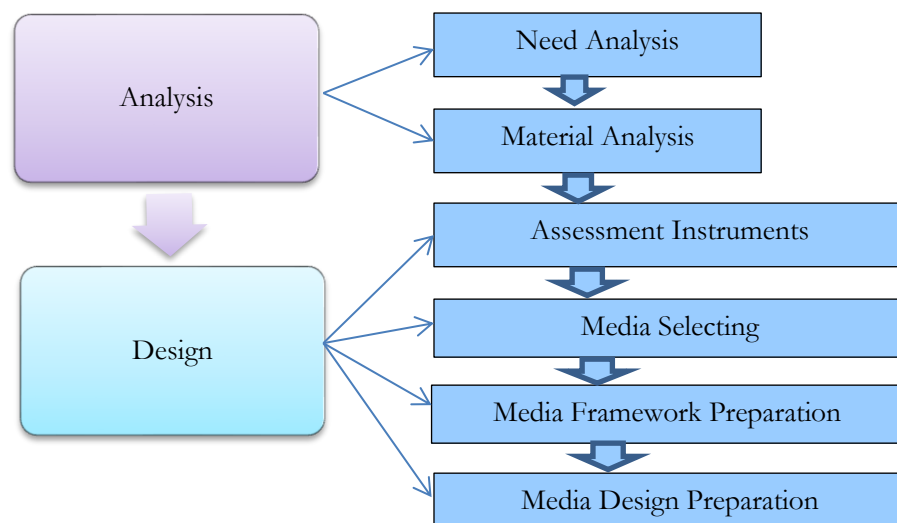

Figure 1. Research Steps

1. Analysis

The analysis aims to obtain the initial analysis data needed to define what is needed in the learning process related to making learning media. This phase consists of 2 steps, namely:

a.   Needs Analysis

At this stage, the researchers interviewed Class VII mathematics teachers at SMPN 3 Metro. This stage is carried out to find out what is needed by the teacher in providing learning to students. Needs analysis from interviews shows that students need learning media that is not monotonous and can be accessed anywhere and anytime. This is a guideline for creating and developing I-spiring Presentation learning media with HTML5 based on *Multiple Intelligence* integrated with Islamic values.

b.   Material Analysis

This stage is carried out to determine the material used during research. At this stage, the researcher analyzed competency standards, essential competencies, indicators, and learning objectives in the material to be used. The material used in designing instructional media in Class VII Mathematics is a comparison.

2.   Design

At this stage, the aim is to carry out the design of learning media or products in order to get an initial appearance, which consists of four design stages, including:

a.   Compilation of Assessment Instruments

Develop an Assessment Instrument I-spiring Presentation learning media with HTML5 based on *Multiple Intelligence* integrated with Islamic values. The needs analysis instrument is in the form of an interview guide.

b.   Media Selection

The first step is to choose learning media in the form of I-spiring Presentation learning media with HTML5 based on *Multiple Intelligence* integrated with Islamic values.

c.   Media Framework Preparation

The next stage is used to develop a Learning Media framework which will later be applied to media, for example, the content arrangement of I-spiring Presentation learning media with HTML5 based on *Multiple Intelligence* integrating with Islamic values as well as musical instruments and animated videos.

d.   Media Design Preparation

At this stage, the media design is arranged according to the rules of learning media, such as the initial cover, the outline of the contents of the teaching materials, the stages of the learning process for multiple intelligences and Islamic values, as well as the media search feature to facilitate the use of interactive media.

Research Instruments

The research instrument for interactive learning media based on *multiple intelligences* uses interviews. The research instrument needs an analysis stage to prepare an interview guide. The interview guide used in this study is unstructured, which only contains an outline of what will be asked. The following is a grid of interview instrument guidelines in this study.

Table 2. Interview Guidelines Grid
Analysis of Needs for Interactive Learning Media Based on *Multiple Intelligences* Integrated with
Islamic Values at SMP N 3 Metro

No	Research Formulation	Research question	Indicator	Informant
1	How is the Analysis of Needs for Interactive Learning Media based on *Multiple Intelligence* integrated with Islamic values at SMPN 3 Metro?	1. What Learning Resources are used in Schools? 2. What Kinds of Learning Media are schools already using? 3. Has the school used Interactive Media? 4. What Types of Interactive Media are schools already using? 5. Have you implemented multiple intelligence learning?	a. Knowledge b. Experience	1. Teacher 2. Learners
2.	Is the Interactive Learning Media Needs Analysis based on *Multiple Intelligence* integrated with Islamic values appropriate for use in SMPN 3 Metro?	6. Have mathematics teachers ever used interactive learning media? 7. Use of Interactive Learning Media did the teacher make? 8. Have you used Interactive Learning Media based on Multiple Intelligence to integrate with Islamic values? 9. Is the learning media in schools good enough to increase Multiple Intelligence? 10. Is the learning media in schools enough to increase Multiple Intelligence and integrate with Islamic values?	a. Learning Facilities and Media b. Facility Availability c. Evaluation	1. Teacher 2. Learners

Data Collection Technique

Data collection techniques in the research were questionnaires and interview techniques. Interviewing is obtaining information/data for research purposes through question and answer, face-to-face between the interviewer and the respondent, using an interview guide [17]. When conducting preliminary studies, the data collection technique used was interviews with a smaller number of respondents to find problems that had to be investigated in more depth [18]. Interviews were conducted with class VII students and teachers at SMP Negeri 3 Metro to analyze the needs of the developed learning media. In this study, interviews were conducted with six students of class

VII to find out how to analyze the needs of students in class, especially in the use of learning mathematics. Furthermore, interviews with 3 Mathematics teachers to obtain information regarding materials, teaching materials, learning implementation, syllabus, lesson plans, and grade VII student achievement.

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RESULTS AND DISCUSSION

Results of Analysis

This study has two analysis results: the needs analysis and the material analysis results.

a. Results of Needs Analysis

Needs Analysis, namely interviews, were conducted with three teachers in Mathematics for class VII at SMP Negeri 3 Metro. The results of teacher interviews, namely Kurniati, S.Pd., Veni Fadillah, S.Pd and Martina, S.Pd., show that, first, the learning resources that are often used in schools are in the form of textbooks and printed books published by the ministry and culture. Second, learning media is widely used by students at school in the form of laptops, LCDs, PowerPoints, and the internet. Teachers still do not use many interactive media, especially in learning Mathematics. As for Interactive media that has been used by Quiziz and Edugame teachers, however, teachers have never used and are familiar with other interactive media such as Ispring Presenter. So researchers need to introduce Ispring Presenter learning media. Third, teachers do not know what *Multiple Intelligence* is, and there have never been Interactive learning media based on *Multiple Intelligence* with Islamic values. So the researcher has to explain and explain to the teacher about *Multiple Intelligence*. So that teachers understand the importance of *Multiple Intelligence* in student learning. The importance of multiple intelligences for students is that students are not stupid. All students are bright according to the uniqueness and character of students who have intelligence from one or many of the nine multiple intelligences. The researchers concluded that the Analysis of Needs for Interactive Learning Media needs to be developed at SMP Negeri 3 Metro. It is hoped that by using this interactive learning media, students will not only understand mathematics learning conceptually but can also increase their Multiple Intelligence intelligence and instill Islamic values in themselves. With the existence of Interactive learning media based on Multiple Intelligence with Islamic values, students can form bright students and have good morals. The following is a picture of an interview with one of the mathematics teachers held at SMP N 3 Metro.

Figure 2. Interview with a math teacher at SMP N 3 Metro

After conducting interviews with mathematics teachers, we conducted interviews with class VII to obtain further information. From the results of interviews with representatives of class VII students, it can be concluded that firstly, student learning resources are still very minimal, and teachers still use textbooks published by the government. Second, students enjoy learning using interactive media, but teachers rarely use this media. Third, learning in schools still uses lectures and is teacher-centered. So students still have difficulty understanding mathematics learning material such as comparative material. Fourth, students do not know about multiple intelligences, so it can be ascertained that learning mathematics is only focused on the logical-mathematical intelligence of the nine other bits of intelligence, namely the nine bits of intelligence of multiple intelligences include; (1) language intelligence (Linguistic), (2) intelligence logic mathematics (Logical-Mathematical), (3) Intelligence visual-spatial (Spatial), (4) intelligence physical kinesthetic (Bodily-Kinesthetic), (5) musical intelligence (Musical), (6) Social intelligence (Interpersonal) (7) intelligence intrapersonal (Intrapersonal), and (8) natural intelligence (Naturalist), (9) Existential Intelligence (Existential). The following is a picture of student interviews in class.

Figure 3. Interview with a math teacher at SMP N 3 Metro

b. Material Analysis Results

After analyzing the needs of class VII students of SMP Negeri 3 Metro, the material analysis aims to obtain information on mathematics learning materials. By obtaining data from teacher interviews, researchers obtained information related to materials, teaching materials, implementation of learning, syllabus, lesson plans, and grade VII student achievement. The researcher then analyzed the material's competency standards, essential competencies, indicators, and learning objectives. Then obtained from the results of the needs analysis of Mathematics Learning Materials developed in this study is Comparison. The following are the results of the Material Needs Analysis seen from the Competency Standards of Spiritual Attitudes, Social Attitudes, knowledge, and skills:

KI-1 and KI-2	:	Living and appreciating adhered to religious teachings and appreciating and living honest, disciplined, polite, self-confident, caring, and responsible behavior, interacting effectively by child development in the environment, family, school, community, and the surrounding natural environment, nation, state, and regional area.
KI-3	:	Understanding and applying factual, conceptual, and procedural knowledge) based on curiosity about science, technology, art, and culture related to visible phenomena and events.
K-4	:	Understanding and applying factual, conceptual, and procedural knowledge based on curiosity about science, technology, art, and culture related to visible phenomena and events.

Figure 4. Activities with Deputy Head of Curriculum SMP N 3 Metro

From the material analysis results, teacher skills are needed to develop interactive learning media that can support the achievement of core competency standards. The next researcher studied Basic Competence, Learning Materials, indicators, Character Values, and Learning Activities in comparative material outlined in learning media. So the researchers tried to provide alternative

solutions by developing Interactive learning media based on Multiple Intelligence with Islamic values for class VII students at SMP Negeri 3 Metro. This research is an early stage of analysis as a reference for creating or designing interactive media using the i-spring presenter media.

Media Design Analysis Results

Furthermore, entering the design process, researchers searched much literature on multiple intelligences. Researchers want to create interactive learning media using a straightforward tool that teachers can use, I-spiring Presenter, which can be accessed for free. The next stage is compiling the framework, including materials, videos, and quizzes. Judging from the results of previous research submitted by Omerin in his ideas, it was revealed that based on Howard Gardner's theory, he said there were eight bits of intelligence that students could develop [19]. The first intelligence is linguistic or language intelligence which focuses on thinking in words. The second intelligence, logical-mathematical intelligence, focuses on thinking with reasoning and logic. The third intelligence, visual or spatial intelligence or visual-spatial intelligence, is thinking in stories and pictures. The fourth intelligence, musical intelligence or musical intelligence, is thinking in melodies. Fifth intelligence, Bodily/kinesthetic intelligence or kinesthetic intelligence/gestures, is thinking through sensations and images of gestures. The sixth intelligence, natural intelligence, or what is called natural intelligence, is thinking in nature. Seventh intelligence, interpersonal or social intelligence, thinks through communication with others. The eighth intelligence, interpersonal intelligence, or called interpersonal intelligence, is reflective thinking. These eight bits of intelligence add up to nine bits of intelligence, which are then taken into account in the interactive learning media design process. The following is the initial design of multiple intelligences interactive learning based on the needs results.
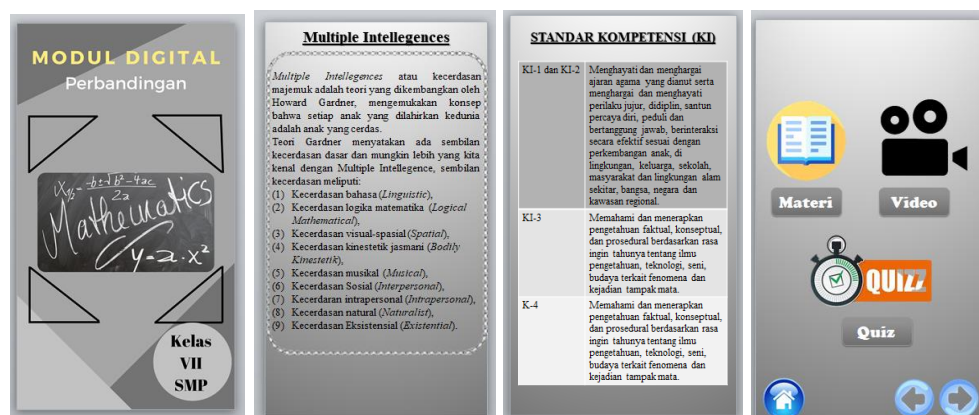

Figure 5. Design of Multiple Intelligence learning media

According to Winarti, et al., this is also very consistent with the results obtained from their research, namely the feasibility of learning strategies based on *Multiple Intelligences and* applied in lessons about the natural environment [15]. His research concluded that there is a significant influence on the use of the *Multiple Intelligences learning methods* in character learning and multiple intelligences of school students. In his research, there are six stages of the learning process using learning strategies based on *Multiple Intelligences*. The six stages consist of self-reflection, introducing concepts, formulating questions, exploring concepts, talent shows, and formulating conclusions.

Figure 6. Material design concept comparison

From previous research by Agustin, he described many literature studies related to the *Multiple Intelligences learning strategy* developed by Gardner, from the results of his study, namely, recognizing and developing the potential for multiple intelligences in children from an early age as the initial milestone in giving birth to a golden generation, he concluded that the role of parents and teachers is vital in helping develop children's interpersonal intelligence [13]. From the three studies above, it can be concluded that multiple intelligences learning strategies are very good at increasing children's multiple intelligences. Learning in schools is not only oriented towards improving students' academic abilities but also improving students' process skills and character skills. Children at school age are still curious about new things and are less stable in controlling their emotions, so we need to instill good character values in developing national character. The character education strategy is suitable for using multiple intelligences or multiple talent approach learning strategies. Apart from being based on multiple intelligences, this interactive media is also integrated with Islamic values. The Islamic values referred to here are the *akhlaqul karimah*, or good qualities exemplified by the prophet and the Prophet. This is by the independent learning curriculum of assessment of learning outcomes, namely knowledge assessment, skill assessment, and character assessment, in terms of character values, namely regius, independence, cooperation, honesty, hard work, confidence, and cooperation. The following are Islamic values that are included in the learning media.
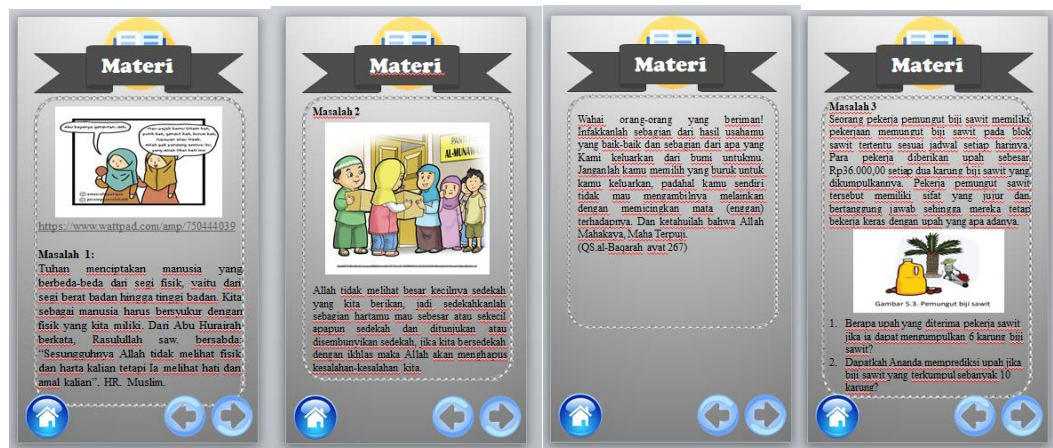
Figure 6. Learning Media for Islamic Values

From the three previous studies, there is still no learning media that supports multiple intelligences learning strategies that integrate with Islamic values. Therefore researchers try to analyze the needs of interactive learning media based on the theory of multiple intelligences learning strategies.

CONCLUSIONS

Based on the results of the needs analysis carried out at SMP N 3 Metro, it can be concluded that no interactive learning media contains the nine multiple intelligences that we know as Multiple Intelligences that integrate with Islamic values. So it needs to be developed further from the results of this research to obtain good learning media as needed. In needs analysis, it is better to obtain maximum data; you can also use a questionnaire or observation according to the researcher's needs. The condition of each school and the needs of the researcher's place influence the research results so that the results are not the same. Therefore, this research should be perfected by future researchers. Researchers can carry out further research to produce interactive learning media based on multiple intelligences integrated with Islamic values needed by students.

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