Development of Rampak Kendang Module Based on Multiple Intelligences for Elementary School Teachers

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Abstract-The phenomena of the lack of instructional media on cultural arts and skills materials happened in Primary Schools in Patimuan District Cilacap, that is *Rampak Kendang* Art. Then, the learning modules based on Multiple Intelligences has been developed. The purpose of this study was to elaborate the development steps and determine the feasibility of the *Rampak Kendang* learning module based on multiple intelligences for elementary schools' teachers. The type of the research was research and development with the 10 stages development model proposed Borg and Gall. Data collection techniques in this assessment were questionnaire and the data analysis used was quantitative data analysis with assessment scores. The results of this study revealed that the average analysis test conducted by a module that was developed was "quite valid" and this it is suitable to be utilized as a basis for learning by teachers teaching *Rampak Kendang* art to all students.

Keywords—elementary school teachers; learning module; multiple intelligences; Rampak Kendang.

I. INTRODUCTION

The present study is a respond to results of research in the first year concerning the identification of hidden curriculum models at Patimuan District, Cilacap Regency. The research proposed a prototype about Multiple Intelligences. The Observational data related to education in May-September 2018 at Elementary Schools in Patimuan Subdistrict found that teachers did not use instructional media nor its' function, especially in the form of art modules for local wisdom, there was no learning of the art of *Rampak Kendang* in the formal education. Teachers should be skillful in choosing teaching techniques and the interesting media. The teaching media help the teachers convey all information about the teaching material. In this case, when choosing a media, the teacher should make sure that they are skillful in using it in the classroom [1].

The present study was focused on developing media to improve the learning process. The media that was chosen to be developed was in the form of modules was chosen. The media was also built to instill character education. The target of this media was students of elementary schools. Students of elementary school are chosen as the target students of this module because to teach elementary school students is challenging, since the students are still in their playing period

[2]. It becomes more challenging to design teaching media that can motivate elementary school students to learn while at the same time can instill into their process values of character education. This was stated in KEMENDIKBUD with the government PPK program in 2017. Based on the description above, it is imprtant to develop a hidden intelligence curriculum based on Multiple Intelligences for building the characters of Elementary School students.

The media that was developed based on multiple intelligences with the basic concept that every child is "not stupid" because every student has a uniqueness and strengths that are different from one another. It is very suitable to be applied in the learning process in primary school. Therefore, it is very important to develop media based on multiple intelligences, especially for teachers teaching in primary schools, so that they will understand more deeply how to provide learning material by understanding the characteristics of each child with their own uniqueness.

The urgency of the research was to scientifically contribute thoughts and knowledge to policy makers and actors in the fields of education, social culture and arts. The present study was also expected to practically contribute to the Patimuan community, so that they build awareness and enthusiasm in cultural preservation. The study was also expected to provide inspiration for the existing art community in the community to continue to work and develop works of *Rampak Kendang*. For teachers of elementary school, the study was expected to contribute to their knowledge about how to instill character education to primary school students through the Multiple Intelligences based *Rampak Kendang* module.

II. RESEARCH PURPOSES

The general objective of this research was to develop a module of hidden intelligence *Rampak Kendang* curriculum based on Multiple Intelligences to build the characters of the students in Schools. The specific objectives were to elaborate the development of a hidden intelligence curriculum module based on Multiple Intelligences for the building of Elementary School students' characters, to test the feasibility of the Multiple Intelligences of *Rampak Kendang* curriculum hidden based on the characters of Elementary School students from media experts and material experts. The results of this study

were expected to provide benefits to improve the expertise and competence of researchers as lecturers related to the science of media development in the form of books based on Multiple Intelligences and arts-related science, and to add to science references and insights so that it was expected to be able to increase the diversity of institutional/laboratory capacities in UAD and at UGM as research partner institutions.

III. LITERATURE REVIEW

A. Multiple Intelligences and Character Education

Student-centered learning tends to dominate the implementation of learning in 2016, although the implementation had not been maximized until 2018. Student-centered learning requires the students to be active and quickly adjust to new things. This learning model requires plural intelligence in children. According to [3], multiple Intelligences is various skills and talents that students have to solve various problems in learning. Reference [4] found that there are eight kinds of plural intelligences, namely (1) verbal-linguistic intelligence, (2) logical-mathematical, (3) visual-spatial, (4) rhythmic-music, (5) physical-kinesthetic, (6) interpersonal, (7) intrapersonal, and (8) naturalistic.

After Multiple Intelligences are known, the things needed to be developed is the characters of the children through education. In this case, a good character according to [5] should have good characters, moral knowledge, moral feelings, and moral behavior. Good character consists of knowing good things, wanting good things, and doing good things. Below will be attached a good character diagram according to [5]:
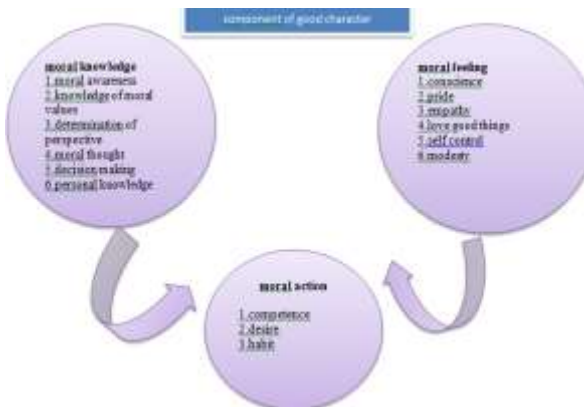

Fig 1. Components of Good Character According to [5]

It is an integral part of Nawacita. The Strengthening Movement for Character Education places character values as the deepest dimension of education that civilizes students and civilizes education practitioners. The Strengthening Movement for Character Education in addition to being a continuation and continuity of the National Movement for Nation Character Education in 2010. There are 5 pillars of character education issued by [6] are religious, nationalist, independent, mutual cooperation and integrity.

B. Media

According to [7], the position of teaching media is used as teaching aids. Besides, media also have other benefits in the learning process as follows; (1) teaching will attract more attention of the students so that it can foster motivation to learn, (2) teaching material will be more meaningful, understandable to students, and students can master the teaching objectives, (3) teaching methods are more varied, students are not bored, facilitate teacher teaching, (4) teaching media can be used in many students' activities, such as observing, practicing, and demonstrating.

The practical benefits of the use of instructional media in the learning process are as follows: (1) learning media can clarify the presentation of messages and information so as to facilitate and enhance the learning process; (2) learning media can increase and direct the child's attention so as to cause learning motivation, interaction which is more direct between students and their environment, independent learning according to their abilities and interests; (3) learning media can overcome the limitations of the senses, space, and time; and (4) learning media can provide a common experience to students about events in their environment and allow it to occur direct interaction with teachers and the community [1].

The types and criteria in choosing teaching media are as follows: (1) accuracy with learning objectives (instructional objectives that contain elements of understanding, application, analysis, and synthesis; (2) support for the content of learning material; (3) ease in obtaining media; (4) the teacher's skills in using it; (5) the time available to use it; and (6) suitable for students' level of thinking[7].

After knowing the criteria for choosing media, [1] conveys that printed technology is a way to produce or convey material. Printed technology has the following characteristics: (1) text is read linearly, while visuals are observed based on space; (2) communication occurs with 1 direction and receptive; (3) text and visuals are displayed statically; (4) the development is based on the principles of language and visual perception; (5) both test and verbal oriented to students; and (6) information can be rearranged by user.

The grouping of various types of media when viewed in the terms of technological developments can be categorized into two, namely in the form of traditional media and the sate of the art media. Traditional media include: (1) projected stationary visuals (opaque projections, overhead, slides, film stripes); (2) visual but not projected media (images, posters, photos, charts, graphs, diagrams, exhibits, etc.); (3) audio (recordings of discs, cassette tapes, reel, cartridge); (4) multimedia presentation (tape, multi-image), 5. Projected dynamic visuals (film, television, video); (7) print (textbooks, modules, programmed texts, workbooks, scientific magazines, hand- out); (7) game; and (8) realia [1].

The media in the study is printed media module. The strengths of printed media are as follows: (1) students can learn and progress according to their speed; (2) it enable the students to follow a logical sequence of thoughts; (3) the combination of text and images will make the attraction and can facilitate the understanding of information related to the material; (4) specifically in the programmed text, students will participate in active interaction because they have to respond to statements and exercises prepared; (5) although the contents of print media information must be updated and revised

according to developments and new findings in that field, the material can be distributed easily and economically [1].

According to [1], print-based text demands six elements that need to be considered during its designing, such as consistency, format, organization, attractiveness, font size, and use of blank spaces. While the media selection criteria are (1) in accordance with the objectives to be achieved; (2) appropriate to support the content of the lesson; (3) practical, flexible, and enduring; (4) teachers are skilled at using it; (5) grouping targets; (6) technical quality (slides must be clear, the message to be conveyed is not disturbed by other elements).

IV. Relevant Research

1. Journal owned by [8], study Program Education Elementary School Teachers Faculty of Teacher Training and Education, UAD. The writing about the application of Multiple Intelligences in learning in elementary schools by understanding that each individual was born with various types of intelligence, the conclusion of students who are intelligent and achievement is only academically intelligent student. Because there are a variety of other great potential that the students may have in addition to their ability in academics. The eight intelligences can operate independently or concurrently and complementarily.

   The research above is different from this present study in terms of the object and the subject of the research. It can be seen that the object is the Study Program Education Elementary School Teachers Faculty of Teacher Training and Education, UAD, and this research uses primary school teacher and elementary school children as research subject, while the similarity is both research use the concept of multiple intelligence variables for the research. Its relevance to our research is that this study supports the importance of understanding the characteristics of children and recognizing the strengths of children to be further developed.

2. The study that was conducted by [9] in as reported educational journal in 2016. It investigated the of multiple intelligence development research through game-based integrative learning, which concerned with the integration of guidance models in the learning process as an effort to develop various intelligence potentials of students in West Sumatera. This study revealed that everyone had a variety of intelligence, but with different levels of development.

   The difference between the research above with this present study is the variables studied in the form of integrated thematic learning, while the similarity between them is to both research were related to multiple intelligences, while the relevance to our research is conceptualized to understand the characteristics of children and the strengths of children who are different from each other but can go through the learning process in accordance expected even better.

3. Further research belongs to [10], from Castilla La Mancha University. This research was entitled Multiple Intelligences and their Relationships with Cognitive and Emotional Intelligences in Adolescents. The results of this research showed the relationship of multiple intelligences with aspects of cognitive and emotional intelligence.

The difference of this present study from the other studies can be viewed from the connecting aspect. This research if focused on analyzing he relationship of the subject variables to be studied. Meanwhile the present was also similar with the previous research mentioned above in terms of the adoption of the concept of multiple intelligences is a good concept in developing children's strengths. While the relevance of this study is in the two other variables examined by the above research related to the variables that will be examined, namely multiple intelligences, which are related to cognitive and emotional aspects.

V. Research Method

This research was designed in Research-and-Development Model because the present study aimed at developing the results of the research in the first year into a module used by teachers in learning the art of *Rampak Kendang* in Elementary Schools. The research was conducted in Patimuan sub-district from March 2019 to October 2019 with the subject of the trial is the Elementary School teachers in the Patimuan sub-district, Cilacap Regency, Central Java. The trial subjects consisted of 60 Elementary School art teachers in Patimuan sub-district.

Media experts and material experts were also involved as research respondents. Material experts and media experts have a function as appraisers of the feasibility of hidden intelligence media based on multiple intelligence from the expert's point of view. Material expert is an expert or lecturer in the performing arts field, while a media expert is an expert or lecturer in the field of media development. The data used in this study were primary data and secondary data. Primary data collection was carried out by literature study, while secondary data collection was done by direct observation techniques and analysis of drums which have been running previously in the elementary school environment in Patimuan Cilacap.

Data analysis was done in a mixed method of combining quantitative and qualitative. The quantitative data obtained will be analyzed to determine the results of the expert validation of the level of eligibility and based on the needs of the modules and trials on the subject of research trials. Qualitative data analysis was used to find out the needs of module development and to describe the quantitative data obtained.
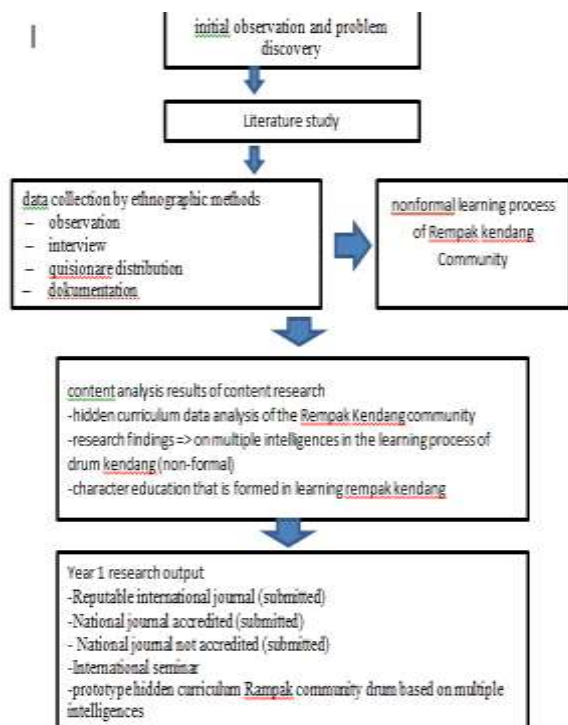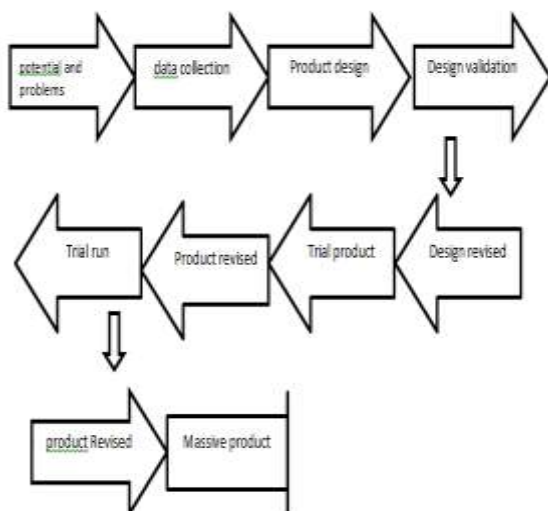
Fig. 2. Flowchart in year 1

Fig. 3. Steps for Using the Research and Development (R&D) Method [11]
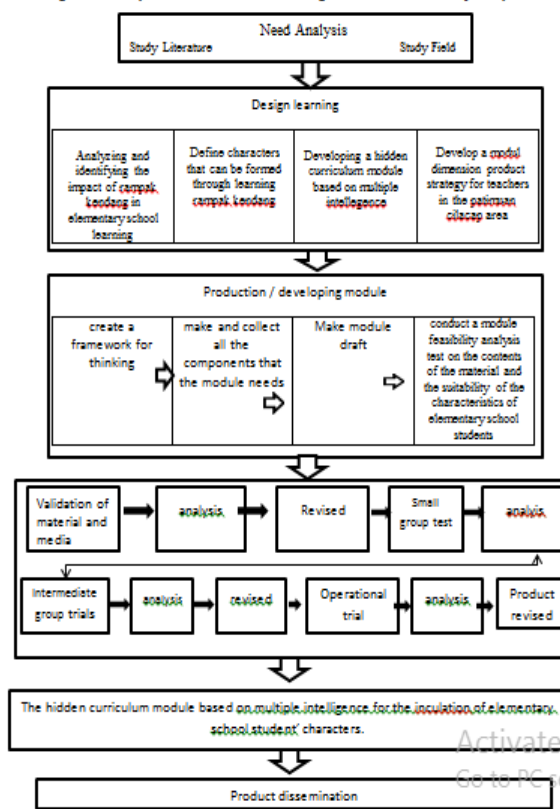

Fig. 4. Product Development Flow Chart by [11]

VI. DISCUSSION

The R & D method used was the model that was simplified by Sugiyono. It was used to develop the results of the research and the research was conducted for 1 year. This development research was designed using the steps of the Research and Development model developed by [1], in which it was translated from Borg and Gall experts. Borg and Gall in [11] suggest that research and development is a process or method used to validate and develop products.

The research and development model consists of 10 (ten) steps starting from (1) potential and problems; (2) data collection; (3) product design; (4) design validation; (5) design revision; (6) product trials; (7) product revisions; (8) usage tests; (9) product revisions; and (10) mass production [11].

Module development was conducted in the following process. *First*, the design and development of teaching materials or materials on the module were made using Microsoft Word Software. *Second*, the module cover was printed on 210-gram ivory type paper with strapless type binding. The contents of the module contain 2 topics, namely Part 1 that contains the techniques for playing musical instruments *Rampak Kendang*; and Part 2 that contains material about multiple intelligences on the *Rampak Kendang*.

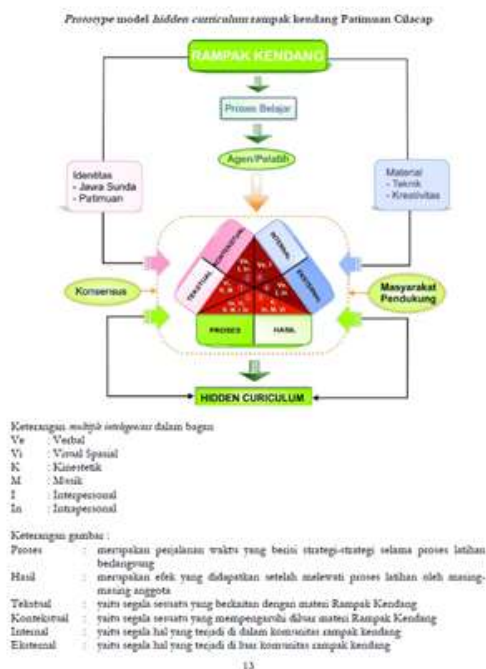Fig. 5. an example of Module contents that displays Techniques

Fig. 6. Prototype hidden curicullum model that appears in Kendang Pattimuan Cilacap

Third, the module is equipped with images obtained from video footage, accompanied by a description of the picture and an explanation of the use of musical instruments in accordance with the musical instrument being discussed. *Fourth*, the module was also equipped with a QR code feature that contains a web address to access videos on how to play a musical instrument with drums. *Fifth*, a QR code is created on the web page https://www.qr-code-generator.com/

Fig. 7. Display the front of the module that was developed

Fig. 8. Display the back of the module that was developed

After developing the Hidden Intelligence Curriculum Module which is based on Multiple Intelligences for the development of student characters in art classes in elementary schools, a trial was conducted to implement the *Rampak Kendang* learning module to determine the feasibility of the developed learning modules. The consideration of the use of drum learning modules based on Multiple Intelligences is also based on the assessment of media experts, material experts, and teaching experts, as follows.

a) The feasibility of the media in terms of media experts includes: the contents of the teaching media are useful and important for students, the content of the media attracts the students' interest, the format is in accordance with the settings for learning activities, the teaching media has a creative nature, and so on.

b) The feasibility of the media in terms of material experts includes conformity with the objectives of teaching, conformity with the material being taught, conformity to the theory used, and so forth.

c) The feasibility of the media in terms of teaching experts includes practicality in the use of media, the feasibility of the media of the learning process of students, and the feasibility of teaching.

The use of the Hidden Curriculum of *Rampak Kendang* module can also be used anywhere. Because media such as the module can be stored anywhere. More specific planning of the learning process in using the hidden curriculum media module is actually *kendang* facilitating educators in delivering the material or teaching material to students independently.

The percentage of teacher questionnaires in the development of the *Rampak Kendang* Module is as follows:
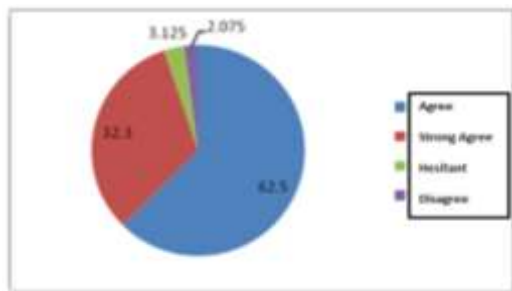

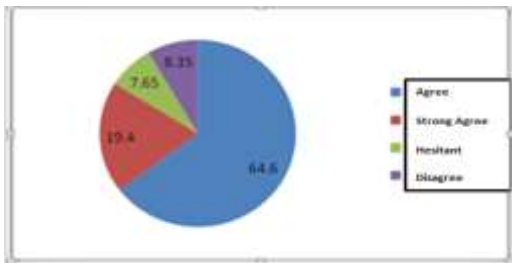Diagram 1. First Aspect: Teachers' understanding of the importance of preserving drums from an early age

Diagram 2. Second Aspect: Teachers' understanding of the importance of drums becoming material in SBDP in elementary schools
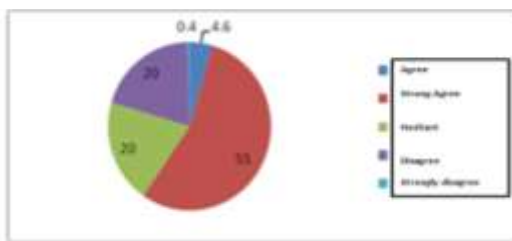

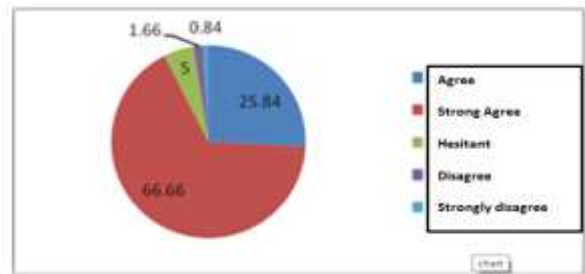Diagram 3. Third Aspect: Teachers' understanding of multiple intelligences

Diagram 4. Fourth Aspect: Teachers' understanding of the relationship between multiple intelligences and character education
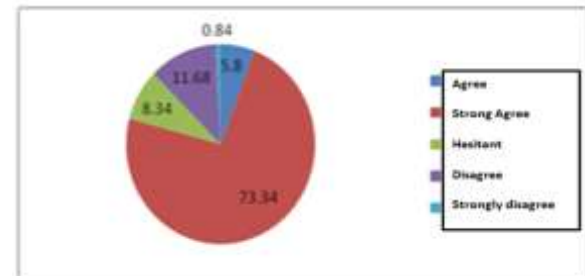

Diagram 5. Fifth Aspect: Teachers' understanding of the needs for learning *rampak* drums based on multiple intelligences for elementary students
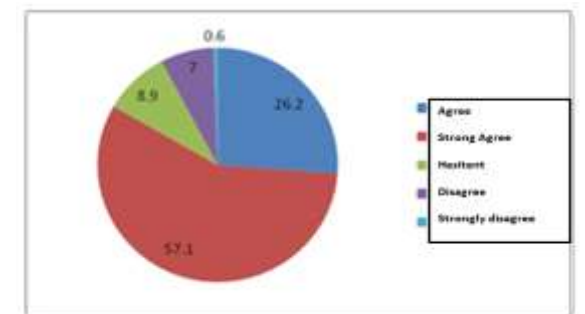

Diagram 6. Sixth Aspect: Teachers' understanding of the need for a drills module based on multiple intelligence to instill student character education

The acquisition score were then interpreted with the percentage results in the eligibility criteria that is very good, good, good enough, not good, very not good. The table for the eligibility criteria for learning media.

TABLE I. SCORING CRITERIA

Score Percentage (100%)	Criteria
Score 81-100	Strongly Agree
Score 61-80	Agree
Score 41- 60	Hesitation
Score 21-40	Disagree
Score <21	Strongly Disagree

From the scoring criteria, it can be concluded that: *First*, Strongly Agree, namely the module developed is suitable for use by teachers for the Multiple Intelligence-based learning process which includes the suitability of core competencies, basic competencies, and learning objectives and indicators

contained in the module material developed without a revision process. *Second*, Agree that the module developed was suitable for use by the teacher for the learning process in the classroom as a learning media tool by carrying out the process of adding material or teaching materials as well as product revisions. *Third*, Doubtful was the module that developed cannot be used fully by the teacher during the learning process to transfer material or teaching material to students so that the process of repairing or revising the product on the media is needed. *Fourth*, Disagree, namely the module developed still has shortcomings in various aspects of the learning process when it is used for the learning process so the product improvement process is still needed on the module. *Fifth*, Strongly Disagree namely, the developed module is not appropriate and cannot be used as a learning tool or media for the learning process carried out by the teacher.

Before testing the developed product, a validation process was carried out on the developed module. The validation used three experts namely, media experts, learning material experts, and teaching experts. The validation of the three experts was intended to determine the level of eligibility in the media module developed in this study. The results obtained from media experts, learning material experts, and teaching experts are displayed in the following table.

TABLE II. OBTAINING THE RESULTS OF EXPERT VALIDATION

Expert	Score obtained
Media Expert	95,5
Material Expert	73,3
Teaching Expert	100

From the results of the three validations obtained scores were used to determine the level of eligibility in the developed module. The results obtained through the validation process then used as material to carry out the process of revision and improvement of the developed mood. This was done so that the modules developed can be used properly by the teacher and students during the learning process.

Learning media experts obtained a score of 95.5 which means that the modules developed were suitable for use by the teacher for the learning process based on Multiple Intelligence which included the suitability of core competencies, basic competencies, and objectives as well as learning indicators contained in the module material developed without a revision process. Then, for teaching experts the module score developed got score of 100 which means the module developed was suitable for use by teachers for the Multiple Intelligence-based learning process which includes the suitability of core competencies, basic competencies, and objectives as well as learning indicators contained in the module material developed without process revision, while the final validation with learning material experts scored 73.3 which can be said that the module developed was suitable to be used by the teacher in classroom learning process as a tool for learning media by adding material or teaching material as well as product revisions.

After obtaining the results of the three valuators, the researcher then conducted a process of improvement and revision of the module in the section that was felt to be less than optimal. If the module that was developed was truly ready for testing, the module was used in the learning process in elementary schools in Patimuan District, Cilacap as a product trial. The results obtained as in this following digram:
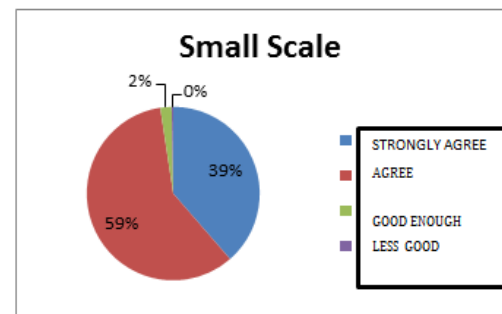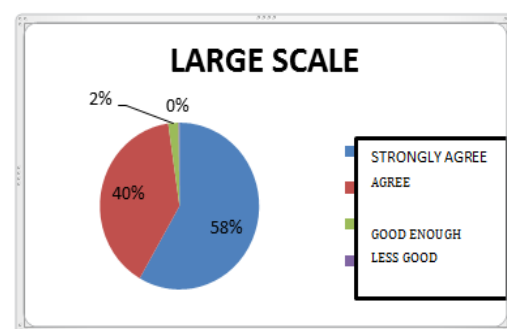

Diagram 7. Obtaining Small Scale Trial Results

Diagram 8. Obtaining large-scale trial results

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