LEARNING MEDIA SKILLS OF READING AND WRITING
INDONESIAN MULTIPLE INTELLIGENCE-BASED BY USING
OBSERVATION LEARNING-BASED APPROACH

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Abstract:
The recent national education system requires to be revised because in measuring the level of intelligence of students only emphasizes the ability of logic and language. The enactment of the 2013 curriculum, which took effect in July 2013 in some schools in Indonesia selected by the Ministry of Education and Culture, tries to renew it by introducing a learning paradigm that not only measures these two parameters, but looks at the aspects of kinesthetic, musical, visual-spatial, interpersonal, and naturalist aspects. Students as a component are treated, able to carry out learning activities with pleasure, carefree and happy without leaving the meaning of the seriousness of learning. Students follow the learning without pressure and also without coercion. Learning becomes more interesting for students in particular and for schools in general so that learning objectives that have been formulated from each basic competency can be achieved and students are able to do complete learning. Therefore, the preparation of learning tools requires several things, as follows (1) must be able to stimulate students to move creatively and innovatively, (2) the teaching materials used should be arranged with the optimization of learning modalities by presenting both verbal and non-verbal texts. varying, and (3) the preparation of teaching materials should have meaning and benefits for students. The objectives in this study are: (1) to develop multiple intelligences-based learning tools with observation based learning approach, and (2) to determine the effectiveness of learning devices in terms of increasing students' competencies. In addition, this development is expected to bring changes in the lives of students so that in addition to students interested in Indonesian subjects at the same time they are able to achieve the expected competencies of knowledge, skills, attitudes and values embodied in the habits of thinking and acting. Based on this, it is necessary to develop learning tools based on multiple intelligences with an observation based

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learning approach with a development method consisting of identification, development, and dissemination.

**Keywords:** learning tools, multiple intelligences, observation based learning

### 1. Introduction

Curriculum is one of the elements that contribute to realize the process of developing the quality of potential students. The 2013 curriculum developed based on competence is needed as an instrument to direct students to become qualified human beings who are able and proactively respond to the challenges of the ever changing times. The development of the 2013 curriculum is a further step in the development of a Competency Based Curriculum that was pioneered in 2004 and KTSP 2006 which includes competency attitudes, knowledge, and skills in an integrated manner.

The 2013 curriculum was implemented in stages starting in the 2013/2014 school year through limited implementation, especially for schools that were ready to implement it. In the 2013/2014 school year, the 2013 curriculum was implemented in a limited manner for students in the 1st, 4th, 7th and 10th grade. In the 2014/2015 academic year, it was implemented by all schools for the 1st, 2nd, 4th, 5th, 7th, 9th and 10th In the 2015/2016 academic year, it is expected that the 2013 curriculum has been implemented in all grades starting from the 1st through 12th.

The 2013 curriculum development needs to be done because it wants to answer some challenges and learning conditions that have been running. Therefore, the enactment of this curriculum will prepare students to have future competencies needed including communication skills, the ability to think clearly and critically, the ability to be responsible citizens, the ability to try to understand and be tolerant of different views (Ministry of Education and Culture, 2014: 5). Thus, the curriculum is intended to answer the public perception that views that learning in schools only focuses on cognitive aspects, the burden of students is too heavy, lacks character.

In its implementation, education in accordance with future needs is only realized if there is a shift or change in mindset in the learning process. Some shifts in mindset that must be considered are: (a) from teacher-centered to student-centered, (b) from one direction to interactive, (c) from isolation to the network environment, (d) from virtual / abstract to context the real world, (e) from one-way relationships to cooperative, (f) from personal learners to team-based learning, (g) from factual thinking to critical, and (h) from the delivery of knowledge to the exchange of knowledge (Joyce, 2000; Brown , 2007; Ministry of Education and Culture, 2014).

Learning in class is an event of different types. Among them, in the form of a planned and sequential curriculum series unit, or an example of the application of teaching methods, patterns of social activities that occur in the classroom, and meetings between various human personalities (Prabhu in Ghazali, 2010). Therefore, the thing to note is that the level of intelligence of students not only emphasizes the ability of logic
and language, but also involves other aspects namely kinesthetic, musical, visual-spatial, interpersonal, intrapersonal, and naturalist.

This is in line with Mashun (2013) which stated that all Indonesian language lessons starting from elementary school to high school must be able to improve the competencies above. By considering the competency dimensions above, students use language not only as a means of communication, but also a means of developing thinking skills. In this regard, the implementation of learning, especially Indonesian language learning must be able to develop multiple intelligences with a scientific approach as mandated in the 2013 Curriculum in one way is to develop Indonesian language learning tools with that approach.

In this regard, the questions are: (1) how to develop Indonesian language learning tools based on multiple intelligences with scientific approach in the 2013 Curriculum?; and (2) how is the form of implementation of the results of the development of Indonesian language learning based on multiple intelligences with scientific approach in the 2013 Curriculum? This is a challenge that needs to be formulated so that the implementation of learning can be met in accordance with expectations.

2. Literature Review

2.1 Multiple Intelligences-Base Learning

Multiple intelligences-based learning with scientific approach in the 2013 Curriculum is an approach that is raised from the shift of views in Indonesian language learning. Language learning is not only on aspects of language competence and language logic, but communicative competence, interactional competence, and sociolinguistic competence or skills in the form of mastery of a language. In other words, if the four competencies are integrated in language learning, it is called language proficiency.

Stern (1983) suggested that skills can be seen as goals and thus can be defined in relation to various specific goals or standards. Then these goals can serve as criteria used to assess skills as an empirical fact that is the actual performance for certain students individually or groups of students. When they are formed, skills can be linked to other variables in the model: context, student characteristics, conditions of learning, and learning process. Therefore, conceptualization and description of skills are important steps in the study of language learning.

In this regard, learning based on multiple intelligences based on scientific approach in the 2013 Curriculum will be able to develop the competencies mentioned above, because learning Indonesian will make students able to actively, creatively and innovative activities.

Multiple intelligences-based learning with scientific approach in the 2013 curriculum can be implemented into several models including (1) project-based learning, (2) discovery learning, (3) problem-based learning. This means that a scientific approach enables students to explore findings made by students, assessment,
interpretation, synthesis, and information to produce various forms of learning outcomes.

2.2 Scientific Approach Learning
According to Allen (1973), this approach is reflected in an implementation of learning which is equated with a scientific process. The scientific process refers to investigative techniques for a phenomenon or phenomenon, gaining new knowledge, or correcting and integrating prior knowledge. To be called scientific, the method of inquiry (method of inquiry) must be based on evidence from observable, empirical, and measurable objects with specific principles of reasoning. Therefore, the scientific method must contain a series of data collection activities through observation or experimentation, processing information or data, analyzing, then formulating, and testing hypotheses (Quinn, 1975: 59).

Permendikbud number 81A in 2013, the learning process with a scientific approach consists of (a) observing, (b) asking, (c) collecting information, (d) associating, and (e) communicating. In this regard, the intended learning is reflected in five phases, presented in the following table.

Table 1: Learning Stages with Learning Activity

<table>
<thead>
<tr>
<th>Learning Stages</th>
<th>Learning Activity</th>
<th>Developed Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observing</td>
<td>Reading, listening, paying attention, seeing (without or with tools)</td>
<td>Practicing sincerity, accuracy, seeking information</td>
</tr>
<tr>
<td>Questioning</td>
<td>Asking questions about information that is not understood from what was observed or questions to get additional information about what was observed (starting from factual questions to hypothetical questions)</td>
<td>Developing creativity, curiosity, the ability to form questions to form the critical mind that is necessary for intelligent life and lifelong learning</td>
</tr>
<tr>
<td>Gathering information/</td>
<td>• Conducting experiments</td>
<td>Developing a conscientious, honest, polite attitude, respect the opinions of others, the ability to communicate, apply the ability to gather information through a variety of ways that are learned, develop learning habits and lifelong learning</td>
</tr>
<tr>
<td>experimenting</td>
<td>• Reading sources other than textbooks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Observing objects / events / Activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conducting interview with the resource person</td>
<td></td>
</tr>
<tr>
<td>Associating/</td>
<td>Processing the information that has been collected is limited only from the results of collecting / experimenting activities as well as the results of observing activities and collecting information activities</td>
<td>Developing honesty, conscientious, disciplined, obedient rules, hard work, ability to apply procedures and ability to think inductively and deductively in concluding</td>
</tr>
<tr>
<td>processing information</td>
<td>• Processing of information collected from those that add breadth and depth to processing information that is looking for solutions from</td>
<td></td>
</tr>
<tr>
<td>Communicating</td>
<td>varous sources who have different opinions to the contrary</td>
<td>Developing an honest, conscientious attitude, tolerance, the ability to think systematically, express opinions briefly and clearly, and develop proper and correct language skills.</td>
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<td>---------------</td>
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<tr>
<td>• Delivering the results of observations, conclusions based on the results of analysis verbally, in writing, or other media.</td>
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</table>

Based on this, planning in a scientific approach is as follows: 1) Setting Learning Objectives, Determination of a learning objective in the learning model with a scientific approach by choosing a method that is suitable with the material to be delivered, it can be a project-based learning model, discovery learning, or problem-based learning, 2) Designing the implementation of learning by incorporating the process of observing, observing activities in learning carried out by taking steps (a) determining the object to be observed, (b) making observation guidelines in accordance with the scope of the object to be observed, (c) clearly determine what data is observed, (d) determine where the object to be observed, (e) determine clearly how the observation will be done, (f) determine the way and take notes on observations, ask questions, ask questions done by sulking questions about information that is not understood from what was observed or questions to get additional information about what was observed (starting from factual questions to hypothetical questions), gathering information / experiments, activities are (a) conducting experiments, (b) reading sources other than textbooks, (c) observing objects / events / activities, and (d) interviewing informants, associating / processing information, learning activities carried out in the process of associating / processing information are as follows (a) processing information already collected, (b) processing information collected from those that add breadth and depth to processing information that is looking for solutions from various sources that have different opinions to the contrary, communicating, activities in the form of conveying the results obtained both verbally and in writing  

3. Material and Method

3.1 Model for Developing Language Learning Devices
Various learning development models proposed by experts include the Dick & Carey (1990) model, the Kemp model (1985), the AT&T Instructional Development Model (1985), the Instructional Development model (Suparman, 2000), and others. Each model is intended to produce an instructional system. The determination of the learning development model used depends on the needs and its suitability with the characteristics of the object being developed.  

The development model used in this paper is a model developed by Dick & Carey (1990). This model sees the development of materials as one component of the learning system that cannot be separated from other learning components. The development of materials as a process is the implementation of curriculum
comprehension, especially Curriculum 2013, the design of learning activities, the application of learning theories and the use of developed objects, so as to produce learning materials that are ready to be used for teaching and learning. The complete development steps proposed by Dick & Carey are: (1) identifying learning objectives, (2) conducting learning analysis, (3) identifying input behavior and learner characteristics, (4) formulating performance goals, (5) developing items benchmark reference test items, (6) developing learning strategies, (7) developing and selecting learning materials, (8) designing and conducting formative assessments, (9) revising learning materials, and (10) designing and conducting summative assessments.

In addition to this, considerations using the development of Dick & Carey (1990) are as follows: (1) can be used to develop learning that includes the realm of verbal information, intellectual skills, psychomotor skills and attitudes, (2) this development model is designed using an observation based approach learning, so that when using this approach will increase opportunities to integrate all variables that affect learning in learning design (Degeng, 1997), (3) this development model is designed with complete steps so that it can be used to design learning, both classical learning and individual.

4. Results and Discussion

The importance of students to optimize language competence (read: language skills) has been embedded in the 2013 curriculum that the 2013 curriculum recognizes the important role of language as a vehicle for expressing feelings and thoughts aesthetically and logically. At one time, language is not required to be able to express things efficiently because they want to convey it beautifully so that it can arouse the feelings of the recipient. At other times, language is required to be efficient in conveying ideas objectively and logically so that they can be easily digested by the recipient. Two approaches expressing two dimensions of self, feelings and thoughts through language need to be balanced (Kemendikbud, 2014).

Thus, students' language proficiency can be achieved by developing multiple intelligence-based learning devices with a scientific approach in a sustainable manner. The virtues of this learning position students have a balance of attitudes, knowledge and skills, the language skills required are formed starting with increasing knowledge about the type, the rules and context of a text, followed by the skill to present written and oral texts in a planned and spontaneous way, and lead to the formation of politeness and foresight of language as well as an attitude of respect for Indonesian as a national cultural heritage.

The development of these tools is intended to achieve competence, in addition students are invited to be more daring to look for other learning resources that are available and are widely spread around it. The role of the teacher in improving and adjusting the absorption of students with the availability of activities on this learning device is very important. The teacher can enrich it with creation in the form of relevant and relevant activities that originate from the social and natural environment.
Material form is the final form which is considered effective to accommodate the results of material development in terms of usage, user and control. In terms of usage, developers need to consider when, where, for what, and for whom the learning material is used. In terms of users, things to consider are who, at what level, and how it is used. Whereas in terms of control, it is necessary to consider how innovative the material developed is.

To improve the efficiency and effectiveness of the learning process, it is deemed necessary to develop teaching materials that have a very important function in learning technology. If learning can be achieved well, it will certainly be able to support the quality of education, because one of the main problems faced in the field of education to date is related to quality and efficiency issues (Ibrahim, 1994: 14). One of the initial activities in improving learning is designing teaching materials that refer to a development model to facilitate learning (Degeng, 1989). Learning design can be used as a starting point for efforts to improve the quality of learning. This means that improvement in the quality of learning must begin with improvement in the quality of learning design, and design learning with a systems approach (Degeng, 1999: 2).

The important thing in designing instructional materials is that the organization of the content of instructional materials must be based on the characteristics of the content structure of the course, so that it can improve learning outcomes and retention rather than merely following the order of the contents of the textbook. (Degeng, 1989). Reigeluth (1992: 22) also suggests that the design of teaching materials should modify one of the standard models (standard blue print) that best suits the special needs of learning. Dimyati (1993: 2) also asserted that students who deal with learning resources learn messages will internalize and are expected to increase their cognitive, affective, and psychomotor domains.

5. Recommendations

Textbooks in learning function as a facilitator so that students are able to find their own solutions to the problems provided in the textbooks provided. Students become more active in finding other sources, individually or in groups. Students are more open in evaluating their own work and their friends objectively. The text of the learning material must have a variety of responses with varied questions, starting with ways of learning and teaching that make children not feel burdened so that students are more willing to express their opinions and defend their opinions.

6. Conclusion

The national education system that measures the level of intelligence of students which only emphasizes the ability of logic and language needs to be revised. Intellectual intelligence does not only include these two parameters, but must also be seen from the kinesthetic, musical, visual-spatial, interpersonal, intrapersonal, and naturalist. Therefore, text development of multiple intelligences learning material requires several
things in text development, namely (1) the use of text in learning should encourage students to do activities and also must have a variety of responses with varied questions so as to make children not feel burdened, (2) the text of the learning material should be prepared by optimizing the learning modality by presenting the text varied verbal and nonverbal forms, (3) learning texts should have meaning and benefit for students, so that they will realize the material they are learning is useful for their lives, (4) educators must believe that the learning text that they convey will bring changes in the lives of the participants he taught, so they would be very interested in the lesson.

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References

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