

## Development of Hots Assessment Instrument Material Description Textbased on North Padang Lawas Local Wisdom Grade VII Students

Wahyuni Siregar  
Surya Masniari Hutagalung  
Medan State University  
Master of Indonesian Language and Literature Education  
Email : [wahyunisiregar06@gmail.com](mailto:wahyunisiregar06@gmail.com)

**Abstract:** This paper is part of the results of a summary of Teaching Materials Development Writing a Local Wisdom-Based Description Text for Class VII Students of Mts Negeri 2 Padang Lawas Utara presented in the form of a Non-Electronic module. The development activities carried out are the development of hots assessment instruments. The development model used in this paper is Research and Development (R&D) with the 4D model (Four D Models) from Thiagarajan namely define, design, develop and disseminate. After going through the HOTS assessment instrument development process validated by material and design experts, it can be concluded that the assessment instrument developed is based on local wisdom.

**Keywords:** Description Text, Hots Assessment Instrument, Wisdom of North Padang Lawas

### Introduction

Education as a concept is being interpreted and viewed by society in an inaccurate sense that can even be said to be wrong, so that the meaning of education is often dwarfed only to the extent of the notion of teaching or society often makes the notion of education the same as teaching. Teaching as the meaning of the word instruction has a narrower meaning than the notion of education. According to the National Education System Law, education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality and noble character intelligence as well as the skills needed by society, nation and state.

Assessment of learning outcomes is expected to help students improve their higher order thinking skills (HOTS), because higher order thinking can encourage students to think broadly and deeply about subject matter. Higher order thinking skills (HOTS) are part of the revised Bloom's taxonomy in the form of operational verbs consisting of analyze (C4), evaluate (C5) and create (C6) which can be used in the preparation of questions. Teachers must have the knowledge and expertise to support their work, so they can develop students' higher-order thinking skills (Aydin & Yilmaz, 2010, p.58).

Learning that emphasizes students' high-order thinking skills is known as HOTS-based learning (Higher of Order Thinking Skills). In its implementation, the application of HOTS learning is not something that is easily carried out by the teacher. Teachers only understand that HOTS learning is learning that provides questions that are difficult for most students to work on. In implementing HOTS learning, a teacher must really master the material and learning strategies, and be able to adapt learning to the environment and competence (intake) of students. Sometimes the teacher has tried his best to make learning interesting for students, but the responses of students are still cold and relatively passive.

Multiple choice is one of the questions whose answer must be chosen from several answers that have been provided. The advantages of multiple choice questions are that they have a wider range of material on the questions to be tested, have a higher level of validity and reliability compared to description or essay questions, the processing part tends to be easier, the teacher can measure various cognitive domains, for assessment can be easier and faster and objective. Apart from the advantages, there are also some disadvantages of multiple choice questions. The weakness of multiple choice questions is that how to make multiple choice questions requires a lot

of time, student answers do not necessarily show actual results because the opportunity for students to guess answers is still quite large, it is difficult to measure students' thinking abilities,

Hots test assignment material for descriptive text based on historical and culinary local wisdom in North Padang Lawas to help students understand the goals and perceptions of education. Including levels. Based on the problems above, it is necessary to develop an evaluation tool for Hots text descriptions based on the wisdom of northern Padang Lawas for class VII Mts students in the format of Hots exam descriptions of Indonesian subjects. The Hots assessment tool developed aims to create a valid and reliable student Hots measurement tool. This study has the following advantages: A valid and authoritative HOTS assessment tool can be used to measure students' HOTS and become a reference for developing other Basic Skills (KD) HOTS assessment tools.

### **Research Methods**

This research is research and development (R&D) according to the Thiagarajan model, *et al.* (1974). This stage consists of three stages, namely the definition stage (define), the design stage (design), and the development stage (develop). The development in this study uses a 4-D model (four D Model) which consists of four stages, namely the define stage, design stage, develop stage, and disseminate.

The instruments in collecting research data are: interview method, direct interviews are interviews that carry out direct debriefing between the questioner and the interviewee. Questioners can also interview students directly by means of an intermediary. The validation sheet for this research instrument will be used in measuring and assessing the Hots-based multiple choice questions which have components, namely material and language. This study uses data analysis techniques which are divided into two, namely material validation analysis, evaluation experts and linguists in assessing the items qualitatively.

### **Discussion**

Education is an effort to influence, protect and provide assistance aimed at the maturity of their students or in other words helping students to be capable enough to carry out their own life tasks without the help of others. In the sense of tesebuf above, the guidance and influence and protection that is given must contain noble values in accordance with the nature and dignity of humanity, with the ultimate goal of education being the ability or independence of students' lives without being led by this, then the activities of influence and guidance given are not educational activities.

Indonesian language learning in the 2013 curriculum encourages students to understand various types of texts, with the aim of fostering student creativity. The content of texts in learning Indonesian is very diverse, one of which is literary texts. Literature is the work of humans (authors), whose creators cannot be separated from human life itself. In the sense that literature is by and for humans. Literary works are born into society without realizing it, because every literary work must have a function, one of which is as a means of entertainment for someone because it can make someone interested and a means of education because it provides advice and inculcates ethics.

In the K13 curriculum The material presented in this book is based on the revised edition of the 2013 curriculum. The basic competencies on which it is based are: (3.1) Identifying information in a descriptive text about objects (schools, tourist attractions, historic sites, and/or the atmosphere of regional art performances) heard and read; (4.1) Explaining the contents of object description texts (tourist attractions, historic sites, regional art performances, traditional fabrics, etc.) that are heard and read orally, in writing, and visually; (3.2) Examine the structure and language of descriptive texts about objects (schools, tourist attractions, places history, and/or the atmosphere of regional art performances) heard and read; and (4.2) Presenting data, ideas, impressions in the form of descriptive text about objects (schools, tourist attractions, historical

sites, and/or the atmosphere of regional art performances) in writing and orally by paying attention to structure, language both orally and in writing.

According to Presseisen (in Devi, 2011) states that "HOTS (High Order Thinking Skills) or higher order thinking skills are divided into four groups, namely problem solving, decision making, critical thinking and creative thinking". What is more emphasized here is in the critical thinking group. Critical thinking is an activity of thinking deeply about various things to reach a conclusion. This is in line with the opinion of Ennis (in Tilaar, 2011, p. 15) stating that 'critical thinking is a process of reflective thinking that focuses on deciding what to do'.

Thiagarajan Models, *et al.* (1974). This stage consists of three stages, namely the definition stage (define), the design stage (design), and the development stage (develop). The development in this study uses a 4-D model (four D Model) which consists of four stages, namely the define stage, design stage, develop stage, and disseminate.

The determination stage aims to develop product specifications based on needs analysis and curriculum review. Needs analysis was carried out by giving questionnaires to teachers to find out the obstacles encountered in learning descriptive texts at school, especially in terms of using teaching materials. In addition, teachers were also asked to provide advice on which local wisdom existed in Padang Lawas Utara that needs to be conveyed to students. The curriculum review is used to determine basic competencies, learning indicators, learning presentation processes, and learning evaluations which will later be presented in teaching material products.

Design stage. The design stage begins with observing local wisdom in Timor to be used as a descriptive text. In addition, researchers also collect materials in the form of images, supporting applications, and various other main aspects. After the text and materials are ready, an initial draft of the teaching materials is made. The draft is then designed with attention to layout, drawing, and color so that it becomes a prototype of teaching materials.

The third stage is the development stage. At this stage, the prototype of the teaching material that has been made is validated (asked for feedback and assessment) by Indonesian language learning experts, North Padang Lawas local wisdom experts, practitioners (subject teachers). Responses and assessments from experts and students will be used by researchers to determine the feasibility of teaching materials according to the criteria contained in table 1. The teaching materials will also be revised according to these responses. If the teaching material product has been declared feasible, then the next stage is the dissemination stage.

Based on the K13 curriculum which is more prominent in the aspects of learning attitudes and knowledge, the researchers raised the development of HOTS assessment instruments on descriptive text material to solve a problem in local wisdom-based description material in North Padang Lawas, which is the background of this research. There is a way to develop wisdom-based instruments. Local questions about the HOTS towards the attitude of discipline in the K13 curriculum, both in the form of syllabus and lesson plans.

Literary works are creations that are conveyed communicatively about the author's intent for aesthetic purposes. A literary work is born in society not without basis, because whatever form the literary work is, it must have a function, namely as a means of entertainment and a means of education. Fairy tales are very closely related to the lives of Indonesian people, especially those around the regions. So that fairy tales become an inseparable part of local wisdom or local genius. Explained that local wisdom is the original wisdom and knowledge of a society that comes from the noble values of cultural traditions to regulate the order of people's lives. Every message contained in fairy tales is closely related to the life of the local community.

The problem in this research is how the HOTS assessment instrument for descriptive text material is developed through the local wisdom of the local area. Aiming to renew local culture does not have to be given by the government. The researcher chose to develop teaching materials based on local wisdom because the culture of local stories is starting to be unknown especially to the millennial generation.

This local wisdom-based learning model has several advantages, including active students in learning, can train students' memory of a concept or information, can train students' critical

thinking style towards a problem and can provide students with meaningful learning activities. The stages are:

stage of design (design) after we know what problems the stage of definition/process will be carried out by the researcher, namely by designing an instrument for scoring multiple choice questions based on HOTS. As for In the design stage, there are several steps, namely: 1) preparation of benchmark tests, and 2) initial design. The purpose of the design stage (Design) is to design an assessment instrument, in order to obtain a prototype (example of an assessment instrument) which is here in after referred to as the assessment instrument draft I. The design stage consists of four main steps, namely preparation of the test, media selection, format selection and initial design (preliminary design).

The development stage (develop) is to produce a product in the form of an assessment instrument in the form of a multiple-choice test which has been validated by material experts, evaluation experts and linguists. The several steps in the development stage are: 1) expert validation, 2) product revision, 3) product trials, 4) product analysis, and 5) final product revision and product results.

HOTS (High Order Thinking Skills) or higher order thinking skills are grouped into four categories, namely making decisions, solving problems, thinking creatively, and thinking critically. In this study, HOTS (High Order Thinking Skills) or higher order thinking skills are more focused on critical thinking groups. Critical thinking is basically a process of thinking more deeply. In critical thinking there are several skills that can be developed and can be used as a reference in making questions that test students at a higher level.

Lsteps - Steps for Preparing HOTS Questions To write HOTS question items, the question writer is required to be able to determine the behavior to be measured and to formulate material that will be used as the basis for questions (stimulus) in a certain context in accordance with the behavior being studied.

expected. In addition, the description of the material to be asked (which requires high reasoning) is not always available in textbooks. Therefore in writing questions

HOTS, requires mastery of teaching materials, skills in writing questions (question construction), and teacher creativity in choosing stimulus items according to the situation and conditions of the area around the education unit. The following describes the steps for preparing HOTS questions according to I Wayan Widana (2016); and Ministry of Education and Culture (2017, p.23 ):

1. Analyzing KD that can be made HOTS questions
2. Arrange a question grid
3. Choose an interesting and contextual stimulus
4. Write the question items according to the question grid
5. Create scoring guidelines (rubrics) or answer keys

The quality criteria for the HOTS questions developed refer to this research, the prototype HOTS questions are declared valid if at least four of the five validators state that the HOTS questions in algebraic material are in accordance with the theoretical basis and are mutually consistent, as indicated by the average value of the results of content validation, construct , and the language is in the valid criteria. The prototype is declared practical if at least four out of five validators give consideration that the questions can be applied in class and the level of implementation of the questions is in the good category. The prototype meets the effectiveness criteria if the prototype developed is in accordance with the objectives. The goal to be achieved is that more than 50% of students give positive responses to questions and categories of students' ability to solve various questions.

## **Conclusion**

In developing HOTS questions, questions with moderate and difficult criteria are needed rather than easy questions. Based on HOTS learning outcomes, there are still assessment tools that measure low levels of cognitive understanding and application, and there are questions that do not yet use interesting and contextual stimuli.

In development the instrument of HOTS questions based on the local wisdom of Padang Lawas Utara can use development research and development (R&D) according to the model of Thiagarajan, et al. (1974). This stage consists of three stages, namely the definition stage (define), the design stage (design), and the development stage (develop). The development in this study uses a 4-D model (four D Model) which consists of four stages, namely the define stage, design stage, develop stage, and disseminate. In developing an assessment instrument for HOTS questions, a descriptive text has assessment criteria.

### Acknowledgement

The researcher would like to thank the Lecturer in the Postgraduate Program in Indonesian Language and Literature Education, Medan State University, who has guided and directed this research so that it can be carried out. Hopefully this research can provide benefits in learning Indonesian, especially learning descriptive text for junior high school level, and the culture in North Padang Lawas.

### Reference

- Alhaddad, I. 2012. Application of Piaget's Theory of Mental Development to the Concept of Long Eternity. *Journal Infinity Pend. Siliwangi University Mathematics*. 1(1) : 31-44.
- Aydin, N., Yilmaz, A. (2010). The effect of constructivist approach in chemistry education on students' higher order cognitive skills. *Journal of Education*, (39), 57-68.
- Grabe, M., & Grabe, C. 2007. *Integrating technology for meaningful learning (5th ed.)*. Boston, MA: Houghton Mifflin
- Fanani, MZ (2018). Strategy for developing HOTS questions in the curriculum 2013. *Edudeena: Journal of Islamic Religious Education*, 2(1).
- Herlambang, YT (2018). *Pedagogic: A Critical Study of Educational Science in Multiperspectives*. New York: Earth Script.
- Jose, et al. 2021. Development of Teaching Materials to Find Interesting Things from Folklore Characters (Legend) *Blitar Local Wisdom Based*. Nahdlatul Ulama University, Blitar. Indonesia
- Perwitasari, S., Wahjoedi, & Akbar, S. (2018). Development of Thematic Based Teaching Materials Contextual. *Journal of Education: Theory, Research, and Development*.
- Risdaneva. (2018). *A Critical Discourse Analysis of Women's Portrayal in News Reporting of Sexual Violence*. *Studies in English Language and Education*
- Thiagarajan, S., Semmel, DS & Semmel, MI (1974). *Instructional development for training teachers of exceptional children a sourcebook*. Bloomington: Indiana University.
- Yuniar, M., Rakhmat, CR, & Saepulrohman, A. (2015). HOTS (High Order Thinking Skills) analysis on objective test questions in social sciences (Ips) Class V SD Negeri 7 Ciamis. *Pedagogika: Scientific Journal of Elementary School Teacher Education*, 2(2), 187-195.