Conference Paper

Assessment of Exposition Text to Develop Critical Thinking Skills for Junior High School Students

Nur Khoiri, Imam Agus Basuki, and Endah Tri Priyatni

Universitas Negeri Malang, Indonesia

Abstract

The purpose of this research is to develop an assessment of exposition text to develop critical thinking for junior high school students. This study utilizes a developmental research approach with a procedural development research called Thiagarajan 4D model as its research design. The resulting product is a book consisting of exposition text assessment tools to develop critical thinking skills for junior high school students. The structured assessment tools are based on the stage of critical thinking by Peter A. Facione and the exposition text written by Mark Anderson and Kathy Anderson. Based on the results of validity and reliability, the assessment tools developed in this study are valid and reliable with more than 80% score. The assessment tools, which were piloted in SMP Hasanuddin 01 Wajak, are proven reliable based on the reliability test between raters.

Keywords: assessment of writing, exposition text, critical thinking

1. Introduction

Critical thinking skill is very important to deal with the competitive lives. Critical thinking skill is required as the main competency that should be achieved. It acts effectively to reach success in this informative era. Learning orientation with the critical thinking skill is intended to prepare the students to face various complex challenges in life along with advance globalism era [12]; ([22], p.20). To fulfill the demand, ideal foundation of critical thinking should be the prime basic in every teaching and learning activity. Critical thinking skill must be started from the elementary level of education. In the junior high level, the students have already been taught any materials that encourage the students to develop the critical thinking skill [18, 19].

One instrument to develop critical thinking skill is through writing activity. A writer cannot utilize every tool that is used by a speaker, like expressing the intention with the body language, gestures, facial expressions, high speaking tone and intonation. A speaker can repeat, explain or revise the ideas that have been told. A writer cannot do all so that he/she should think first to take certain steps to overcome the shortage. The main activity of critical thinking is reasonable and reflective thinking activity by
emphasizing the decision production about what should be performed [3, 5, 11] and (Walker, 2006).

In order to create effective writing activities, there are some requirements that must be accomplished as follows: tight organization in the ideas and information development, high level of accuracy to banish the meaning ambiguity, the use of complex language system to make the reader to be more focus on the stress the writer given, vocabulary choice, language pattern, and the accurate sentence structures to create appropriate style for the theme and the readers [10].

The writer has found the result finding of the survey in 2004 about the amount of scientific writings that are produced by ASEAN countries. From the finding, Indonesia got the forth rank for its scientific writings. The first rank is Singapore with 5,781 scientific writings, followed by Thailand with 2,397 and Malaysia then Indonesia and Vietnam with 453 writings per year [20].

The comparison of the result of the scientific writings among Indonesia and other three countries in the ASEAN region is too far. This survey shows how important the development of writing skill for students, so that the next generation becomes a generation which have the same quality as other countries in the world. One way to develop the skills is by developing the critical thinking skill in writing activity.

Writing activity to develop the critical thinking activity can be started from critical literary activity. Critical writing can be done from the result of critical reading. A good students’ writing depends on how many reading references students’ have. Furthermore, they transfer into critical writing. Critical thinking process in writing cannot be separated from the critical reading activity. This is in line with Priyatni’s opinion (2011: 12) that critical reading means applying the critical thinking process from the text. A critical writer must pass the critical reading phase before; hence every given argument is the reflection result from the various critical reading experiences that have been done. Critical approach toward text material is needed to score implicit meaning behind the text. Critical reading skill helps the reader to comprehend the writer intention and goal and make this as an active user toward the information that can be found in the text ([14]: 7).

The relationship between score and teaching learning process ([15]: 7; [8]: 3; [9]: 4) is that teaching learning process is one process that has three elements that are related each other, they are teaching learning goals, study experience, and the result of the study. Teaching learning goals themselves are desirable attitude transformation from the students in the form of certain competences. Therefore, when doing scoring, it is important to check the progress of students’ attitude transformation whilst or after teaching learning process. By realizing the teaching learning process’ goal level of achievement, the teachers are able to take the remedial or guiding the students individually or classically.
Writing exposition text assessment development that has been done by (Kasmadi, 2015) produces writing exposition text assessment guidelines based on 2013 curriculum. Assessment instruments that have been produced only contain of writing assessment steps as a writing skill. Exposition text as a text that aims to convince the reader accompanied by strong analysis and arguments (Mark and Kathy, 1998) forces the writer to think critically so he can produce valid and analysis and arguments and it can be accountable. Critical thinking activity that is the basic from the critical thinking skill is the skill of evaluating and analyzing (Marzano, dkk., 1988: 91).

Critical thinking development is really beneficial to construct sharp arguments so that the reader can be convinced with the arguments. Exposition comes from the word “exposition” that means opens; it can also be interpreted as a writing that aims to inform, reveal, decipher, or explain something ([21]: 29). In the exposition text, problem that is communicated is the information in the form of factual data, an analysis, and can also in a form of someone’s firm establishment.

The implementation of writing assessment in exposition text in Indonesian lesson in junior high school is conducted in seventh grade for 2013 curriculum with the materials writing a report and news, and eighth grade for KTSP with the materials simple scientific writing and writing advertisement.

Critical thinking elements are intellectual process in making the concept, applying, analyzing, synthesizing, and or evaluating various information that are acquired from the result of observation, experience, reflection, then the result of this process is used as the basic when taking an action [24]. This action is really suitable in writing exposition text skill. Therefore, the development of writing assessment for developing critical thinking in this research adapts critical thinking taxonomy by [6, 7] and (Facione, 2013), they are (1) interpretation, (2) analysis, (3) conclusion, (4) evaluation, (5) explanation, and (6) self-arrangement. The development toward the authentic assessment has been done by many researchers such as [2] and (Fawzi, 2014). It can be concluded that assessment product that has already produced is only limit in the skill assessment. The point of assessment that is expected to measure at once give a qualified teaching learning standard so that it can produce students’ quality which is able to break the challenge of excess demographics and globalization in the future, cannot be seen clearly. Thus, it is necessary to develop an assessment product that can be produced the students that are able to think critically, that is assessment that includes assignment that contains motivated material and lead the students to do critical thinking activity.

According to the important of the development of critical writing assessment instruments above, the goal of the research is to develop junior high school students’ critical thinking with the special goals, (1) develop assessment instruments in exposition text to develop junior high school students’ critical thinking and (2) test the feasibility of assessment product.
The development of assessment instrument product is expected to be useful for various elements in teaching learning process (1) for the teachers, the development result of this product can be taken as a benefit practically as an assessment guidance in the learning writing exposition so that the assessment in Indonesian lesson can be easier to be conducted, (2) the assessment in the critical writing in learning text exposition can be a solution to encourage the students to be more critical and creative in producing creations or findings because they have been accustomed to criticize the standard evaluation in the teaching learning process they have done, (3) the result of development can become assessment instrument model in writing activity for other researchers and can be re-tested the validity and reliability level or can become an inspiration to develop the assessment instruments that are related to language skills except writing.

2. Method

This research uses development design research. The use of research approach and development is based on the prime goals from this research that is to produce a product in form of assessment development in the writing exposition learning activity especially in developing critical thinking that can be accounted the validity, practicality, attractiveness, and the effectiveness.

The development model that is used in this research is procedural development Thiagarajan model [23] which is abbreviated as 4D, define, design, develop, and disseminate. The steps of 4D Thiagarajan model are.

Define, the activities one in this step are (1) collect writing assessment instruments then analyze the shortage and the excess (if available), (2) ask the practitioner to fill in the questionnaire needs (if unavailable), (3) do theory study that is relevant with the assessment instruments in the writing exposition text activity for critical thinking development, and (4) do curriculum analysis.

Design, the activities done in this planning stage are (1) design the product concept that is developed, (2) compile the indicators based on the result of theory analysis and curriculum in form of matrix mapping, (3) make assessment instrument planning that is going to be developed, (4) decide the magnitude or parameter used in the assessment instrument that is going to be developed, and (5) do legibility test toward the text that is going to be used.

Develop, that is development stage. Development stage is done by (1) fix the text accordance with the result of eligibility test, (2) develop questions indicator dimension in the planning to be question items, (3) develop the assessment guide lines, (4) set the scored processing guidelines, (5) develop the use of the product guide lines, (6) enhance early product draft to be tested, (7) do product validity and reliability test, and (8) do the revision according to the test result of the product.
Disseminate, it is done by spreading the final findings. If the product, in this case critical writing assessment instruments, declared eligible, the product can be applied in every education institution. The report of the result of the product is delivered through scientific forum and professional meetings, or in the form of scientific journal and mass media. The distribution of the product through commercial institution can be done after meeting the quality control stage that is defined.

The trials location of development result was done in Hasanuddin junior high school Wajak, Malang. The trials for the result of the development writing exposition assessment instrument product was tested to eighth grade of junior high school. The trials time was on July–August 2015. Hasanuddin junior high school Wajak has been chosen as an object because this school is one of the best schools in Malang district.

The type of the data that has been collected in this development activity was verbal and nominal. Verbal data was obtained from the pre development study and the product tested. Nominal data was obtained from the result of product tested. The verbal data of the development activity was trials notes, opinion, correction, and the product subjects’ comment. The verbal data contains of the early product shortage and excess from the development and the suggestions for the improvement of the product development. Nominal data from the validity test result was treated with the descriptive analysis technique, which was finding the average score of every aspect, meanwhile the students’ nominal data scores was treated with the formula of difficulty level, different power, and reliability. The result of the reliability test was analyzed with the interrater reliability test SPSS.

3. Findings and Discussion

This research produces one product book that contains of six parts. The first part contains of materials mapping, the second part is about assessment planning of writing exposition text for critical thinking development, the third part is about writing assignment, the fourth part contains of assessment rubric of writing exposition text for critical thinking development, the fifth part is about the scored assessment tabulation of writing exposition text for critical thinking development, and the last part is about the conclusion of assessment result.

The first material mapping assessment contains four critical thinking taxonomy steps by Peter A. Facione, also indicator development to each step. Those six steps are (1) interpretation, (2) analysis, (3) conclusion, (4) evaluation, (5) explanation, and (6) self-disposition. Each critical thinking step is explained in the critical thinking skill indicator with sixteen indicators of all.

The second part is assessment planning of writing exposition text for the critical thinking development. There are four exposition text development plans. They are
argumentation text planning, editorial, advertisement, and pleidoi. For the planning format, it contains of four columns. They are critical thinking aspect, critical writing skill, writing assignment, and quality.

The third part is students’ assignment; the series of students’ assignment are started with (1) the instruction how to do the assignment, (2) students’ identities, (3) illustrations/examples of the texts and the explanation, and (4) ten writing assignments with the steps that are written orderly. In the third and fourth steps are explained into four types of exposition text. In Each step there is assignment that is in accordance with the character of the text.

The fourth part is about assessment product rubric. There are four assessment rubrics; they are assessment rubric for argumentation text, assessment rubric for editorial text, assessment rubric for advertisement text, and assessment rubric for pleidoi text. Each rubric is explained in form of table.

That contains of critical thinking aspect, writing assignment, descriptor, score, and maximum score. There are students’ identities before the table and after it there are instruction how to use the table, also score tabulation.

The fifth part contains of score tabulation of writing exposition text for junior high school students’ critical thinking development. The score tabulation covers class identity, students’ score table, and teacher’s signature. The score table contains students’ names, critical thinking aspect columns that are relevant to the amount of the assignment, and total score.

The sixth part is score conclusion. The most important things for this part are total score and score given decision that contains of score range A-E also the decision about the completeness of learning. Overall, it is started with the class identity and the materials, score table, teacher’s signature and score explanation.

Assessment instrument of exposition text is tested by evaluators and practitioners (Indonesian teachers) to know the feasibility of the products in term of content validity. The data is from the questionnaire and some notes/comments that are given by the validators. Obtained data from product trials is verbal data in the form of comments and improvement suggestions.

Obtained data from product trials with expert evaluators, scrivener, practitioners, and field trials toward a group of students is analyzed to be the basic revision for the final product. Those data can be informed of nominal data that is scoring in questionnaire, verbal data that is comment and improvement suggestion. The data analysis aims to get the assessment that is related to the excess and the shortage of the product development, so it can produce a better product.

Assessment product data analysis that has been tested contains of writing assignment data analysis model 1, 2, 3, and 4. Both nominal and verbal data from product trials with the experts, practitioners and field trials are presented more complete as follow.
3.1. Data Analysis of Writing Assignment Model 1

It had been found the average percentage from content validity aspect 85%, construct validity 96%, eligibility and practicality 81%, the implementation 81%, attractiveness 83% and reliability 0.974.

Therefore, based on the reference of level product feasibility, it can be concluded that writing assignment model 1 argumentation text had been very appropriate and ready to be implemented. That validity feasibility was based on Ridwan’s opinion (2012:15) that declared if product feasibility test reaches level of percentage 81%-100%, assessment instrument was classified as very feasible and ready to be implemented. If the assessment instrument feasibility test reached level of percentage 61%-80%, assessment instrument was classified feasible and ready to be implemented.

Besides nominal data, in the product test, it was also obtained verbal data. Those verbal data was suggestions and comments. Those data were analyzed to be a basic revision for the final product. According to the analysis, there were sixteen suggestions that can be implemented as the basic revision.

3.2. Nominal Data of Writing Assignment Model 2

It had been found the average percentage from the content validity aspect 88%, construct validity 92%, eligibility and practicality 81%, implementation 83%, attractiveness 83%, also reliability 0.971. Therefore, based on the reference of level product feasibility, it can be concluded that writing assignment model 2 editorial text had been very feasible and ready to be implemented.

Besides nominal data, in the product test, it was also obtained verbal data. Those verbal data was suggestions and comments. Those data were analyzed to be a basic revision for the final product. According to the analysis, there were fifteen suggestions that can be implemented as the basic revision.

3.3. Nominal Data of Writing Assignment Model 3

It had been found the average percentage from the content validity aspect 83%, construct validity 88%, eligibility and practicality 81%, implementation 81%, attractiveness 83%, also reliability 0.986. Therefore, based on the reference of level product feasibility, it can be concluded that writing assignment model 3 advertisement text had been very feasible and ready to be implemented.

Besides nominal data, in the product test, it was also obtained verbal data. Those verbal data was suggestions and comments. Those data were analyzed to be a basic revision.
3.4. Nominal Data of Writing Assignment Model 4

According to table 1.4, it had been found the average percentage from the content validity aspect 90%, construct validity 92%, eligibility and practicality 81%, implementation 83%, attractiveness 83%, also reliability 0.977. Therefore, based on the reference of level product feasibility, it can be concluded that writing assignment model 4 pleidoi text had been very feasible and ready to be implemented.

Besides nominal data, in the product test, it was also obtained verbal data. Those verbal data was suggestions and comments. Those data were analyzed to be a basic revision for the final product. According to the analysis, there were seventeen suggestions that can be implemented as the basic revision.

In general, the concept of the product was not changed at all. The changing from before and after revision took place at three aspects, text, assignment content, also fonts and graphics delivery. Text changing included language and content. Language changing was done to reduce text level of difficulty and repair the use of the language so that it fits to the rules. Text content changing was done related to readers or writers goals. If the text content was not feasible to the students so it will be explained to them. Assignment content changing included the addition and the subtraction of the items. This was based on the triangulation experts’ trials result, intensive guidance with the tutor, also relevant theory study. The changing of text delivery and questions were done based on the parts of text main structures, they were part I (thesis, II (arguments), and III (reaffirmation). This changing was harmonized with the six steps of critical thinking theory by Facione.

4. Conclusions and Suggestions

The research in writing exposition text assessment development for junior high school students’ critical thinking development produces a book that contains of the guidance to write exposition text for junior high school students’ critical thinking development. In general, there are three parts of the development, introduction, writing assignment, and scoring guidelines. The introduction included title, acknowledgement, table of content, materials mapping that has a function to give an overview, motivation, and guidelines to do the critical writing assessment activity. Writing assignment part is about several tasks that are designed orderly to guide the students in doing critical writing activity. The last part is assessment guidelines (contains of scoring guidelines), the examples of scoring format, references, and the examples of lesson steps.
The given overview in the beginning of the product is critical thinking stages that are used in the exposition text assessment activity. The assessment activity includes materials mapping and items planning/writing assignment. Those two assessment elements are explained into four types of exposition text, they are argumentation, editorial, advertisement, and pleidoi. The second part is about continued assignment that was the main part of the writing activity for critical thinking development. This assignment must be done by the students. This assignment also has to be done orderly, because the order of assignment given has to be adjusted to the critical thinking taxonomy that was used in this product. The last part was rubric and scoring. Rubric was made in a simple way but it was very complete. It is done to accommodate all materials that are tested to the students. The scoring is used to see the final result of the learning activity. Thus, in scoring part, the assessment data is made completely so that it can be used to learning evaluation activity.

Product relevancy level model 1 concluded very relevant, that was according to table 1.1 the average from content validity aspect was 85%, construct validity 96%, eligibility and practicality 81%, implementation 81%, attractiveness 83% also reliability 0.974. Product model 2 concluded very relevant, that was according to table 1.2 the average from content validity aspect was 88%, construct validity 92%, eligibility and practicality 81%, implementation 83%, attractiveness 83% also reliability 0.971. Product model 3 concluded very relevant, that was according to table 1.3 the average from content validity aspect was 83%, construct validity 88%, eligibility and practicality 81%, implementation 81%, attractiveness 83% also reliability 0.986. Product model 4 concluded very relevant, that was according to table 1.4 the average from content validity aspect was 90%, construct validity 92%, eligibility and practicality 81%, implementation 83%, attractiveness 83% also reliability 0.977.

References

Philosophical Association Fuulerton: California State University.


