CHAPTER IV

RESULT AND DISCUSSION

This research aimed to know the development of *empirically derived, binary-choice, boundary definition* (EBB) scale for rating scale descriptor constructed and the implementation of *empirically derived, binary-choice, boundary definition* (EBB) scale as a rating scale descriptor for writing assessment. This chapter deals with the findings of the study as well as the discussions of the findings. These findings and discussions are arranged and presented in such a way in which the research question became the basis or reference for the arrangement and presentation.

A. Research Finding

1. The Development of Empirically-derived, Binary-choice, Boundary-definition Scale

The result of observational field notes, interview and the document analysis of English teacher’s rubric, students’ score and assignment are presented below to answer the first research question. Based on three times of observation, interview section with English teacher and document analysis of English teacher’s rubric, students score and assignment, were got the data to develop an *empirically derived, binary-choice, boundary definition* scale. There were some steps to develop an EBB scale; first was classifying the students’ level, second was creating the criteria and descriptor, third was giving separating point.
The first step to develop an EBB scale was classifying students’ level. The researcher classified students’ level into two groups: upper and lower groups. There were nineteen students in upper group and thirteen in lower group. Based on students’ score, there were six students’ performance levels. The researcher did an analysis of six students’ assignments representing all ranges of students’ performance levels. The results of analysis students’ assignment are like follow:

a. Student level 1

Students was being first level because student’s writing showed that students wrote on the topic. Students wrote eight until ten sentences in each paragraph. The student wrote detail information for each paragraph: the first paragraph about self-identity, the second paragraph is about family, and third paragraph is about hobby and favorite things. Students wrote paragraph clearly with some supporting sentences and well organized. Student’s writing also had logical sequence. Most of the sentences had not grammatical errors. The student wrote simple sentence and fully formed: the subject, predicate and object were clear. The vocabulary choice and use were meaningful, nevertheless there are some lexical errors. Students also had good written in placing punctuation, capitalization and paragraphing.
b. Student level 2

Students were being in the second level because they wrote on the topic and most of sentences were clear. Students wrote five until seven sentences in each paragraph. Students wrote detail information: first paragraph told about self-identity, second paragraph told about family, and last paragraph told about hobby and favorite thinks. Students wrote the supporting sentences for each main idea clearly. Students had few grammatical errors, pronouns, and preposition but the meaning is clear enough. Students wrote good vocabulary in use and choice. However, students put punctuation correctly, but some capitalization was incorrect.

c. Student level 3

Students were being third level because student’s writing showed that the student wrote on topic and most of information was clear. Students wrote four until six sentences in each paragraph. There were four paragraphs: first paragraph told about self-identity, the second paragraph about her parents, the third paragraph told about her sister and her favorite movies, the last paragraph was closing. The second and the third paragraph should be one paragraph, because it had same idea. There were few grammatical errors in and few lexical errors founded in some words, but the meaning was clear enough. Students put punctuation and capitalization are correctly.
d. Student level 4

Students were being fourth level because the students’ writing showed that the student wrote on the topic. Students wrote three until four sentences for each paragraph. Students wrote about self-identity, family, and hobby. Nevertheless, the supporting sentences were two until three sentences; the sentences were not detail enough to explain the main idea. Students only wrote two until three sentences in each paragraph. There were frequent grammatical errors in used pronouns, frequent lexical errors, punctuation, and capitalization that influence the meaning of the sentence.

e. Student level 5

Students were being fifth level because student’s writing showed that students wrote on the topic and the information clearly. However, student’s writing had similar with teachers’ idea and supporting sentences as an example; nevertheless, students wrote information not detail. The supporting sentences in each paragraph were only one or two sentences. There were frequent grammatical errors of pronouns, few lexical errors in some sentences but the meaning not obscure. The punctuation and capitalization were few errors that influence the meaning.

f. Student level 6

Students were being sixth level because student’s writing showed that students wrote on the topic but everything unclear. Students had poor handwriting and obscure to read. The paragraph was not clear, because
there was no supporting sentence and none of paragraph had finish. Students were frequent the grammatical errors and lexical errors did not communicate.

Based on the data above, the student’s level was concluded by the researcher. The result of classify students’ level showed in table bellow:

Table 4.1
Criteria of Students’ Performance Levels

<table>
<thead>
<tr>
<th>Students’ level</th>
<th>Criteria</th>
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</table>
| Students level 1 | a. Performance: write on the topic, detail information, and more than eight sentences in each paragraph.  
b. Grammatical: no grammatical errors and fully formed sentences.  
c. Vocabulary: almost no lexical errors.  
d. Mechanism: punctuation, capitalization, and paragraphing are correctly. |
| Student level 2 | a. Performance: write on the topic, detail information, and more than five sentences in each paragraph.  
b. Grammatical: few grammatical errors in |
| Student level 3 | a. Performance: write on the topic, most information clear but not detail, no more than six sentences in each paragraph.  
|                 | b. Grammatical: few grammatical errors but meaning no obscure.  
|                 | c. Vocabulary: few lexical errors but meanings are clear.  
|                 | d. Mechanism: punctuation and capitalization are correct, but errors in paragraphing. |
| Student level 4 | a. Performance: write on the topic, information are clear, but not detail, no more than four sentences in each paragraph.  
|                 | b. Grammatical: few grammatical errors in pronouns influence the meaning.  
|                 | c. Vocabulary: few lexical errors, but the pronouns, but the meaning are clear.  
|                 | c. Vocabulary: few lexical errors, but the meaning is clear.  
|                 | d. Mechanism: punctuation and paragraphing are correct, but few capitalizations are incorrect. |
| Student level 5 | a. Performance: write on the topic, clear information but not detail, no more three sentences in each paragraph.  
| | b. Grammatical: frequent grammatical errors in pronouns and the meaning are confused.  
| | c. Vocabulary: frequent lexical errors, but the meaning is clear enough.  
| | d. Mechanism: frequent errors in placing capitalization and punctuation. |

| Student level 6 | a. Performance: write on the topic, but nothing is clear.  
| | b. Grammatical: frequent grammatical errors and does not communicate.  
| | c. Vocabulary: frequent lexical errors and the meaning are confused.  
| | d. Mechanism: frequent errors in placing punctuation, capitalization, paragraphing, and poor handwriting. |
Students’ level was classified as described above by the researcher. Then the researcher created the criteria and descriptors. The criteria and descriptors were created based on the result of document analysis and interview with English teacher. According to the teachers’ rubric the criteria and descriptors are like follow: (See Appendix B)

a. Content

Content measured the idea with the descriptor are related ideas for scale “Excellent to very good” as a higher score, occasionally unrelated ideas for “Good”, very often unrelated ideas for “Fair to poor”, and irrelevant ideas for “Very poor”.

b. Organization

Organization measured text organization with the descriptor are effective and well organized for “Excellent to very good”, occasionally ineffective, weak transition and incomplete organization for “Good”, lack organization for “Fair to poor”, little or no organization for “Very poor”.

c. Vocabulary

Vocabulary measured vocabulary use. The descriptor are effective word choice for “Excellent to very good”, mostly effective word choice for “Good”, frequently error in word for “Fair to poor”, and mostly ineffective word choice for “Very poor”.
d. Language use

Language use measured grammatical accuracy. The descriptor are grammatically correct for “Excellent to very good”, mostly grammatically correct for “Good”, frequently error in grammar for “Fair to poor”, and very often error in grammar for “Very poor”.

e. Mechanism

Mechanism measured students’ handwriting with the descriptor are few errors in spelling, punctuation, capitalization, paragraphing for “Excellent to very good”, occasionally errors in spelling, punctuation, capitalization, paragraphing for “Good”, frequent errors in spelling, punctuation, capitalization, paragraphing for “Fair to poor”, and dominated by errors in spelling, punctuation, capitalization, paragraphing for “Very poor”.

Based on the data above, the researcher conclude that the teacher’s rubric does not have detail descriptors. The descriptors explained the major aspect without detail description aspects want to score. The researcher analyzed student’s assignment and got the criteria for each level. According to the data above, the researcher created the criteria and descriptor. The result showed bellow:

Table 4.2

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>a. Coherent and elaborate the topic with</td>
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</tr>
</tbody>
</table>
| **sufficient opinions** | b. Elaborations opinions that relevant to topic  
| | c. Coherent and sufficient opinions 
| | d. Inadequate development of the topic 
| | e. Mostly relevant the topic but no elaborate |
| **Grammatical and Vocabulary** | a. A variety of sentences pattern with almost no grammatical or lexical errors  
| | b. Few grammatical and lexical errors 
| | c. Verbs marked for incorrect tense and aspect 
| | d. Frequent grammatical and lexical errors 
| | e. Frequent grammatical and lexical errors, but sentences and fragments are generally well-formed |
| **Communicative Effectiveness** | a. Well organized with logical sequence and fluent expression  
| | b. Ideas clearly supported  
| | c. Loosely organized but main ideas stand out  
| | d. Ideas confused or disconnected  
| | e. Lacks logical sequencing and development |
| **Mechanism** | a. Demonstrates mastery of conventions with distich meaning |
b. Few errors of spelling, punctuation, capitalization, and paragraphing but has distich meaning

c. Few errors of spelling, punctuation, capitalization, and paragraphing

d. Meaning confused or obscured

e. Frequent errors of spelling, punctuation, capitalization, and paragraphing

To distinct separation point for each descriptors, the researcher matched the criteria and hierarchy for descriptors with the students’ writing. The researcher giving the upper half performance with the point is 6, 5, and 4, and the lower half with point 3, 2, and 1. The researcher distinguish level 6 performance from level 4 and 5 performance, then level 5 performance from level 4 performance. The researcher worked with upper half first, then with lower half. The result of distinct separation point can be shown below (See Appendix C).

a. Grammatical and vocabulary

The first hierarchy for grammatical accuracy and vocabulary is “A variety of sentences pattern with almost no grammatical or lexical errors” rated as 6. Point 6 is highest point. In this point, student wrote sentences fully
formed: there was a clear subject, to be or verb, and object included complement. Second hierarchy is “Few grammatical and lexical errors” rated as 5. Students wrote sentences fully formed, but there were some errors used to be or preposition. Students also wrote some lexical errors in verbs or nouns but the meaning was clear. Third hierarchy is “Verbs marked for incorrect tense and aspect” rated as 4. Students wrote fully formed sentences, but there were some mistake verbs used in sentences. The verb was not appropriate for tense.

Next hierarchy is “Frequent grammatical and lexical errors, but sentences and fragments are generally well-formed” rated as 3 and 2. Students wrote sentences fully formed, but there were many mistakes in used to be or verb. Last hierarchy is “Frequent grammatical and lexical errors” rated as 1. Students wrote sentences with many mistakes: tense and verb used in sentences were not appropriate. There were many mistakes for lexical errors also. The mistake made the meaning are obscure.

b. Communicative effectiveness

The single factor to distinguish upper and lower level in communicative effectiveness is “Well organized with logical sequence and fluent expression”. First level is “Ideas clearly support” rated as 6. In this point, students wrote with well organizer and logical sequence for the idea. Student’s idea had clearly supporting sentences that make the idea understandable.
Second level is “Loosely organized but main ideas stand out” rated as 5 and 4. Students wrote paragraph with clearly idea and clearly support sentence rated as 5 point. However, student’s writing had not good text organizer, there was an organizer did not use. And point for rated for students who wrote with loosely text organizer, there were some organizer did not use. However, the idea was clearly.

Third level is “Lacks logical sequencing and development” rated as 3 and 2. Students wrote few supporting sentence but did not enough to develop the idea. Text organizer was used only one aspect by students. There were many mistakes was made by student’s writing did not communicate enough. Then, for point 2, students had not supporting sentences to develop the idea, and the text organizer was wrongly arrangement. The last is “Ideas confused or disconnected” rated as 1. Students had not supporting sentence to develop idea. Each paragraph did not appropriate and the text organizer did not used.

c. Content

The single factor to distinguish better and poorer level in content aspect is “Coherent and elaborate the topic with sufficient opinions”. “Elaborations opinions that relevant to topic” rated as 6. In this point, students wrote sentences with elaboration their opinion with the topic that being clear and coherent between each paragraph. Next hierarchy is “Coherent and sufficient opinions” rated as 5 and 4. For point 5, students wrote
sentences with many opinions that coherent each other. However, there is no elaboration opinion the topic. In point 4, students wrote few opinions that support the topic and the opinion was coherent each other. Then, “Mostly relevant the topic but no elaborate” rated as 3 and 2. For point 3, students wrote something they know that relevant with the topic and added some opinion but no elaboration between knowledge and opinions. In point 2, students wrote something mostly relevant with the topic but there was no opinion included to elaborate each other. Last is “Inadequate development of the topic” rated as 1. Students only wrote main idea that relevant with the topic, but did not develop. Students wrote one or two sentences only.

d. Mechanism

In mechanism, the single factor to distinguish better and poorer level is “Demonstrates mastery of conventions”. “Distich meaning” rated as 6. In this point, students wrote with good handwriting and there was no spelling, punctuation and capitalization errors. Next, “Few errors of spelling, punctuation, capitalization, and paragraphing” rated as 5 and 4. For point 5, students had good handwriting but students had few errors in punctuation and capitalization. However, the meaning was clear enough. In point 4, students had good handwriting but students had few spelling, punctuation, and capitalization errors. However, the meaning was clear enough.
Then, “Frequent errors of spelling, punctuation, capitalization, and paragraphing” rated as 3 and 2. Point 3, students had handwriting that difficult to understand. There were many errors in spelling, capitalization and punctuation. However, the meaning was understandable. In point 2, students had many errors in spelling, capitalization, punctuation, and paragraphing. Students had poor handwriting that difficult to understand.

And the last is “Meaning confused or obscured” rated as 1. Students had many mistakes in spelling, punctuation, capitalization, and paragraphing errors. Students had poor handwriting that made meaning confused.

Based on the data above, the rubric was constructed by the researcher using *empirically derived, binary-choice, boundary definition* scale can be shown below:

| Table 4.3 |
|---|---|---|
| Rubric constructed Empirically derived, Binary-choice, Boundary definition scale |

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Scale</th>
<th>Criteria</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>6</td>
<td>Coherent and elaborate the topic with sufficient opinions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Coherent and sufficient opinions that relevant to the topic</td>
<td></td>
</tr>
<tr>
<td>Score</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Coherent and sufficient opinions without elaborate the topic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Mostly relevant the topic with few elaborate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Relevant the topic but no elaborate opinions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Inadequate development of the topic and does not coherent the topic</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Communicative Effectiveness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Well organized with logical sequence, fluent expression, and ideas clearly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Loosely organized but logical sequence and main ideas stand out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Loosely organized and limited support but logical sequence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Lacks logical sequence with some development ideas but the ideas clearly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lacks logical sequencing and development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ideas confused or disconnected, does not communicate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Grammatical and vocabulary</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>A variety of sentences pattern with almost no grammatical or lexical errors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Variety of sentences pattern with few grammatical and lexical errors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanism</td>
<td>Score</td>
<td>Description</td>
<td></td>
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<tr>
<td>-----------</td>
<td>-------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Demonstrates mastery of convention with distinct meaning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Few errors of spelling, punctuation, capitalization, and paragraphing, but has distinct meaning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Few errors of spelling, punctuation, capitalization, and paragraphing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Frequent errors of spelling, punctuation, capitalization, and paragraphing, but meaning not obscured</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Frequent errors of spelling, punctuation, capitalization, and paragraphing. Meaning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>confused or obscured</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>No mastering of conventions and meaning confused or obscured</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. The Implementation of Empirically derived, Binary-choice, Boundary-definition scale for Writing Assessment

The researcher did an implementation of rubric constructed *empirically derived, binary-choice, boundary definition* scale in two times; the first implementation scale used to score students’ writing about intention paragraph, and the second implementation used to score students’ writing about descriptive paragraph. The researcher did an observation and document analysis to found out the data. The result of observation and document analysis are like follows:

The first implementation of rubric constructed EBB scale used to scoring students’ writing about intention. First, the teacher gave material needed to write intention paragraph. Then, the teacher asked students to write their intention. Students wrote as many as paragraph they can about their intention in holiday or in their future, they used future continuous tense. Based on observation on October 26th 2016, the researcher got the data about teaching and learning process. Before students writing, the teacher had to give the materials.
The teacher opened the lesson with some question that elicits students related intention material. The teacher showed power point presentation about meaning and expression of intention. The teacher explained it and gave the examples about intention like her planning in holiday. Then, the teacher gave the formula of future continuous tenses and gave the examples of it. The teacher explained detail about how to use the tense and the variety of pattern can be using by students to write intention.

The teacher asked students to write a sentence about their intention if they visited some places such as mall, beach, and library. Students had high motivation to write their sentences in the blackboard. Students’ sentences were correcting by the teacher. The teacher asked students to write their intention in next holiday, as many as they can write. After students finished the paragraph, the teacher-assessed students’ writing use rubric constructed EBB scale.

The researcher analyzed student’s writing according to rubric constructed EBB scale to give score. Content was analyzed first by the researcher: whether the content is coherent or not, whether the students give elaborate opinions or do not and whether they develop the topic or do not. Then the researcher gave point according to student’s writing (See Appendix D).

The researcher analyzed communicative effectiveness as a second aspect. Students should write their intention and what their plan in their
future. In this aspect, the researcher focused on text organization: students’ text organization is correct or not, the idea: the idea is clear or not, and supporting sentences: there are any supporting sentences to explain their intention or not, and communicate or not. Then, the researcher gave point based on students’ writing (See Appendix D).

Then, the researcher analyzed grammatical and vocabulary. Part of intention used simple future tense; students should use future form tense and verb. In this aspect, the researcher focused on tense form and lexical. Next, the researcher analyzed student’s handwriting: is student’s writing understandable or not? According to the descriptor, the researcher focused on spelling, punctuation, capitalization, and paragraphing (See Appendix D).

Diagram 4.1

The Result of First Assessment use EBB scale

![Diagram](https://example.com/diagram.png)
According the data above, we can see that students had five varieties score in better performance and two varieties score in weaker performance. There were; 96 was gotten by two students, 92 was gotten by four students, 88 was gotten by two students, 83 was gotten by six students, 79 was gotten by six students, 67 was gotten by two students, and 50 was gotten by one student.

The second implementation of empirically derived, binary-choice, boundary-definition scale used to score students’ writing about descriptive. Students described about ecotourism destination place that they know. The observation did on November 2\textsuperscript{nd} and 8\textsuperscript{th} 2016, the researcher got the data about teaching and learning process. Before student wrote the description, the teacher explained about descriptive text.

The teacher opened the lesson with show the material. The teacher told the purpose of descriptive text, generic structure, and language use. The teacher gave the formula of simple present tense and the examples. The teacher focus on nominal formula of simple present tense, then the teacher explained about noun phrase and the example of it. While the teacher explained it, students had good pay attention. Sometimes, students confusing but they tried to understand it. After the teacher gave many examples about simple present tense and noun phrase.

The teacher explained about passive voice. The teacher gave the formula of it and examples. Students asked to found out the generic structure of text in the book. Students found out the noun phrase and passive voice. The
teacher drew a table to easier student answer. The teacher asked the student to
describing a place that they already know. After students finished the
assignment, the teacher assessed students’ writing used rubric constructed
EBB scale.

The researcher analyzed students’ writing about describing place
based on rubric constructed EBB scale. The researcher analyzed content of
student’s writing for content aspect. In this aspect, the researcher focused on
whether the content is coherent, whether students’ opinions are coherent and
elaborate, and whether the topic is developed. (See Appendix E).

The researcher analyzed communicative effectiveness in student’s
writing. The researcher focused on text organization, idea, and supporting
sentences. Student’s writing should include organization for descriptive text:
title, identification, and description. The researcher analyzed whether students
writing has detail supporting sentences to explain their plan in future, the idea
is clear and supporting sentences are communicative. (See Appendix E).

The researcher analyzed grammatical and vocabulary that focused on
tense used in descriptive text. The researcher analyzed whether students
writing has variety sentences, use correct tense and verb, and grammatical and
lexical errors (See Appendix E).

The last aspect was analyzed by the researcher is mechanism. This
aspect focused on students handwriting: spelling, punctuation, capitalization,
and paragraphing. The researcher analyzed whether the students writing is understandable and has distinct meaning. (See Appendix E).

Diagram 4.2

The Result of Second Assessment use EBB scale

Based on the diagram above, there were eight varieties of students’ score; three students got 96, two students got 92, four students got 88, six students got 83, five students got 79, two students got 67, and one student got 50. There were five varieties score as eighteen students got better performances, and three varieties score as three students got weaker performances.

Both of the data above showed there was no significant differences score in first and second implementation. In the first implementation, there were seven varieties score, those are 96, 92, 88, 79, 67, and 50. The second
implementation also had seven varieties score, those are 96, 92, 88, 79, 67, and 50. The scores’ variety was consistent.

B. Discussion

1. The Development of Empirically derived, Binary-choice, Boundary-definition scale

According to Upshur and Turner there are five steps to develop EBB scale:

a. Eight student performances were selected from the set to be rated. These should represent approximately the full range of ability in the total set. Then, give the task to a group of students drawn from the target population. The target population were students of X MIA 4. There were 23 students; 2 male students and 21 female students. Students are gave task to write three paragraphs about their self-identity and family.

b. Take the resulting language samples and ask the group of experts to divide them into two groups – the ‘upper’ and the ‘lower’ performances. From the task, the teacher did an assessment and the result is three students got 94. Second score 88 was gotten by nine students. Third score 82 was gotten by six students. Fourth score 75 was gotten by four students. The last score 69 was gotten by one students. Based on the teacher standard minimum score was 78. The high score was 94, 88, and 82. And the low

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2 Glenn Fulcher, *Practical language testing*, …p. 212.
score was 75 and 69. There were 18 students had high performance level and 5 students had low performance level.

c. The team discussed their dichotomous rankings and reconciled any differences. They then formulated the simplest criteria question that would allow them to classify performances as ‘upper-half’ or ‘lower-half’ according to the attribute that they were rating.³ There were five level of question for six-point scale.

The researcher analyzed the students’ performances and found out that upper students wrote well organize, few errors of grammatical, few errors of spelling, and few errors of mechanism. Whereas, the lower students wrote not clear in content, organization, frequent errors in grammatical and lexical, frequent errors in mechanism, meaning confused until did not communicate. The researcher formulated simplest criteria question for each aspect after analyze students’ writing and teachers’ rubric.

d. Working with the four upper-half performances, the team members individually rated each of them as ‘6’, ‘5’, or ‘4’. The procedure requires that at least one sample should be rated as ‘6’; at least two numerical ratings must be used. Therefore, at least two of the four samples receive the same rating. This scoring was done impressionistically.⁴

The simplest question were formulated, and then gave the point. The researcher distinguish a question being first level question to break down the upper and lower performances.

e. Rankings were discussed and reconciled. Simple criteria questions were formulated, first to distinguish level 6 performances from level 4 and 5 performances, and then level 5 performances from level 4 performances. Steps 4 and 5 were repeated for the lower-half performances. After distinguish level, the researcher gave point for each performance level question.

According to discussion above, the researcher concluded that development of EBB scale constructed student level performances. The aspect and descriptor constructed with student’s performance, and the teacher’s rubric. The four aspects are appropriate with student’s performance. The descriptor also decided according to student’s writing, and teacher’s rubric.

2. The Implementation of Empirically derived, Binary-choice, Boundary-definition scale

The implementation of *empirically derived, binary-choice, boundary-definition* scale did in twice; the first implementation used to assessing students’ writing about intention, and the second implementation used to assessing writing about descriptive text. Rubric constructed EBB scale that

\[ \text{\textsuperscript{5}} \] John A. Upshur and Carolyn E. Turner, “Constructing rating scales for second language tests”, … p. 7.
develop based on student’s level are more appropriate to students than teacher’s rubric. Namara states that a rating scale is a series of ascending descriptions of salient features of performance at each language level. A language performance can be assessed by examining either the whole impression of the performance or the performance according to different criteria.\(^6\)

Harai and Koizumi were analyzing the validity and reliability of EBB scale and analytic score, the finding showed that EBB scale was slightly superior in reliability and validity, whereas the analytic scale excelled in practicality.\(^7\) Another research by Mu-shuan Chou states that rating scale more detail in description and help student more focus than rating checklist.\(^8\) The data above showed that the students’ score had many variety score than before. It because the descriptors constructed by student’s performance levels.

The rubric has detail descriptors that represent all ranges of student’s performance levels. It is useful and helpful for the teacher to assess students’ writing with high validity assessment. EBB scale represented an innovation in the logic of how raters judge performance with reference to performance data in specific contexts of language use. EBB scale may not contain the rich


\(^7\) Harai Akiyo, and Koizumi Rie, “Validation of the EBB scale: A Case of the Story Retelling Speaking Test”, p. 15.

description of the previous method, but they are relatively easy to use in real-time rating, and do not place a heavy burden on the memory of the raters.\footnote{G. Fulcher, F. Davidson, and J. Kemp, “Effective rating scale development for speaking tests: Performance decision trees”, \textit{Language Testing}, vol. 28, no. 1 (2011), p. 9, accessed 31 May 2016.}