The Development of Learning Material: Explanation Text Based on Multimodal by Using Sway App in 11th grade of SMAN 1 Batu

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ABSTRACT
Generally, this paper is conducted to produce writing teaching material related with Explanation text based on multimodal text by using Sway app. This paper purposes to discover reasonable learning material from the aspect of content, lay out, and the effectiveness of learning material. The research method used in this paper is in the form of the elaboration of Four-D model brought by Thiagarajan, Dorothy, and Melvyn. Four-D model consists of 4 steps: Define, Design, Develop, and Disseminate. The average acquired by the suitable learning material in the form of: content 80.5 %, presentation 77.55%, lay out 78%. This learning material proven to be effective since it is able to improve student learning outcome by the score up to 94% of classical graduate.

Keywords: learning material, explanation text, multimodal text, Sway

INTRODUCTION
Bahasa Indonesia has significant role to enhance proper language competence of student. Recently, communication competence: active, receptive, and active-productive have been deliberately corresponded with literature competence. Since technology and communication improve rapidly, in line with literature competence. It is not merely about reading and writing comprehension, but to comprehend symbol, picture, or film. These appropriate with learning approach of 2013 curriculum in which it demands to learn bahasa Indonesia based on text. Based on text learning approach, text means a language unit contains complete contextual concept and meaning. Language unit is not merely about in a form of text, but also in a form of spoken, even in text multimodal concept, it may be the combination of text and spoken or even animation of image and film. Understanding those explanations above, literature competence delivered to student should be in an integration of listening competence, speaking competence, observing competence, reading competence, writing competence and critical thinking (PMP Bahasa Indonesia SMA 2016;6).

Point out from the above thought, teacher demands to be able to supply Bahasa Indonesia learning competence which is able to develop student competence in listening, speaking, observing, reading, and writing. Observing competence is the newest competence which just posted in PMP bahasa Indonesia in 2013 curriculum-revised version. It is one of linguistic competence in which it is essential in modern era for almost a half of recently communication is served through technology information in a form audiovisual. Because of that, teacher has concern to teach all the linguistic competence integrally. Unfortunately, there is only a few learning material to complete courses and assessment for linguistic competence in this term is observing competence. Whereas, based on 2013 curriculum which uses text approach, the learning process of Bahasa Indonesia material must not
merely provide written text or spoken text, but also the combination of visual text in a form of picture/image or audiovisual in a form video or film, for reason.

Salam (2007:2-3) argues that learning material is a unit of courses arranged systematically whether in written or not so that it supports the ambience/atmosphere for student to learn. The aim of learning material is to help the achievement of syllabus’s purpose and the role of teacher and student in learning-teaching process (Wright in Trianto, 2005:9). This aim is appropriate with Cunningsworth (1995;7) opines that learning material is made in order to presented learning material, main resource activity for student to practice interactive communication, linguistic information references, stimulant resources, class activity concept, syllabus, and an assistance help for newbie and inexperienced teacher to improve their self-confidence. The purpose of using of materials is sometimes modeling among sub-themes related to main themes, sometimes activating learning, sometimes concretizing hardly understandable themes, depicting, etc. So every kind of supportive object towards activating education and improving productivity can be called as educational materials. Based on two opinions above, we can conclude that learning material has benefits: (a) helping teacher in learning-teaching process; (b) facilitating the presentation of courses in class; (c) lead student; (d) availing student to learn out of the class; (e) changing student’s perception that teacher is the only learning resources, and (f) motivating student to enhance their selves in comprehending subjects.

Included in PMP Bahasa Indonesia 2013 curriculum version is that student is provided with variety knowledges and opinions developed through multimodal text such as: spoken, printed, digital, and any other media in learning Bahasa Indonesia so that linguistic competence: listening, observing, reading, speaking, writing, and producing are able to be developed integrally and prospectively. Bahasa Indonesia learning through multimodal learning included (a) multi text (various type of text), (b) various type of linguistic competence provided integrally, and (c) use various type of learning media. Text discussed in 2013 curriculum is no longer confined to the spoken and written, but also nonverbal and other visual element. The presence of nonverbal and any other visual cannot be ignored in communicating or understanding text for their interrelation among text, nonverbal language, any other visual (Sinar, 2012:31). Without nonverbal language such as gesture, facial expression, voice, and any other visual cause the limitation of comprehending text.

Multimodal text are texts that have more than one ‘mode’ in which the meaning is communicated through synchronization mode. Michelle Anstey and Geoff Bull (2010) states that a text that is multimodal text is formed from the two or more combination of semiotic system. According to them, there are five multimodal semiotic systems in a text, (a) linguistic: vocabulary, generic structure and the grammar of oral and written language; (b) visual color, vectors, and viewpoint in still and moving images, (c) Audio: volume, pitch, and rhythm of music and sound effect, (4) gestural: movement, speed, and stillness in facial expression and body language, and (e) spatial: proximity, direction, position of layout and organization of subject space.

Various type of multimodal text experienced by student in recent education environment is still in a form of printed such as images, guide book, newspaper and magazine. Unprinted of multimodal texts are in the form of film, video, and text in electronic form such as e-mail, internet, and digital media such as CD-ROM or DVD. The multimodal text learning in 21 century is very important. Therefore, new skill, strategy, and new pedagogy are needed to support student’s interaction with multimodal text. (Kress, 2003; Serafini, 2011). Shifting communication style from monod modal to multimodal demands readers to be able investigate, design, interpret and analyze text in a new and sophisticated ways (Anstey & Bull, 2006; Kress, 2002, Serafini, 2009)
The writer as Bahasa Indonesia teacher in SMA 1 Batu has included learning material in including observing competence, for example by using info graphic and video. The result of student comprehension who using this teaching material equipped with material and exercise of observing is better rather than who not using this learning material. This first discover in line with Cisco’s (2008) states that learning multimodal has great impact in student result opposite with student result by using one mode. However, this result cannot be used as first base that the use of learning material using material and assessment is able to enhance study result for it has not tested scientifically. Furthermore, this teaching material is not prepared systematically by the writer and the writer has not researched scientifically whether this teaching material has complied the standard of good quality learning material. This idea leads the writer to develop learning material multimodal Bahasa Indonesia which fulfills the standard of good learning material. Regarding the limitation of writer’s ability, in this research and development, the writer focuses on the explanation text in even semester 2014/2015 academic year.

The chosen learning media is an interconnected media with accessible internet whether through computer, laptop, or smartphone. This learning media is appropriate to be developed in SMA 1 Batu since this school has provided accessible Wi-fi and almost all the students owns laptop and smartphone. To develop this learning material, Sway App as the story telling app which can be easily used by 365 office and Microsoft account users for free. Sway App is an application helping the users to make presentation slides by using internet connection. Thus, the learning material which is developed by using this Sway App can be categorized as e-learning material. The pluses of e-learning are: (a) combine text (written information) with moving media such as animation and video, (b) flexible, not bound by place and time since it is showed in a web, (c) e-learning utilization to learning activity can increase learning quality of students, and (d) e-learning material can work automatically for it can be integrated with Learning Management System (LSM).

The pluses of Sway App compare any other presentation App are; (a) have excellent feature design to ease the users in upload variety of contents such as video from YouTube, pics, tweet, and any other multimedia contents; (b) can choose the content such as pics and video saved in Cloud since Sway App connected with Cloud App; (c) Sway App will re-format the presentation slide at the time the presenter opens it through smartphone, laptop or PC; (d) Sway App completed with Apps eases the users to do collaboration with other users to make Sway project. In addition, if the internet connection is not stable, the users are still able to download and saved as a file since it is integrated with Cloud App so that the users do not have any worry to lose it. By using Sway App, teachers are able to make learning material with eye-catching and accessible material whether student or parents everywhere and every time. In addition, students can get new experience in doing the school task, class report, and individual portfolio.

All in all, this research aims to produce explanation of text material based on multimodal through Sway App. This research specially aims to describe (a) feasible explanation text learning material based on multimodal Sway App; and (b) effective explanation text learning material based on Sway App.

**METHOD**

This research and development uses the elaboration of Four-D model consist of 4 steps: Define, Design, Develop, and Disseminate. This model is chosen because it can be developed to enhance instructional development and has right steps and systems to develop learning material. This development research is designed within 4 steps; define, design, develop, and disseminate.
The first step, *define*. Define should be done by using analyzing activity include (a) *goal analysis*, in order to produce explanation teaching material, (b) *class analysis*, in order to know student characteristic and also the obstacles experience by student in learning explanation text, (c) *curriculum analysis*, consist of analysis of core competence (KI), base competence (KD), indicator, and explanation text material, and (d) *analysis of text book*; (e) analysis of theory related explanation text and multimodal text, (f) product specification is arranging, forming, determining product details based on the result.

*Design step*. The activities done in this step are (a) collecting learning material, (b) processing and arranging multimodal text, (c) conceptualizing learning material, and (d) arranging learning material through Sway App

*Develop step*. There is three steps in this steps: (a) compatibility test learning material through validation by the experts of learning material and the experts of learning media. Furthermore, this compatibility test learning material through the using material design experiment in non-sample class. Instrument used to value the compatibility learning material based on compatibility principle learning material of Development Teaching Material Guide Book (Depdiknas, 2008). The result is used to revise learning material design; and (b) Effectiveness test, after student attend learning activity using developed learning material, they are tested to discover their study result. This study result, later, can be compared with study result prior using developed learning material. Learning material can be counted as more than 85% total student in class experiment achieve the required standard of minimal graduate (KKM): 75 with the average more than 75.

*Disseminate step*. Disseminated is conducted in two steps: pararel presentation to other teaching partner and uploading learning material. After learning material has revised and proven able to enhance student’s study result, the developed learning material is presented in discussion with other Bahasa Indonesia teacher in Senior High School 1 Batu and uploaded to internet to be accessed for free and unlimited for students of SMAN 1 Batu

The data experiment is in the form descriptive qualitative and quantitative. Descriptive qualitative is verbal data in a form of written comment, critique/advice and note taken from research. Analysis descriptive qualitative data is conducted by (a) collecting data verbal, written and spoken, (b) transcribing written and spoken data, (c) selecting and classifying written verbal data and spoken verbal data based on test group, (d) analyzing data and formulating the conclusion of the result as the based to do the next step toward developed learning material. Whereas, quantitative data is a score contains in questionnaire of test for experts, practitioners, and students related with compatibility and interest developed teaching material. Besides, unstructured interview is conducted to acquire verbal data such as notes and comments from subjects. Data analysis is done by some steps (1) collect written data verbal taken from the questionnaire score; (2) transcript written verbal data; (3) collect, select, and clarify written verbal data ad spoken verbal data based on test group, and (4) analyze and arrange the conclusion of the analysis as the base to do the next action towards developed product, revised and implemented.

**RESULT**

**Product Description**

The product from this research is learning material of explanation text with Sway App for 11th grade. Teaching material consists of courses, assessment, summary, and evaluation. The served material covered concept of explanation text, example of explanation text, explanation in a form of info-graphic, and audiovisual explanation text (online video from YouTube). Concept resulted from explanation of explanation text, structure of the text, and linguistic principle served in inductive
way. From linguistic point of view, this teaching material uses suitable language, communicative, and able to motivate student to read and learn teaching material. Also, greeting expression normally used in everyday life of high school student is used in this teaching material. The main component of teaching material is arranged systematically. The arrangements are cover, acknowledgement, table of content, mind map, guideline for using learning material, material, and references. The appearance of learning material is supported with appropriate font size, margins, color, picture, and video for material.

RESULT OF THE TEST

As the first product finished, the next step is done by validating to experts, practitioners, and students. This test involves two validators, Bahasa Indonesia learning expert and learning material expert. Here, the writer shows table of validation of compatibility content language, presentation and lay out.

Here, diagram of the result of validation of the developed of qualification of learning material

Based on the chart above, we know that the qualification of learning material is good thoroughly for students achieve grade 80 above for core competence and base competence compatibility, student development, moral and social value, and benefit to gain student’s knowledge. Although, the qualification of learning material has increased 80.5% overall, however, the need and the material substance fact point of view only reach the score with 70% and 75% in average. Feedbacks and suggestions from the experts regarding with material substance fact are example of the chosen Explanation fact appropriate with structure and text principle. In addition, the chosen text is contextual text, in line with daily life of student to be compatible with student development.

Here, The result of the compatibility teaching material test seen from its presentation.
Based on 2\textsuperscript{nd} chart above, we know that the developed learning material is good seen from aspect of clarity indicator, the order of presentation, and the information completeness. However, it still needs improvement on the aspect of interesting motivation and stimulus response. All in all, learning material presentation compatibility reaches the standard by the score 78\% in which it is categorized in ‘enough’. It means that it still needs improvement since it reaches only 3 points above the standard. Suggestions from experts and practitioners regarding the process of giving stimulus-response is to give assessment in a form of image or photo which describe natural phenomenon or social phenomenon through teaching material. Student assessment is to arrange those images in a sequence of event. Next, students are asked to write in the form of text explanation. Besides, showing uncompleted video can be as oral student assessment to continue and explain the probable event. In learning process teacher show the full video after the student assessment result’s compilation.

The result of lay out component validation test can be seen in the following chart.
In aspect of the attractiveness of learning material seen from the above chart is that font, size, layout, and the composition of color are the only aspect values as ‘good’ with 80% as the score. The other aspect values ‘enough’ are illustration (78%), text and images composition (75%) and the composition of color (75%). All in all the lay out learning material compatibility scores 77%. By that, the lay out aspect learning material still needs to be revised and fixed especially in a form of images and photo illustration and video presentation. Feedbacks given by experts, practitioners, and students are needed in order to link YouTube is accessible. The content of the video should be chosen contextually. The using of illustration, images, and photo should balance with written text. Furthermore, experts give feedbacks that cover should be added in the first slide to show the main courses to be explained in learning material and references should be added in the last slide.

The Study of Revised Product

The Study of Learning Material Compatibility

The developed learning material contains course, example, assessment, summary, and evaluation. Appropriate with base competence, course contained in learning material are the border of explanation text, structure of explanation text, and the language principle of explanation text. The presentation of the explanation text is done not only deductively, started with some related theories, but also inductively. It means that the concept of explanation text is given after the presentation of some examples of short explanation text, so do structure course presentation and the principle of text language.

Developed learning material also contains assessment in which it is positioned after course and example. Assessment is used to apply the course. Besides, summary will always put in the end of chapter. Evaluation is also put in the last chapter of learning material. Evaluation is self-reflection activity and parallel reflection activity. The contents of teaching material are chosen based on Pangarsa (2011) that learning material or instructional material generally contains of knowledge, skill, and attitude which have to be learned by student in order to achieve the given standard of competence.

The language used in this learning material is communicative formal Bahasa Indonesia that be able to motivate students. The sentence used is adapted from student development. In the acknowledgement, motivation words are used in order to motivate students to start reading this learning material.

The arrangement of learning course is presented in the second slide of teaching material by using operational vocabulary which clearly describes the competence to be mastered by students. The arrangement of course and assessment are started easy to follow and ease student to master course step by step. In addition, learning material also uses eye-catching motivation sentences completed with right stimulus and response. All in all, those presentations are presented with clear information so that student can use it individually.

Lay out of the learning material product is complete enough. This is can be seen from the attractiveness, the composition of text and images, the illustration, and the composition of colour. Views from the aspects of learning materials and color illustrations are very attractive and does not tire the eyes. Moreover, the illustrations used further clarify the matter.

In addition, the learning material developed in good organization. It can be seen from the systematically presentation of teaching material contains of (1) introduction, cover (inside and outside), acknowledgement, core competence, base competence, indicator, table of contents, and mind map; (2) teaching material contents, course, assessment, summary; and (3) conclusion, reflection, learning evaluation, references, and biography of the writer.
The introduction of learning material is made eye-catching and meaningful. In the outside cover contained the interesting mountain eruption picture and a question “how is the process of mount eruption?” This combination goals to student to think critically in the process of mount eruption. The next step shows the main course, core competence, base competence, and indicator which should be fulfilled and followed by the next slide about study instruction.

Study instruction is not presented with numbered sentences but in a form of interesting smart art process. Table of contents slide contains page number of slides and sub courses will be explained to ease reader to find the required passage. Mind map contains the following learning material concept in which it contains of contents of chapter and subchapter. From this mind map, readers are able to know the core of this developed teaching material. The next part after mind map, there is learning material guideline to benefit the reader to use and pass the required target in this learning material.

In the content, there are 5 chapters to be mastered by students. The first activity is apperception activity as the base to receive the course in the main activity. Explanation text is presented in a form of audiovisual (video). Student should watch and understanding the video and answer the related questions afterwards, especially the process of sequence event happened in video in order to let student comprehension about explanation text concept.

In the next part, presented theory about explanation text (made based on video) followed by examples of written explanation text. Student demands to make events’ mind map presented in the text and find out the difficult vocabulary contained in the example in dictionary. In the next slide, info graphic is presented about same event happened in the video and written text. It purposes to student to understand variety of explanation text in a form of written, audiovisual (video), and visual (info graphic). This activities are belongs to class activity with teacher guidance.

The next slide is in the part of individual assessment. This part is presented through 2 packages. The first package is individual assessment and the other is enrichment. The individual assessment should be done and compiled so that the teacher can give score afterwards. Enrichments package is used to serve learning material at home. Individual assessment is in the form of transform video of explanation text to written explanation text and correct explanation text to be suitable with language principle and structure. The theme of video is flood happened in Batu a few years ago.

Font and size used in presenting this material is Book Antiqua, 12 pt; JustOldFashion, 12 pt which is uncommon but appropriate with BSNP (2007)’s standard. The size of the text used is suitable since it is not too small nor too large. An unique font is hardly to read and understand so it obstructs the material delivering process.

This learning material is presented verbally, visually, and audiovisual appropriate with the demand of language learning and multimodal learning. This statement is supported by Sinar’s statement (2012;31) that the presence of nonverbal language and visual media cannot be disregard in delivering or comprehending text for there is the relationship between text, nonverbal language, and any other visual media. Verbal language without nonverbal language (gesture, facial expression, sound, and any other visual media) can cause the limitation to comprehend the text. The comprehension of text should be based on more than two points of views which named as multimodal. The development of multimodal learning material is feasible with Michelle Anstey and Geoff Bull (2010) argues that a text belongs as multimodal text if that text is in a composition of two or more of semiotic systems. They argues that there are five multimodal semiotic systems in a text: (1) (a) Linguistic: vocabulary, generic structure and the grammar of oral and written language, (b) Visual: color, vectors and viewpoint in still and moving images, (c) Audio: volume, pitch and rhythm of music and sound effects, 4) Gestural: movement, speed and stillness in facial expression.
and body language, and (e) Spatial: proximity, direction, position of layout and organization of objects in space.

After be revised, this learning material is consulted to experts, practitioners, and students. The result is that they are agreed that the teaching material compatibility has fulfilled the criteria as ‘good’ and scores above 80. All in all, Explanation text learning material can be developed in a multimodal way and use Sway App that has fulfilled the standard of compatible learning material criteria based on Development of Teaching Material Guideline (Depdiknas, 2008)

The Effectiveness of Learning Material

The next step after the revision of this learning material is effectiveness test by applying as learning material in 11th grade of MIA-1. The comparison between the previous and afterwards study result using multimodal material by applying Sway App with class control with only use text book as the learning material is done in order to prove the effectiveness of this learning material. The result is that this learning material is proven to be able improve student’s study outcome. Based on student outcome evaluation, obtained data as follow

Table 1: The Comparison of Student’s Outcome Using Text Book And Using Multimodal Learning Material based Multimodal Sway App

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Using text book</th>
<th>Using multimodal learning material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of failed students</td>
<td>14 students (37%)</td>
<td>2 siswa (6%)</td>
</tr>
<tr>
<td>2</td>
<td>Number of passed students</td>
<td>20 students (63%)</td>
<td>32 siswa (94%)</td>
</tr>
<tr>
<td>2</td>
<td>Highest score</td>
<td>90</td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>Lowest score</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>4</td>
<td>Class average score</td>
<td>75</td>
<td>78</td>
</tr>
<tr>
<td>5</td>
<td>Passed percentage</td>
<td>63%</td>
<td>94%</td>
</tr>
</tbody>
</table>

Based on the above table can be concluded that there is improvement of significant study result seen from class average, total student who pass standard minimal grade (75), the highest score and the lowest score, and presentation of study completeness.

Besides, students are asked to give comment toward the effectiveness of this learning material in helping them to master explanation Text course. The result is all the student states that multimodal teaching material using Sway App is effective and it facilitates students to understanding explanation text. Variety of explanation text presentation in a form of written text, audiovisual (video), and info graphic are not only interesting but also ease students to understanding the sequence event presented in Explanation text. In addition, uploading learning material by using tiny.url which is accessible through smartphone every time and everywhere. By that, students are able to study explanation text flexibly.
SUGGESTION

Regarding the result of this research, the writer suggests to teacher and researcher who researches related with this research. Teacher should make a best use in this writing explanation text learning material through multimodal text with Sway App. The video contained in this learning material can be replaced with needed video. The next researcher related with this learning material should develop this learning material not only for explanation text but also can be other type of text by using multimodal text and technology in this development of the recent curriculum. This learning material can be socialized to forum of Bahasa Indonesia teacher (MGMP) in order to develop this learning material furthermore. This learning material can be added with new learning strategy with new and supporting atmosphere. Also, this teaching material can be added with supporting back sound to be more fascinating.

LIST OF REFERENCES


