

The Improvement of Psycholinguistic Teaching Materials (Multimodal E-Book)

Frinawaty Lestarina Barus¹, Safinatul Hasanah Harahap², Salmah Naelofaria³, Emasta Evayanti Simanjuntak⁴

{frinabarus@unimed.ac.id¹, safinatulhasanah@unimed.ac.id², emastaunimed@unimed.ac.id³, naelofaria@unimed.ac.id⁴}

^{1,2,3,4}Indonesian and Literature Education Department, Universitas Negeri Medan

Abstract. This research is aimed to produce Psycholinguistics teaching materials in the form of multimodal e-books by using the book creator application. The method used is ADDIE (Analyze, Design, Development, Implementation, and Evaluation). The first stage is implement by seeking information from college teachers and students regarding the teaching materials which are needed in the Psycholinguistics course. The second stage is designing the teaching materials that will be developed. The third stage is developing the teaching materials. The fourth stage is teaching materials are validated by material experts and media experts and tested on students. The Fifth stage is the evaluation section which are revisions. The teaching materials of psycholinguistics (multimodal e-book) obtained a score from material expert validation of 93.33% in the very feasible category and from media experts of 95% (very feasible) and based on the student responses of 87.5% (very feasible) students were interested in use of multimodal ebook teaching materials. Based on this, the resulting teaching material products can be used as teaching materials for Psycholinguistics courses.

Keywords: Development, teaching materials, multimodal ebooks, Psycholinguistics

1 Introduction

Teaching materials are used in the learning process activities. From this understanding it can be concluded that teaching materials can be in the form of printed books, digital books, printed modules, digital modules, handouts, videos, worksheets, etc. that are used in the learning process. So, it can be concluded that teaching materials are all aspects used in the learning process and can improve the students' thinking abilities.

Psycholinguistics is one of the courses in the Indonesian Language and Literature Education Study Program, Universitas Negeri Medan. This course is taken by all fourth semester students and has 2 credits. This course aim to making the colage students able to examine and criticize psycholinguistic concepts which include language learning, language acquisition, language development, language disorders, and second language learning.

Several studies show that so far the psycholinguistic teaching materials used have not been optimal. This is supported by a research conducted by Ritonga (2022) who states that students expect psycholinguistic teaching materials whose material is related to everyday life so that they can be understood better by students. Furthermore, Pamuji & Thobroni (2019) in their research revealed that the teaching materials used were based only on books and literature from the internet so that students were less interested in the teaching materials used.

Digital books which also known as e-books are one of the teaching materials that is quite popular lately. They are usually consist of text, images, video and sound which are available in digital form and can be read on a computer, Android or tablet. They are practical teaching materials used in the learning process (Mentari et al., 2018).

Nowadays, there have been many applications available for creating ebooks, so educators can choose based on their needs. One application that can be used is a book creator. It is an application for creating attractive books. It is said to be attractive because usually a book only displays writing and pictures, but with this application, we cannot only display pictures and writing but also insert audio or video.

A research conducted by Maharani, Anak Agung Putri Santosa (2019) revealed that the use of book creator-based modules can improve students' abilities in writing argumentative texts. Then, Puspitasari et al. (2020) said that the students' responses to the implementation of learning proved a positive response to the differentiation model using book creators. This is shown by the percentage of respondents' answers from 12 students that 82% of students really liked the teaching materials used.

Multimodal is defined as an approach using various kinds of media or what are called semiotic modes such as visual, audio, and kinesthetic. Through this approach, each media can be strengthened and complemented. Lestari (2022) said that teaching materials packaged in e-book creators by integrating multimedia in teaching materials make learning more interesting and have an impact on learning outcomes.

A research conducted by Munawwarah et al. (2022) revealed that multimodal E-books display the three chemical representations in an integrated manner which is starting from symbolic, macroscopic and sub-microscopic aspects. One part of the teaching material that displays aspects of representation in electrochemical material is a video that shows symbolic representations in the form of reaction equations, element symbols, ions and electrons. Based on this, it is necessary to conduct a research regarding the development of psycholinguistic teaching materials (multimodal ebooks) to be used as a teaching material in psycholinguistics courses.

2 Research Method

The ADDIE (Analyze, Design, Development, Implementation, Evaluation) method is applied to this research to produce psycholinguistic teaching materials (Multimodal Ebook). In the first stage, a needs analysis of Psycholinguistic teaching materials was carried out. The second stage development. The third stage is developing the teaching materials. The fourth stage is teaching materials are validated by experts and at the same time tested. The final

stage is an evaluation of the teaching materials. The stages in this research are depicted in the following chart.

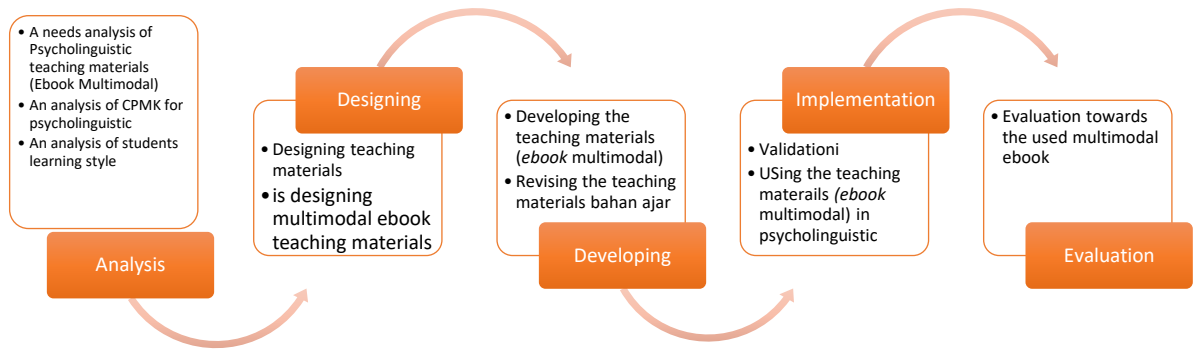


Figure 1 Method of Development of Teaching Materials

3. Result and Discussion

This research is aimed to produce psycholinguistics teaching materials in the form of multimodal ebooks using the book creator application. The analysis was carried out by giving questionnaires to all the students who take the Psycholinguistics course. The questionnaire was given via Google Form. The number of questions in the questionnaire is ten questions to determine the level of need for Psycholinguistics teaching materials. The results of the questionnaire show that the majority of the students (93.1%) want a variety of teaching materials and expect Psycholinguistics teaching materials in the form of multimodal ebooks. The following are the results of development using the book creator application.



Figure 2 Multimodal Psycholinguistics Ebook Teaching Materials

From the teaching materials that have been produced, videos, sound recordings and pictures are made that support the explanation of the material. The video contains a short

explanation recording that was made by yourself and is also supported by several videos available on the internet. Similar to videos, sound recordings also provide explanations that support the material in multimodal ebook teaching materials. So the teaching materials produced are mostly supported by videos, sound recordings and pictures that support the explanation of the material. After the development, validation is conducted from material and the media experts. The validation results from material experts are as follows.

Table 1 Material Expert Validation

No	Criteria	Indicator	Assessment Alternative				
			1	2	3	4	5
1	Aspect of content feasibility	The Conformity of material with the Course outcomes (CPMK)					*
		The power of materials					*
2	Presentation	The update materials					*
		Spark Curiosity					*
		Sequential Presentation Technique					*
3	Language Eligibility	Presentation equipment					*
		Straight forward					*
		Communicative					*
		The use of icons, terms, and symbols					*
		Suitability to the student's level of development					*
		Sequence and integration of thought flow					*
		Conformity to language rules					*
Total			56/60 = 93,3%				

The table above shows that the material expert validation in the category is very valid with a percentage of 93.3%. From these results, the teaching materials are valid to be tested on the students. Based on suggestions from the validator, there are several revisions to the material to include the latest references. In the material accuracy section, the material has been presented systematically, it is only needed to add various references to support the material presented.

Meanwhile, for the appropriateness of language in the aspect of using terms, symbols and icons, the researchers must revise various inconsistent terms in teaching materials. For the language selection according to the student's level of development, there are several word choices that must be adjusted to the cognitive development of fourth semester students taking the Psycholinguistics course. Apart from the above, the validator also suggests adding more examples in everyday life to facilitate understanding of material.

The teaching materials assessment from media experts obtained a score of 95% in the very worthy category. From these results, this teaching material is very suitable to be used as a teaching material in Psycholinguistics courses. Below are the validation results that have been obtained.

Table 2 Media Expert Validation

No	Criteria	Indicator	Assessment Alternative				
			1	2	3	4	5
1	Module	Conformity of module sizes to ISO					*

	Size	standards	
		Suitability of size to module content material	*
2	Cover	The appearance of the layout is consistent (*
	Design	Displays a good center point	*
		The colors of the layout elements are harmonious and clarify the function	*
		Interesting use of letters	*
3	Design of	Layout Consistency	*
	Module	Elements of Harmonious Layout	*
	Content	Complete Layout Elements	*
		Typography The contents of simple teaching materials	*
		Typography Content of teaching materials	*
		Facilitates Understanding	*
		Content Illustration	*
		Total	57/60= 95%

Before conducting trials to the students, there are still several improvements to the teaching materials, including the choice of color and layout in the teaching materials which must be adjusted based on suggestions from the validator. Apart from that, improvements to the content typography were also made based on suggestions from reviewers and the content illustrations also underwent several improvements. After making improvements from the material and media experts, a trial was carried out on the effectiveness of using multimodal ebook teaching materials in the Psycholinguistics course.

In trials on the use of teaching materials for students, 87.5% of students were interested in using multimodal ebook teaching materials. This trial was conducted on 32 students, following the students' responses regarding the teaching materials used.

Table 3 Student Responses Regarding Multimodal Ebook Teaching Materials

Category	Number of Students	Percentage
Very interested	28	87,5%
Interested	3	9,37%
Quite interested	1	3,125%
Not interested	-	-
Total		100%

From the data above, it can be seen that the students have a high interest in multimodal ebook teaching material products using the book creator application that has been developed. Result of interviews with students, it was also found that they like this teaching material product because there are videos, sounds and images that support understanding of the material. Explanations in video, sound and images provide additional understanding of the material after reading the literature. Apart from that, video, sound and images can accommodate all students' learning styles.

This research is supported by Masfingatin et al. (2021) who stated that the application of multimodality in the learning process increases the effectiveness of the learning process. This is supported by learning completeness which reaches 80.65%. Apart from that, Wahyuni (2023) in her research also said that the students have an interest and positive perception towards the use of multimodal e-books. In other words, the use of multimodal e-books is

effective in increasing students' knowledge, skills and interest in learning Indonesian. This research can be a recommendation to enrich teaching materials and increase the effectiveness of learning in Psycholinguistics courses and other courses.

4. Conclusion

Multimodal ebook teaching materials assisted by book creators in the psycholinguistics course are effectively used in the learning process. This is supported by the expert validation of 93.3% with a very feasible category. As many as 95% media expert validation which is very feasible. And after being tested on students, a very positive response was obtained regarding the teaching materials. As many as 87.5% of students after the trial gave a positive response regarding the teaching materials. Therefore it can be concluded that Psycholinguistics teaching materials in the form of multimodal ebooks can be used as one of the teaching materials in psycholinguistics courses.

References

- [1]Kosasih, E. (2021). Pengembangan Bahan Ajar. Bumu Aksara.
- Lestari, A. S. (2022). Digital Based Learning Management With A Multimodal Approach. AL-TANZIM: Jurnal Manajemen Pendidikan Islam, 6(1), 465–476. <https://doi.org/10.33650/al-tanzim.v6i2.3235>
- [2]Maharani, Anak Agung Putri Santosa, M. H. (2019). THE IMPLEMENTATION OF PROCESS APPROACH COMBINED WITH SCREENCAST-O-MATIC AND BOOKCREATOR TO IMPROVE STUDENTS' ARGUMENTATIVE WRITING. LLT Journal: A Journal on Language and Language Teaching, 24(1), 12–22.
- [3]Masfingatin, T., Murtafiah, W., Krisdiana, I., Setyansah, R. K., & Susanti, V. D. (2021). Multimodal Model Melalui E-Learning Pada Mata Kuliah Geometri Bidang Di Masa Pandemi Covid 19. AKSIOMA: Jurnal Program Studi Pendidikan Matematika, 10(1), 73. <https://doi.org/10.24127/ajpm.v10i1.3414>
- [4]Mentari, D., Sumpono, S., & Ruyani, A. (2018). Pengembangan media pembelajaran e-book berdasarkan hasil riset elektroforesis 2-d untuk mengukur kemampuan berpikir kreatif mahasiswa. PENDIPA Journal of Science Education, 2(2), 131–134. <https://doi.org/10.33369/pendipa.v2i2.4651>
- [5]Pamuji, S. S., & Thobroni, M. (2019). PENGEMBANGAN MODUL PERKULIAHAN PSIKOLINGUISTIK BERBASIS ANIMASI 3D DI UNIVERSITAS BORNEO TARAKAN. 6(d), 70–76.
- [6]Puspitasari, V., Rufi'i, & Walujo, D. A. (2020). PENGEMBANGAN PERANGKAT PEMBELAJARAN DENGAN MODEL DIFERENSIASI MENGGUNAKAN BOOK CREATOR UNTUK PEMBELAJARAN BIPA DI KELAS YANG MEMILIKI KEMAMPUAN BERAGAM. Jurnal Education and Development, 8(4), 310–319.

[7]Ritonga, A. W. (2022). Pengembangan Bahan Ajar Psikolinguistik untuk Mahasiswa Program Studi Sastra Indonesia Fakultas Bahasa dan Seni Unimed [Universitas Negeri Medan]. <http://digilib.unimed.ac.id/49059/>

[8]Wahyuni, D. (2023). EFEKTIVITAS PENGGUNAAN E-BOOK MULTIMODAL EFFECTIVENESS OF USING MULTIMODAL E-BOOK. 08(April), 1–10.