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Development of Interactive Teaching Materials in Editlinguistic Lectures Assisted by The Lectora Application

Suhud Aryana^{1*}, Rifa Salsabila²
*¹IKIP Siliwangi, Indonesia

1*suhudaryana@ikipsiliwangi.ac.id, 2rifasalsabila50@gmail.com

*Correspondent Author

Keyword

Development, Editlinguistics, Lectora,

Abstract

This research endeavors to enhance interactive teaching materials for editing courses, aiming to boost student interaction and comprehension of editing content with Lectora application support. The methodology encompasses the design, development, and evaluation of these materials, along with assessing the success of Lectora application-based instruction. The study involves IKIP Siliwangi Semester 5 class A1-2021 students as the population and research sample. Findings reveal a high material expert validation level (90%) and media validation (96.5%), indicating excellent criteria. Statistical tests demonstrate a significant difference (Asymp. Sig. < 0.05) in linguistic editing skills understanding and mastery between students exposed to interactive teaching materials with Lectora application assistance and those using conventional teaching materials at IKIP Siliwangi. The research aspires to positively contribute to tertiary education development, particularly in enhancing Editlinguistic learning effectiveness through a technology-based interactive approach.

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Introduction

In this modern era, any job is bound to involve the use of technology. As previously stated by researchers Cloete (2017), Hashim, (2018), Svenningsson et al. (2021), Valijonovna & Rakhmatjonovich (2022), Alfiah, R., & Amir, M. F. (2022) Firstly, technological advances have made very rapid changes in various fields. Second, the existence of various information and communication technology applications that can be used to make work easier is increasingly

accessible to everyone. Third, the existence of technology is very vital because currently everything is technology-based and completely digital.

Editlinguistics is an important field of study in language learning and linguistics (Aeni & Aryana, 2022). Editlinguistics discusses the text editing process, grammar, syntax, and other linguistic aspects related to text processing and editing. Students studying editing linguistics need to understand basic concepts and develop skills in editing and text editing. (Aeni & Aryana, 2022). However, in editing linguistics courses, obstacles are often encountered in providing effective and interesting learning for students. According to Aeni & Aryana (2022) The use of conventional learning methods, such as lectures and static teaching materials, is often unable to activate student participation and understanding optimally. This can hinder the learning process and student interest in that field of study.

To overcome these obstacles, developing interactive teaching materials using the Lectora application can be an effective solution. According to several previous researchers Oktavianingtyas et al., (2018), Zainuddin et al. (2019), Mudinillah (2019), Sutarna (2020), Khoirotunnisa, et.al (2023). Liliana et al., (2020), Lukman et al. (2022), Mahliatussikah (2022), and Fahreza Imani et al. (2022) The Lectora application is a software that allows the creation of interactive teaching materials that are interesting, interactive, and can be accessed via a computer or mobile device. Using the Lectora application in editing linguistics learning can enrich students' learning experiences by presenting content that is more dynamic, interactive and responsive.

However, currently there is still limited availability of interactive teaching materials assisted by the Lectora application in editing linguistics lectures at IKIP Siliwangi. Therefore, this research aims to develop interactive teaching materials assisted by the Lectora application in editing linguistics lectures for IKIP Siliwangi students. As stated by several previous researchers Faruk, (2014), Tarawi et al. (2020), Azizah et al., (2022) Lukman et al., (2022), Fahreza Imani et al., (2022) and Nengsih et al. (2022) and Saripudin et al. (2022) Interactive teaching materials are designed to provide a more interesting, active learning experience and facilitate better understanding. The use of technology, such as the Lectora application, can enrich teaching materials with interactive elements, such as images, audio, video and simulations, which can increase student involvement and participation in learning. By developing interactive teaching materials assisted by the Lectora application, it is hoped that it can increase students' understanding of basic concepts and principles in editing linguistics. As stated by Mudinillah, (2019), Zainuddin et al. (2019), Nugroho et al. (2022), and Isnaini et al. (2022) The use of technology and multimedia applications can provide a more interesting and interactive learning experience for students. Besides that, Akbarini et al. (2018), Azizah et al. (2022), and Novaliendry et al., (2022) It is also hoped that the use of interactive teaching materials can improve students' skills in editing and text editing. Apart from these benefits, this research can also contribute to the development of educational technology by utilizing the Lectora application as an interactive learning tool.

With this research, it is hoped that a more interesting, effective and interactive learning experience will be created for students studying editing linguistics at IKIP Siliwangi. Apart from

that, this research can also provide input and recommendations for the development of interactive teaching materials in other fields of study and can encourage the use of technology in learning in higher education.

Method

This research uses a Research and Development (R&D) research design following the Plomp development model, which consists of four main stages: initial assessment, planning, realization/construction, and implementation. Research and development approach according to Sukmadinata (2017) and Hamzah (2020:09) produce new products or improve existing products, whether in the form of software or hardware such as books, modules, learning programs, or learning aids.

The data source and research subjects are students of the Indonesian Language and Literature Education Study Program at IKIP Siliwangi, regular class of 2022, fifth semester. Data collection techniques involve tests and non-tests, with instruments such as test questions, questionnaires, interviews, observations, and documentation as well as media and material expert validation sheets. Data analysis was carried out qualitatively and quantitatively, according to the type of data being analyzed.

Qualitative data analysis follows the Miles & Huberman interactive model, through four stages, first data collection, second data condensation, data presentation, and drawing conclusions. Meanwhile, quantitative data analysis was carried out at the product testing (prototype) stage, with a design for testing the effectiveness of interactive teaching materials through quasi-experiments.

Results and Discussion

Results

The results of research and development of interactive teaching materials in linguistic editing lectures assisted by the Lectora application for IKIP Siliwangi students are as follows.

1. Initial Assessment

a) Curriculum analysis, syllabus, semester learning plan.

The curriculum used by the Indonesian language and literature education study program at IKIP Siliwangi in the 2023/2024 academic year is the first revised Merdeka curriculum. The following are the results of an interview with the head of the Indonesian language and literature education study program IKIP Siliwangi.

- SA : Permission to ask, ma'am, what type of curriculum is applied to lectures this semester? Are there any changes between the codes and names of courses and credits from the previous curriculum?
- DSF : Yes sir, please. We are implementing the 1st revised independent curriculum in the odd semester 2023/2024. Previously we conducted a curriculum review

based on Permedikbudristek regulation No.5 of 2022. The results of the curriculum review showed several different course names.

SA : Has the editing linguistics course with code MK 4212212308 in semester 3 with a weight of 2 credits changed?

DSF : We have changed this course to the name Language Literacy Entrepreneurship for code 4212212307 and the credits remain 2 credits.

Based on the results of these observations and interviews, it can be concluded that the study of the curriculum applied to the Indonesian language and literature education study program in the odd semester 2023/2024 has undergone changes, including course names, credit weights and semesters. This change is supported by Permendikbudritek regulation No.5 of 2020.

Meanwhile, the results of discussions through interviews with lecturers who teach the Language Literacy Entrepreneurship course are presented as follows.

SA : Permission to ask, ma'am, have there been any changes to the syllabus and RPS for the courses you are teaching now? Considering the curriculum review.

ISSA: Yes, Sir, there are slight changes to the syllabus and RPS for both CPMK and Sub-CPMK, sir, and this course is very useful for students' experience in becoming entrepreneurs in the field of editing. Maybe for last semester the name of the course was Editinglinguistics and this book that I used was still some of the material from the editinglinguistics book.

b) Field observations to describe lecture practices at the Undergraduate Department of Indonesian Language and Literature Education, IKIP Siliwangi.

The results of observations made by researchers show that the practice of lecturing at IKIP Siliwangi is fully online for certain classes of students, including students of the Indonesian Language and Literature Education Study Program who carry out lectures both online and offline. From one odd semester 2023/2024 three lectures will be held offline and that is limited to implementing UTS. The results are presented from interviews with the head of the study program and one of the students.

- SA : Permission to ask again, ma'am, are lectures held online? And do lecturers need online media or teaching materials to make it easier for them to practice teaching?
- DSF : Please sir, that's right sir, especially at PBSI, learning is still online and as time goes by there are some classes who learn offline. Well, maybe this is my evaluation material, sir, for our lecturers at PBSI who have to be creative in preparing teaching materials and media that are interactive, communicative and collaborative.
- SA : I want to ask students, did you find lecturers who delivered material interactively during online learning? Example with Android-assisted media or teaching materials. Especially courses in linguistics editing or language literacy entrepreneurship.
- RS : In my personal opinion, sir, there are some lecturers who use Android applications and there are also lecturers who don't. For us as students, we are happier and more interested in interactive learning using Android because it is simpler.
- c) Describe student attitudes, knowledge and skills. Based on research results, the knowledge and skills scores of PBSI IKIP Siliwangi students in the language literacy entrepreneurship (Edilinguistics) course in the previous semester decreased, this was due to the effects of the Covid-19 pandemic and online lectures which were less effective in increasing students' knowledge and

skills. So that students' enthusiasm and enthusiasm for learning decreases and their motivation for learning tends to be lacking. These results are presented through previous interviews with lecturers in the language 1 literacy entrepreneurship (editlinguistics) course.

SA : Permission to ask, ma'am, what are the results of the knowledge, attitudes and lecture skills of the students you teach in the language 1 literacy editing/entrepreneurship course?

ISSA: Yes, sir, you can. The results of the evaluation that I carried out, sir, were quite a decline in the skill scores, but I felt that the attitude and knowledge scores were sufficient but needed to be improved further. Because in every lecture we as lecturers instill character education. It's just that I am particularly hampered in developing interactive teaching materials.

2. Planning

a) Determine teaching materials that are interactive, creative, innovative and collaborative.

The following is the planning for this research and development to plan an interactive teaching material assisted by the Lectora application in editing linguistics learning. This plan was carried out based on the results of a needs analysis or initial study (issues) of learning that occurred within the Indonesian language and literature education study program at IKIP Siliwangi. These interactive teaching materials are specifically planned to have internet access, be interesting, interactive and contain language literacy (editlinguistics) entrepreneurship course material, questions and instructions for users, whether lecturers or students. In this planning, the researcher prepared material based on the RPS, syllabus and curriculum applicable to the study program.

3. Realization/Construction

a) Carrying out Product Design (prototype)

Based on an analysis of the needs of lecturers and students as well as heads of study programs through interviews, the research and development product design is in the form of Lectora application-based teaching materials with aspects of material, instructions, Course Learning Outcomes, exercises, evaluation and profile.



Figure 1. Display of interactive teaching materials in the Lectora-based editing linguistics course

b) Carrying out validation by a team of experts Based on the results of validation of the prototype product design by four experts, namely two media experts and two material experts. The following are the results of the validator results for teaching materials.

Table 1. Validation test results of teaching materials

No.	Rated aspect	Number of Indicators *5	Value of 1st validator	2nd validator value		
1.	Eligibility of content	7	34	32		
2.	Feasibility of presentation	4	18	16		
3.	Linguistic feasibility	5	22	20		
4.	Aspects of assessing editor skills	2	10	10		
	Total score	90	84	78		
	1st & 2nd validator value /90*100		93,33	86,67		
	Validator value 1&2/2*100%		90%			

^{*)} scale 5

Based on the results of material expert validation in teaching materials, 90% were obtained from two validators. From these results it can be concluded that the teaching materials in the material developed have appropriate criteria with a very good predicate. These criteria are based on a very good interval of 81%-100%.

Table 2. Media validation test results

No.	Rated aspect	Number of Indicators *5	Value of 1st validator	2nd validator value
1.	Content quality	4	17	18
2.	Alignment of learning objectives	4	17	19
3.	User-friendly access	1	5	4
4.	Meets learning media standards	1	5	4
5.	Interactive	3	11	12
6.	Creative	3	15	13
7.	Innovative	2	9	8
8.	Collaborative	2	7	6

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Total score	100	86	84
1st & 2nd validator value /90*100		86,00	84,00
Validator value 1&2/2*100%		96,5%	

Based on the validation results from media experts on the prototype of Lectora Inspire-based interactive teaching materials in editing linguistics lectures, the score was 96.5%, meaning it had appropriate criteria with a very good predicate. These criteria are based on a very good interval of 81%-100%.

c) Revise the lecture model.

Revisions were carried out based on input and suggestions from experts, from the validation results, input and suggestions from validators regarding the prototype of Lectora-based interactive teaching materials in editing linguistics courses, namely 1) HOTS-based practice questions, 2) instructions for use, 3) assignment instructions, 4) questions group assignments, 5) final evaluation.

4. Implementation

a) Limited trials through pre-experimental research

After improvements or revisions have been made, the product for developing Lectora-based interactive teaching materials in the editing linguistics course is tested pre-experimentally with one group pre-test and post-test as follows.

Table 3. Pre-experimental trials **Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Test Interactive Teaching Materials	69,1026	39	6,50018	1,04086
	Post-Test Interactive Teaching Materials	78,2821	39	5,25632	,84168

Based on the pre-experimental test results, the product trial results have a significant value with a pre-test value of 69.1 and a post-test of 78.3, it is concluded that the product can be tested to the next stage, namely user trials.

b) Test usage through experimental research.

After a limited trial was carried out, the next step was to test the use with two different classes, namely the control and experimental classes. The results of user trials with experimental research can be presented as follows.

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		Kolmogorov-Smirnov ^a		Kolmogorov-Smirnov ^a Shapiro		ro-Wi	lk
	Class	Statistic	df	Sig.	Statistic	df	Sig.
Student Editing Linguistic	Pre-Test	,174	32	,015	,928	32	,035
Learning Results with	Eksperimen						/
Lectora-based Interactive	Post-Test	,175	32	,014	,939	32	,071
Teaching Materials	Eksperimen						
	Pre-Test Kontrol	,174	32	,015	,928	32	,035
							\

Post-Test Kontrol ,174 32 ,015 ,928 32 ,035 a. Lilliefors Significance Correction

From the results above, it can be seen that the pre-test significance value for the experimental class is 0.35 and the control class is 0.035, both significance values are <0.05, which means the data is not normally distributed. So the next step is the non-parametric test, namely the Mann-Whitney test.

Pre-Test

Test Statistics^a

Student Editing Linguistic Learning Results with Lectorabased Interactive Teaching Materials

Mann-Whitney U	406,000
Wilcoxon W	934,000
Z	-1,427
Asymp. Sig. (2-tailed)	,154

a. Grouping Variable: Kelas

Post-Test

Test Statistics^a

Student Editing Linguistic **Learning Results** with Lectorabased Interactive **Teaching** Materials Mann-Whitney U 170,000 698.000 -4,600 Asymp. Sig. (2-tailed) ,000

Wilcoxon W

Z

Based on the results of the statistical tests above, it is known that the value of Asymp. Sig. (2-tailed) of 0.000 < 0.05. So it can be concluded that there is a significant difference in understanding and mastery of linguistic editing skills between students who take lectures using interactive teaching materials assisted by the Lectora application and students who take lectures with conventional teaching materials at IKIP Siliwangi.

a. Grouping Variable: Kelas

[&]quot;Ho: There is no significant difference in understanding and mastery of editing linguistics skills between students who take lectures using interactive teaching materials assisted by the Lectora application and students who take lectures with conventional teaching materials at IKIP Siliwangi."

[&]quot;Ha: There is a significant difference in understanding and mastery of editing linguistics skills between students who take lectures using interactive teaching materials assisted by the Lectora application and students who take lectures with conventional teaching materials at IKIP Siliwangi."

c) Valuation tests and revisions in implementation After conducting experimental trials, there were several evaluations and revisions before implementing the product as a whole in editing linguistics learning with Lectorabased interactive teaching materials. These evaluations include 1) use only on certain types of Android, 2) evaluation results cannot be stored permanently, and 3) limited funding.

Discussion

Comparison of the results of this research with several previous research results provides relevant academic information and differences for consideration and development by future researchers. Below are some comparisons of previous research results regarding the application of the Lectora Inspire application in developing e-learning based teaching materials or teaching media.

Research conducted by Nabilah & Faznur, (2023) with the title "Development of Lectora Inspire-Based Social Environment Themed Teaching Materials for Lecture Texts." The research method used is the research and development (R&D) method with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. The research results show that the teaching materials for writing lecture texts based on Lectora Inspire are considered valid and practical. The average value of this research shows that the media expert's assessment reached 96% in the very valid category, the material expert's assessment reached 93% in the very valid category, the language expert's assessment reached 100% in the very valid category, trials in large-scale classes reached 86, 90% in the very practical category, and the results of the teacher response questionnaire reached 100% in the very practical category. Meanwhile, comparing the results of research on the development of interactive teaching materials in linguistic editing lectures assisted by the Lectora application for IKIP Siliwangi students with the Plomp design development model with four steps, namely initial assessment, planning, realization/construction, and implementation. The results are 1) said to be valid with the results of material expert validation of teaching materials of 90% and media validation of 96.5% with very good criteria, 2) there are significant differences in understanding and mastery of editing linguistics skills between students who take lectures using interactive teaching materials assisted by applications Lectora and students who take lectures using conventional teaching materials at IKIP Siliwangi.

Research conducted Zulvira & Desyandri, (2022) regarding the development of integrated thematic interactive teaching materials using the Lectora-based STEAM approach in grade III elementary school stated that the validity was 93.91%, the teacher practicality was 92.69%, and the students' practicality was 92.41%, making it very valid and practical material for thematic learning. These results are also proven by the results of validation research on the development of Lectora-based interactive teaching materials in editing linguistics courses, namely 1) it is said to be valid with the results of material expert validation of teaching materials of 90% and media validation of 96.5% with very good criteria. Meanwhile, compared with this

research, both studies show high results in validation of material and media experts. The research "Development of Interactive Teaching Materials" achieved material expert validation of 90%, while Zulvira & Desyandri's research achieved validity of 93.91%. Both studies show that the teaching materials developed are considered very good in terms of validity. Both use Lectora as a basis for developing interactive teaching materials. This shows that Lectora is considered an effective platform for creating interactive teaching materials for both college level lectures and elementary school level learning. Zulvira & Desyandri's research stated a high level of practicality for teachers (92.69%) and students (92.41%). This indicates that the teaching materials developed can be well applied in the learning context. comparison between students who used interactive teaching materials assisted by Lectora and those who used conventional teaching materials, while Zulvira & Desyandri's research did not involve such a comparison.

Study Handayani & Desyandri, (2022) regarding the development of integrated thematic teaching materials based on Problem Based Learning with the Lectora application in class V elementary school shows that the validity of the teaching materials is 84%, the validity of the media is 79%, and the validity of the language is 94%. The practicality test with educators got an average of 95%, while the practicality test with students got 86%. The effectiveness test showed an increase in student motivation by 83%, knowledge learning outcomes achieved good grades, students' skills and attitudes were very good. Research "development of interactive teaching materials in editing linguistics lectures assisted by the Lectora application for IKIP Siliwangi students" shows high validity results (90% material experts, 96.5% media experts), and significant differences in editing linguistics understanding between students who use Lectora and conventional teaching materials. On the other hand, the research "Development of Integrated Thematic Teaching Materials based on Problem Based Learning with the Lectora application in elementary schools" shows sufficient validity (84%-94%) and high effectiveness with increased motivation and good learning outcomes.

Research by Darwis et al., (2023) with title "The Effectiveness of Using Lectora Inspire-Based Media on Class XI Craft Subjects at Muhammadiyah Sidrap Vocational High School" aims to assess the effectiveness of using Lectora Inspire-based media in Crafts subjects in class XI at SMKS Muhammadiyah Sidrap. The research results showed an increase in posttest results of 83%, compared to the pretest of 50.8%. In conclusion, the use of Lectora Inspire-based media in the Crafts subject at Muhammadiyah Sidrap Vocational School is effective in improving student learning outcomes. Meanwhile, when compared with the results of this research, "development of interactive teaching materials" shows a high level of validity, with material expert validation results of 90% and media validation of 96.5%, with very good criteria. This indicates the good quality of teaching materials. Research at Muhammadiyah Sidrap Vocational School stated that the use of Lectora Inspire-based media in Crafts subjects was effective in improving student learning outcomes, with a posttest increase of 83%. Furthermore, we found significant differences in understanding and mastery of editing linguistics skills between students who used interactive teaching materials assisted by the Lectora application and students who used conventional teaching materials at IKIP Siliwangi, while research at

SMKS Muhammadiyah Sidrap did not specifically discuss significant differences, but showed the effectiveness of using Lectora-based media. Inspire in improving student learning outcomes. Research at IKIP Siliwangi focuses more on college level lectures using interactive teaching materials for linguistic editing while research at SMKS Muhammadiyah Sidrap focuses on craft subjects at vocational school level. The research "development of interactive teaching materials" aims to develop interactive teaching materials in the lecture environment. Research at Muhammadiyah Sidrap Vocational School aims to assess the effectiveness of using Lectora Inspire-based media in craft subjects in vocational high schools.

Fajri, (2023) conducted research entitled "Development of Interactive Digital Books Based on Lectora Inspire for Indonesian Language Subjects." This research aims to produce an interactive digital book for Research Methods Subjects, with a focus on validity, effectiveness, practicability and attractiveness. The 4-D (Define, Design, Develop, Disseminate) development model is used. The results show a high level of validity (86.5%), effectiveness (88.5%), and learning outcomes (90.7%). The product demonstrated practicability (91.8%) and attractiveness (94.2%). In conclusion, Interactive Digital Books are a valuable and effective resource for lecturers and students in improving learning outcomes.

Zulbahri et al., (2022) conducted research entitled "Effectiveness of Developing Gymnastics Learning Media Using the Teileren and Global (Ganze) Method Based on Digital Lectora." Driven by the limitations of gymnastics learning media in regional schools, this research aims to produce digital learning media using the Teileren and Global (Ganze) methods. Following the Borg & Gall development research model, the seven-step process produces practical and highly effective gymnastics learning media products. Research "development of interactive teaching materials in editing linguistics lectures" at IKIP Siliwangi shows high validity (90% material experts, 96.5% media experts) and significant differences in editing linguistics understanding between users of Lectora and conventional teaching materials. Meanwhile, the research "Effectiveness of Developing Gymnastics Learning Media using Teileren and Global Methods Based on Digital Lectora" Zulbahri et al., (2022) succeeded in producing practical and very effective gymnastics learning media using Digital Lectora with the Borg & Gall development method.

Wahyuningtyas et al., (2020) conducted research on "Development of Lectora-Based Interactive E-Books for Elementary Schools." This research aims to create an interactive e-book that is valid, practical and interesting for fourth grade students, with a focus on the theme of energy sources in Indonesia. Following the ADDIE method, the interactive e-book achieved a high level of validity (93.29%) and practicability and appeal in field trials (100%). The results show that interactive e-books are very valid, practical, and interesting for elementary school students. Research "development of interactive teaching materials in editing linguistics lectures" at IKIP Siliwangi shows high validity (90% material experts, 96.5% media experts) and significant differences in editing linguistics understanding between users of Lectora and conventional teaching materials. In contrast, the research "Development of Lectora-Based Interactive E-Books for Elementary Schools" by Wahyuningtyas et al., (2020) created a very

valid, practical and interesting interactive e-book for elementary school students with a validity level of 93.29% and practicability as well as 100% attractiveness.

Simanjuntak, (2019) conducted research on "Development of Interactive Multimedia on Economic Problems in Economics Subjects for Class X Social Science Students at SMA Darma Yudha." This research aims to produce interactive multimedia using Lectora Inspire in economics learning, by applying the 4D development model. The research method used is descriptive qualitative, with a focus on the development stage, including expert assessment and development trials. The proposed system, which was validated by experts and small-scale trials, is considered very suitable for economics learning at SMA Darma Yudha. Research "development of interactive teaching materials in editing linguistics lectures" at IKIP Siliwangi shows a high level of validity (90% material experts, 96.5% media experts) and significant differences in editing linguistics understanding between users of Lectora and conventional teaching materials. In contrast, the research "Development of Interactive Multimedia on Economic Problems" by Simanjuntak and Sahala Freddy at Darma Yudha High School produced interactive multimedia using Lectora Inspire which is very suitable for economic learning with expert validation and supporting small-scale trials.

Ratnawati et al., (2021) conducted research on "Development of Multimedia-Based Learning Media for Basic Skills in Teaching Materials to Prepare Professional Teachers." This research aims to create multimedia-based learning media using Lectora to teach basic skills. The research involved Social Science Education students in the Social Studies Micro Teaching Class (June-September 2019). The ADDIE development model is used in this research. The result is a multimedia-based learning medium that is suitable and interesting for teaching basic skills, suitable for sharing. Research at IKIP Siliwangi on "development of interactive linguistic editing teaching materials" using the Plomp model shows high validity (90% material experts, 96.5% media experts) and significant differences in understanding between Lectora and conventional interactive teaching materials. In contrast, research by Ratnawati et al. (2021) in "Development of Multimedia-Based Learning Media" shows the suitability and attractiveness of this media for teaching basic skills to Social Science Education students using the ADDIE model.

Research by Satibi et al., (2023) discussing "Efforts to Increase Teacher Competency Through Training in Making Android-Based Learning Media 'Lectora Inspire'." In the context of limited face-to-face learning, this research highlights the importance of learning media innovation, especially using Lectora Inspire. Qualitative research methods emphasize the role of educators in understanding the need for sophisticated learning media for effective and structured learning. The Lectora Inspire learning media trial showed good usability and functionality aspects. This innovation is expected to increase student motivation and learning achievement. Research at IKIP Siliwangi on "Development of Editing Linguistic Interactive Teaching Materials" using the Plomp model shows a high level of validity (90% material experts, 96.5% media experts) and significant differences in understanding between Lectora and conventional interactive teaching materials. Meanwhile, research Satibi et al. (2023) regarding "Efforts to Improve Teacher Competency" with Lectora Inspire emphasizing innovation and

effectiveness in limited face-to-face learning, with trial results showing good usability and functionality, it is hoped that it will increase student motivation and learning achievement.

Farhana et al., (2021) conducted research entitled "Development of Digital-Based Teaching Materials in English Subjects at Atlantis Plus Vocational School, Depok." This research aims to develop digital learning materials for class XII Multimedia and Nursing students at Atlantis Plus Vocational School, Depok. Using the Research and Development (R&D) method with the ASSURE model, this research involves trials and tests by experts, small group trials, and field trials to measure student attitudes and learning outcomes. The results show that the developed prototype has the potential to be an effective learning design, with 70.27% of students showing a positive attitude towards digital learning materials. Field trials showed learning completeness of 87.56%. Thus, it can be concluded that this digital-based learning material is valid and practical for use in learning English. Research on the development of interactive teaching materials at IKIP Siliwangi using the Lectora application is valid (90% material expert, 96.5% media) and effective in increasing mastery of linguistic editing. In comparison, the study of Farhana et al. (2021) at Atlantis Plus Depok Vocational School developed valid and practical digital-based materials (student attitude 70.27%, completeness 87.56%). Both demonstrate successful learning design, but the focus and methods are different.

From this comparison, it can be concluded that the development of interactive teaching materials using the Lectora application for editing linguistics lectures at IKIP Siliwangi has very good validity and provides significant learning outcomes. Various previous studies have shown the success and effectiveness of the Lectora Inspire-based development method in various learning contexts.

Conclusion

The development of interactive teaching materials in editing linguistics lectures assisted by the Lectora application for IKIP Siliwangi students using a plomp design development model with 4 steps, namely initial assessment, planning, realization/construction and implementation, can be concluded 1) it is said to be valid with the results of expert validation of the teaching material at 90% and media validation 96.5% with very good criteria, 2) there is a significant difference in understanding and mastery of linguistic editing skills between students who take lectures using interactive teaching materials assisted by the Lectora application and students who take lectures using conventional teaching materials at IKIP Siliwangi.

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References

- Aeni, E. S., & Aryana, S. (2022). Utilization of The Sipebi Application in Edit Linguistic Study for IKIP Siliwangi Students. *E-Prosiding PBSI IKIP Siliwangi, 1*(10), 62–74.
- Akbarini, N. R., Murtini, W., & Rahmanto, A. N. (2018). The Effect of Lectora Inspire- Based Interactive. *Jurnal Pendidikan Vokasi*, 8(1), 78–87.
- Alfiah, R., & Amir, M. F. (2022). Peningkatan aktivitas dan hasil belajar siswa sd melalui media game edukasi andorid. *Jurnal Pendidikan Edutama*, 9(1), 119-132.
- Azizah, S., Widjanarko, M., Darmanto, E., & Pratama, H. (2022). Interactive Learning Media 2D Educational Game to Improve Learning Effectiveness in Kindergarten Students. *ICCCM Journal of Social Sciences and Humanities*, 1(1), 23–28. https://doi.org/10.53797/icccmjssh.v1i1.4.2022.
- Cloete, A. L. (2017). Technology and Education: Challenges and Opportunities. *HTS Teologiese Studies / Theological Studies*, *73*(4), 1–7. https://doi.org/10.4102/hts.v73i4.4589.
- Darwis, I. A., M, U., Takdir, M., Hermansyah, S., & Zain, S. (2023). The Effectiveness of Using Lectora Inspire-Based Media on Class XI Craft Subjects at Muhammadiyah Sidrap Vocational High School. *International Journal of Educational Narratives*, 1(3), 183–188. https://doi.org/10.55849/ijen.v1i3.525.
- Fajri, Z. (2023). Development of Interactive Digital Books Based on Lectora Inspire for Indonesian Language Classes. *Proceeding of International Conference on Education, Society and Humanity*, 1(1), 1318–1328. https://ejournal.unuja.ac.id/index.php/icesh/article/view/5692.
- Farhana, F., Suryadi, A., & Wicaksono, D. (2021). Pengembangan Bahan Ajar Berbasis Digital Pada Mata Pelajaran Bahasa Inggris Di SMK Atlantis Plus Depok. *Instruksional*, 3(1), 1. https://doi.org/10.24853/instruksional.3.1.1-17.
- Faruk, A. (2014). Development of Interactive Learning Media Based Lectora. *Proceeding of International Conference On Research, Implementation And Education Of Mathematics And Sciences 2014, Yogyakarta State University, May,* 18–20.
- Hamzah. Amir. (2020). Metode Penelitian & Pengembangan. Malang: Literasi Nusantara.
- Handayani, S., & Desyandri, D. (2022). Pengembangan Bahan Ajar Tematik Terpadu Berbasis Problem Based Learning Menggunakan Aplikasi Lectora di Kelas V Sekolah Dasar. *Jurnal Basicedu*, 6(2), 3065–3075. https://doi.org/10.31004/basicedu.v6i2.2572.
- Hashim, H. (2018). Application of Technology in the Digital Era Education. *International Journal of Research in Counseling and Education*, 1(2), 1. https://doi.org/10.24036/002za0002.
- Imani, F. (2022). Development of Interactive Learning Media using Lectora Inspire on Nervous System Topic for Senior High School Students. *Indonesian Journal of Mathematics and Natursal Science Education*, 3(2), 87–95. https://doi.org/10.35719/mass.v3i2.77.

- Isnaini, D. S., Siswandari, S., & Sudiyanto, S. (2022). Development of Interactive Multimedia Based Lectora Inspire for Accounting Subjects on Adjustment Journal Materials. *International Journal of Multicultural and Multireligious Understanding*, 9(9), 191. https://doi.org/10.18415/ijmmu.v9i9.4018.
- Khoirotunnisa, A. U., Sujiran, S., & Noerudin, A. (2023). Pengembangan Bahan Ajar Belajar dan Pembelajaran Berbasis Esperiental Learning. *Jurnal Pendidikan Edutama*, 10(2), 53-60.
- Liliana, R. A., Raharjo, W., & Jauhari, I. (2020). The Development of Interactive Learning Media With Lectora Inspire in Gas Kinetic Theory Subject to Improve The Result and Students' Interest of The Eleventh Grade Students Of Senior High School. *Journal of Physics: Conference Series, 1567*(3). https://doi.org/10.1088/1742-6596/1567/3/032092.
- Lukman, I., Silalahi, A., Silaban, S., & Nurfajriani. (2022a). Interactive learning media innovation using lectora inspire solubility and solubility product materials. *Journal of Physics: Conference Series*, 2193(1). https://doi.org/10.1088/1742-6596/2193/1/012067.
- Lukman, I., Silalahi, A., Silaban, S., & Nurfajriani. (2022b). Interactive Learning Media Innovation Using Lectora Inspire Solubility And Solubility Product Materials. *Journal of Physics: Conference Series*, 2193(1). https://doi.org/10.1088/1742-6596/2193/1/012067.
- Mahliatussikah, H. (2022). Development of Interactive Learning Media "Lectora Inspire" for Balaghah Learning. *Proceedings of the International Seminar on Language, Education, and Culture (ISoLEC 2021)*, 612(ISoLEC), 128–133. https://doi.org/10.2991/assehr.k.211212.024.
- Mudinillah, A. (2019). The Development of Interactive Multimedia using Lectora Inspire Application in Arabic Language Learning. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 4(2), 285–300. https://doi.org/10.25217/ji.v4i2.570.
- Nabilah, H., & Faznur, L. S. (2023). Pengembangan Bahan Ajar Teks Ceramah Bertema Lingkungan Sosial Berbasis Lectora Inspire. *Bahtera Indonesia; Jurnal Penelitian Bahasa Dan Sastra Indonesia*, 8(2), 439–450. https://doi.org/10.31943/bi.v8i2.433.
- Nengsih, Y. K., Handrianto, C., Nurrizalia, M., Waty, E. R. K., & Shomedran, S. (2022). Media and Resources Development of Android based Interactive Digital Textbook in Nonformal Education. *Journal of Nonformal Education*, 8(2), 185–191. https://doi.org/10.15294/jne.v8i2.34914.
- Novaliendry, D., Saltriadi, K. S., Mahyuddin, N., Sriwahyuni, T., & Ardi, N. (2022). Development of Interactive Media Based on Augmented Reality for Early Childhood Learning Around the Home. *International Journal of Interactive Mobile Technologies*, 16(24), 4–20. https://doi.org/10.3991/ijim.v16i24.34501.
- Nugroho, S. A., Trisniawati, T., & Rhosyida, N. (2022). Developing Powerpoint-Based Interactive Multimedia Of Mathematics Learning Multiples And Factors Materials For Elementary School. *Advances in Mobile Learning Educational Research*, 2(2), 411–420. https://doi.org/10.25082/amler.2022.02.009.
- Oktavianingtyas, E., Salama, F. S., Fatahillah, A., Monalisa, L. A., & Setiawan, T. B. (2018). Development 3D Animated Story as Interactive Learning Media with Lectora Inspire and Plotagon on Direct and Inverse Proportion Subject. *Journal of Physics: Conference Series*, 1108(1). https://doi.org/10.1088/1742-6596/1108/1/012111.
- Ratnawati, N., Wahyuningtyas, N., Ruja, I. N., Habibi, M. M., Anggraini, R., & The, H. Y. (2021). Developing Multimedia-Based Learning Media for Basic Skill of Teaching Material in Order to Equip Professional Teachers. *International Journal of Emerging Technologies in Learning*, 16(7), 77–89.

- https://doi.org/10.3991/ijet.v16i07.21203.
- Saripudin, D., Fauzi, W. I., & Nugraha, E. (2022). The Development of Interactive E-Book of Local History for Senior High School in Improving Local Wisdom and Digital Literacy. *European Journal of Educational Research*, 11(1), 17–31. https://doi.org/10.12973/eu-jer.11.1.17.
- Satibi, A., Rudi, M., Aprinaldo, A., & Ikmaludin, A. B. (2023). Upaya Peningkatan Kompetensi Guru Melalui Pelatihan Pembuatan Media Pembelajaran Berbasis Android "Lectora Inspire." *Darma Diksani: Jurnal Pengabdian Ilmu Pendidikan, Sosial, Dan Humaniora, 3*(1), 1–11. https://doi.org/10.29303/darmadiksani.v3i1.2074.
- Simanjuntak, S. F. (2019). Development of Interactive Multimedia Towards Economic Problems on Economic Subjects for Social Science Class X Students At Darma Yudha High School. *International Journal of Educational Best Practices*, 3(2), 64. https://doi.org/10.31258/ijebp.v3n2.p64-74.
- Sukmadinata. S.N. (2017). Metode Penelitian Pendidikan. Bandung: PT. Remaja Rosdakarya.
- Sutarna, N. (2020). The Development of Teaching Materials Based on Quantum Teaching Model Using Lectora Inspire. *Journal of Physics: Conference Series*, *1477*(4). https://doi.org/10.1088/1742-6596/1477/4/042003.
- Svenningsson, J., Höst, G., Hultén, M., & Hallström, J. (2021). Students' Attitudes toward Technology: Exploring The Relationship Among Affective, Cognitive and Behavioral Components Of The Attitude Construct. *International Journal of Technology and Design Education*, 32(3), 1531–1551. https://doi.org/10.1007/s10798-021-09657-7.
- Tarawi, O., Noer, A. M., & Linda, R. (2020). The Development of Acid-Base E-Chemistry Magazine as Interactive Teaching Materials. *Journal of Physics: Conference Series*, 1440(1). https://doi.org/10.1088/1742-6596/1440/1/012012.
- Valijonovna, K. I., & Rakhmatjonovich, T. D. (2022). Informational Technology at Education. *Spain Journal of Innovation and Integrity*, 06(1), 262–266.
- Wahyuningtyas, P., Bintartik, L., & Putra, A. P. (2020). Lectora-Based Interactive E-Book Development for Elementary Schools. *Advances in Social Science, Education and Humanities Research (Atlantatis Press)*, 508(Icite), 257–264. https://doi.org/10.2991/assehr.k.201214.246.
- Zainuddin, Hasanah, A. R., Salam, M. A., Misbah, & Mahtari, S. (2019). Developing the Interactive Multimedia in Physics Learning. *Journal of Physics: Conference Series*, 1171(1). https://doi.org/10.1088/1742-6596/1171/1/012019.
- Zulbahri, Z., Astuti, Y., Sasmitha, W., Pitnawati, P., Erianti, E., Damrah, D., & Rosmawati, R. (2022). Effectiveness of Developing Gymnastics Learning Media With the Application of Teileren and Global (Ganze) a Method Based on Lectora Digital. *Linguistics and Culture Review*, 6, 248–263. https://doi.org/10.21744/lingcure.v6ns3.2133.
- Zulvira, R., & Desyandri. (2022). Pengembangan Bahan Ajar Interaktif Tematik Terpadu Menggunakan Steam Berbasis Lectora Di Kelas III SD. *Jurnal Cakrawala Pendas*, 8(4), 1273–1286. https://doi.org/10.31949/jcp.v8i4.3133.