RESEARCH ARTICLE
Educational Sciences

Development of Interactive Teaching Books Indonesian Language in PGSD Department Unismuh Makassar

ABSTRACT

The main problem of this research is the need for the development of interactive textbooks Indonesian in the PGSD Unismuh Makassar study program and the effectiveness of using textbooks. The purpose of this study is to develop interactive textbooks Indonesian and the effectiveness of the use of textbooks. The type of research used in this study is Research and Development (R & D). The subject of this study is an interactive textbook in Indonesian course. The research instrument uses test sheets, and observation sheets. Data collection techniques use cognitive tests, questionnaires, and questionnaires. The data is then analyzed using validation analysis, practicality analysis, practicality analysis and effectiveness analysis.

The results of this research are the process of developing interactive textbooks in supporting Indonesian learning at PGSD Unismuh Makassar starting with student analysis, task analysis. Next is the stage of textbook design and material development. At the material development stage, all materials are prepared that will be included in the application program and the packaging of textbooks into Interactive textbook products. The response of students and lecturers to the use of interactive textbooks at PGSD Unismuh Makassar in Indonesian course was very positive. Interactive textbooks are very effective in supporting learning. This can be seen from student activities in the learning process.

Keywords: Interactive Textbooks, Indonesian, PGSD Study Program

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INTRODUCTION

One of the big concerns today is the service of lecturers in providing textbooks to students that are used in the learning process. The development of education and learning in the era of globalization, which is supported by information and communication technology, requires lecturers to be able to provide interesting textbooks. Textbooks that attract creativity in producing these products, one of which is preparing textbooks. The development of textbooks now among lecturers seems to be lacking due to the lack of relevant references, so it becomes an obstacle to making new innovations in accordance with the development of science and technology. Thus, the textbooks used by lecturers are less effective in learning, besides that the textbooks currently used are less varied, causing uninteresting learning. An important problem that is often faced by lecturers in learning activities is choosing or determining the right teaching materials to deliver textbooks in order to help students achieve competence. This is since quality textbooks in higher education are very minimal that correspond to the curriculum or syllabus. One of the efforts to improve the quality of learning is through the procurement of quality textbooks.

The development of interactive teaching materials is important for achieving educational goals. In addition, education as part of culture is a means of successor to values and ideas, so that everyone can participate in the transformation of values for the progress of the nation and state. Therefore, to realize quality education, one of the things that must exist is qualified lecturers. Qualified lecturers are lecturers who have the ability to realize national education goals, namely those who have pedagogical, personal, social, and professional competencies in accordance with The Law of the Republic of Indonesia No.14 of 2005 concerning Lecturers and Lecturers (Munadi, 2008).

Interactive textbooks framed in flipbook applications play a very important role in learning. Interactive textbooks providing instructional guides for lecturers will allow them to teach without having to look at the syllabus because the textbooks have been designed according to the syllabus and applicable curriculum. In this case, it is certain that interactive textbooks will spur the learning process to run in accordance with existing learning objectives (Hasibuan, 2014). The development of textbooks must be based on the prerequisites of the authorized body and the applicable curriculum.

Based on preliminary observations addressed to 39 students in the PGSD Study Program for the 2019/2020 academic year, data was obtained by 71.79% of students stating that Indonesian course was not interesting, and only (28.21%) students stated that the course Indonesian interesting. There are several factors that make them state that Indonesian

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course is not interesting, namely student textbooks 32.14%, student activity sheets 28.57%, learning activities 21.43%, learning media 10.71%, and lecturers 7.14%.

The high percentage stating that student textbooks are not interesting (32.14%) compared to other factors indicates that the textbooks used must be in accordance with the character of students and Indonesian courses. Based on the findings in these observations, these problems need to be addressed immediately so that students who are also prospective lecturers master the Indonesian comprehensively.

Not achieving the maximum learning objectives due to these problems, researchers tried to overcome by developing an interactive flipbook-based textbook that combines offline classroom learning and online learning. Interactive textbooks framed in flipbook applications are the best choice for increasing effectiveness, efficiency, and greater appeal in interacting between people in diverse learning environments.

Based on the explanation above, researchers are encouraged to develop interactive textbooks Indonesian in the PGSD Unismuh Makassar study program as a solution offered from previously stated problems and answer the challenges of the pace of development of science and technology. In addition, it is hoped that the development of this textbook will be able to become a role model for all lecturers to develop innovation and creativity, especially PGSD students, Faculty of Vocational and Education, University of Muhammadiyah Makassar.

METHOD

The type of research used in this study is Research and Development (R & D). The subject of this study is an interactive textbook in Indonesian course. The subjects of the develop stage trial are students of the Elementary School Teacher Education study program who take Indonesian courses, while the disseminate stage is a lecturer in the Indonesian course of the Faculty of Teacher Training and Education. The research procedure uses stages (Four-D), namely: Define, Design, Develop and Disseminate. The research instrument uses test sheets, questionnaires, and observation sheets. Data collection techniques use cognitive tests, questionnaires and questionnaires. The data is then analyzed using validation analysis, practicality analysis, practicality analysis and effectiveness analysis.

RESEARCH RESULTS

Needs Analysis of Interactive Textbook Development Indonesian

a. Design Stage (Design)

✓ Selection of textbooks

Textbooks used in the implementation of learning use flipbook-based textbooks designed using the pdf flipbook application combined with several animations, images and several learning videos. This textbook is considered an alternative in delivering learning materials to students interactively to achieve learning objectives.

✓ Format selection

The format of the learning implementation plan used is adjusted to the curriculum procedures at the university, in the semester implementation plan there are sub-CPMK, indicators, time allocation, learning objectives, teaching materials, learning methods, steps of learning activities, learning tools and resources. Flipbook-based interactive textbooks developed for Indonesian material according to learning indicators and objectives.

✓ Preliminary Design

After setting learning goals that suit the needs of students, the researcher begins to design textbooks. The initial design was in the form of a prototype of a flipbook-based interactive textbook design overview.

b. Development stage (Develop)

At this stage, it aims to produce a revised interactive textbook based on input from experts and after limited trials. The steps in the development stage are as follows:

✓ Validation

The validation of interactive textbooks goes through 3 stages, namely; material (content and language), the appearance and design of textbooks and the feasibility of presentation. Validation in the assessment of the validity of existing instruments is:

Eligibility of content and language

Prof. Dr. Dra. Munirah, M. Pd as Validator 1 (V1). He is a lecturer as well as the head of the S2 education study program Indonesian unismuh Makassar and also as a lecturer at FKIP Unismuh Makassar. The author asks the expert

to examine and provide views and suggestions regarding the use of language and the content of the interactive textbooks used. The selected expert is a lecturer at Unismuh Makassar who has taken doctoral education in the field of humanities who is thus an expert in the field of Language. The expert has examined and advised that "overall in terms of content and linguistic feasibility, this textbook is suitable for use by students. However, there are some that need to be improved and developed". Appendix content and linguistic feasibility as in appendix A.

Eligibility of learning appearance and design

Dr. Abdul Hakim, M.Pd as validator 2 (V2). This expert is an expert in the field of learning appearance and design, besides that he is also a lecturer in the Education technology study program, Makassar State University. The author selects experts to examine and provide views and suggestions on the feasibility of learning appearance and design in the interactive textbooks used. The expert has examined and suggested that "overall this textbook is eligible for use but there are some parts that need to be improved such as the color fit on the cover of the textbook" validation of the feasibility of the appearance and design of the learning as in appendix B.

Eligibility for presentation

Dr. Abdul Haling M. Pd as validator 3 (V3). This expert was chosen because he is an expert in the presentation of a textbook. He is a lecturer of Education technology study program, faculty of education, Makassar State University. He is a graduate of Universiti Kebangsaan Malaysia who has been widely used for his work in the field of presenting materials and textbooks. The author asks experts to examine and provide views and suggestions regarding the feasibility of learning display and design in the interactive textbooks used. The expert has checked and declared it worth using without revision. Validate the feasibility of presenting an interactive textbook as in appendix C.

c. Validity and Practicality of Indonesian Interactive Textbooks

✓ Trials

After an analysis of the results obtained from the two validators, a trial was then carried out limited to practitioners / lecturers and objects to obtain data on the assessment of interactive textbooks. At this stage, 2 lecturers were involved Indonesian who taught at the PGSD Unismuh Makassar study program and 30 students. Analysis of lecturer and student responses.

✓ Student response analysis

Table 1. Response of PGSD Unismuh Makassar Students

No. Respondent	Respondents' average score (1-30 people)	Category
1	3,18	Totally Agree
2	3,09	Totally Agree
3	3,18	Totally Agree
4	3,27	Totally Agree
5	3,27	Totally Agree
6	3,27	Totally Agree
7	3,18	Totally Agree
8	3,09	Totally Agree
9	3,55	Totally Agree
10	3,18	Totally Agree
11	3,18	Totally Agree
12	3,27	Totally Agree
13	3,09	Totally Agree
14	3,82	Totally Agree
15	3,45	Totally Agree
16	3,55	Totally Agree
17	3,00	Agree
18	3,55	Totally Agree
19	3,27	Totally Agree
20	3,18	Totally Agree
21	3,27	Totally Agree
22	3,00	Agree
23	3,36	Totally Agree
24	3,18	Totally Agree
25	3,55	Totally Agree
26	3,45	Totally Agree
27	3,27	Totally Agree
28	3,00	Agree
29	3,55	Totally Agree
30	3,64	Totally Agree
Average	3,30	Totally Agree

Source: Student Response Data Analysis 2022

Based on Table 1, it shows that the response of PGSD Unismuh Makassar students after participating in learning activities obtained an average of 3.30, which means that the responses of students are in the category of strongly agreeing. So it can be concluded that the student's response strongly agrees with the use of interactive textbooks in supporting learning activities.

✓ Analysis of Lecturer Response

This assessment is used to determine the lecturer's response after using an interactive textbook which includes: (1) interesting aspects, (2) color aspects, (3) sound aspects and (4) image / video aspects. The results of the analysis of lecturer response data after learning can be seen in Table 2. below:

Table 2. Lecturer Responses

No.	Statement	Respondent	
		1	2
1	Practical and easy-to-use interactive textbooks	4	4
2	Multimedia learning can add flexibility to student learning	3	4
3	Interactive textbooks make it easy for me to find references related to basic operating system subjects	4	3
4	Interactive textbooks add to my communication interactions with students	3	4
5	Interactive textbooks can help students learn independently	4	3
6	Interactive textbooks are not boring and varied	4	4
7	Interactive textbooks can activate students in the learning process	3	3
8	Interactive textbooks using ICT technology	3	4
9	Interactive textbooks make it easier for me to explain the material in the learning process	4	4
10	Interactive textbooks can develop students' talents	4	3
11	Interactive textbooks can improve student academic achievement	4	3
12	The interactive textbook description is systematic and clear	4	3
13	Interactive textbooks are always updated with technological developments.	3	4
	Average	3,62	3,54

Source: Lecturer Response Data Analysis, 2022

The results of the data analysis of lecturers' responses from the two respondents to interactive textbooks received average scores of 3.62 and 3.54 with the category of strongly agreeing. Based on the results of development with philosophical considerations, textbooks are developed based on needs in the learning process, so as to be able to benefit universities, lecturers and students. Based on the results of the development through the content validation stage carried out by two experts, revise the design results and provide an assessment so that the measurement results carried out are valid and feasible to use with a little revision.

d. Effectiveness of Interactive Textbooks Indonesian

✓ Results of student activities at the first and second meetings

The assessment of student activities includes student activities including: 1) paying attention to the lecturer's explanation, 2) paying attention to the material in the textbook, 3) providing questions as feedback on the use of textbooks, 4) trying to use interactive textbooks, 5) discussing the material, and 6) behavior that is irrelevant to learning activities. The results of student activity data analysis can be seen as follows:

Table 3. PGSD Unismuh Makassar Student Activities

No.	Average Respondents	Category
1	3,17	Very Active
2	3,17	Very Active
3	3,17	Very Active
4	3,00	Active
5	3,33	Very Active
6	3,33	Very Active
7	3,17	Very Active
8	3,17	Very Active
9	3,67	Very Active
10	3,00	Active
11	3,17	Very Active
12	3,33	Very Active
13	3,17	Very Active
14	4,00	Very Active
15	3,33	Very Active
16	3,50	Very Active
17	3,17	Very Active
18	3,67	Very Active
19	3,50	Very Active
20	3,17	Very Active
21	3,17	Very Active
22	3,33	Very Active
23	3,33	Very Active
24	3,33	Very Active
25	3,50	Very Active
26	3,67	Very Active
27	3,17	Very Active
28	3,00	Active
29	3,33	Very Active
30	3,67	Very Active
average	3,31	Very Active

Source: Student Activity Data Analysis, 2022

Based on Table 3 shows that the activities of PGSD Unismuh Makassar students in learning activities obtained an average of 3.31 which means that student activities in learning activities are in the very active category, so it can be concluded that student activities in learning activities are in the very active category or learning using interactive textbooks can be said to be quite effective.

✓ Student Learning Outcomes

Pretest

Based on the results of research conducted by researchers at PGSD Regular 2020 (Semester III), the results of student learning in the early stages (Pretest) can be seen in the following table:

Table 4. Statistics of learning outcomes scores (prestest)

Percentage score (%)	Category	Percentage	Frequency
$100\% x \geq 80\%$	Excellent	0	0
$60\% \leq x < 80\%$	good	60-80	16
$40\% \leq x < 60\%$	Enough	42-56	14
$20\% \leq x < 40\%$	Less	0	0
$x \leq 20\%$	Very Less	0	0

Based on the results of the percentage of learning outcomes test scores (pretest), it can be seen in table 4 above, it can be concluded that there are 16 students with a percentage of 60% to 80% with good categories, and there are 14 students with a percentage of 42% to 56% with sufficient categories.

Final Test (Posttest)

The following is presented in the form of a table regarding student learning outcomes in the final test (posttest) by applying interactive learning tools. Data on student learning outcomes can be seen in the following table:

Table 5. Statistics of learning outcomes scores (posttest)

Percentage score (%)	Category	Percentage	Frequency
$100\% x \geq 80\%$	Excellent	80-98	16
$60\% \leq x < 80\%$	good	64-78	13
$40\% \leq x < 60\%$	Enough	50-58	1
$20\% \leq x < 40\%$	Less	0	0
$x \leq 20\%$	Very Less	0	0

Based on table 5 above, it can be stated that the average score of student learning outcomes from 30 students is that there are 16 students with a percentage of 80% to 98% with excellent categories, there are 13 students with a percentage of 64% to 78% with good categories, and there is only 1 student with a percentage of 50% to 58% with sufficient categories. Furthermore, the overall score of the pretest and posttest learning outcomes test can be seen in the following chart.
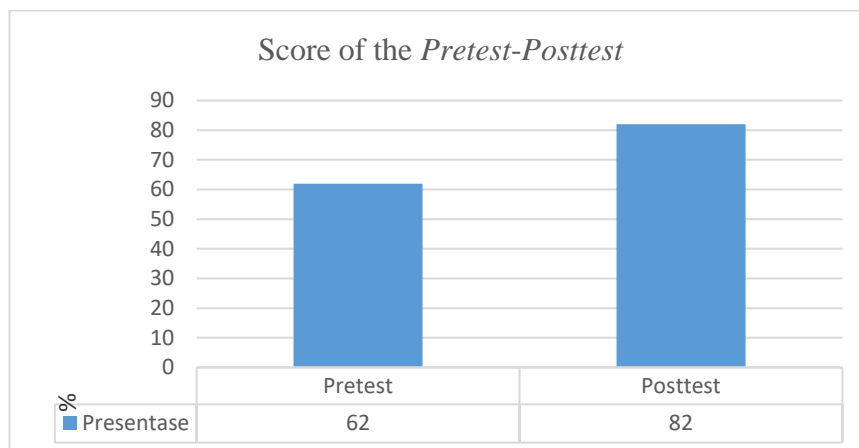

Fig 1. Results of recapitulation of pretest-posttest learning outcomes test results

Based on Fig 1 above, it can be seen that in the initial test (pretest) the percentage of learning completion reached an average score of 62% with good categories, and in the final test (posttest) the percentage of student learning completion reached an average score of 82% with very good categories, so it can be concluded that with the application of interactive textbooks in Indonesian courses on 30 PGSD students of the Faculty of Teacher Training and Education, University of Muhammadiyah Makassar effectively used in the learning process.

DISCUSSION

Based on the results of the analysis of the needs of students and lecturers, it was found that the use of interactive textbooks in Indonesian courses at PGSD Unismuh Makassar is far from effective so that it requires media in the form of interactive textbooks in supporting the learning process.

Prototype of Textbooks on Interactive Indonesian

Interactive textbooks use a professional PDF flipbook application in Indonesian courses developed through research and development (R&D). The process of developing an interactive textbook based on a professional PDF flipbook is carried out through several stages before producing good learning media that is suitable for use in the process to achieve course learning (CPMK). In this section, it is stated that the discussion of research hail using the learning device development model is a 4D model which includes four things, namely define, design, develop and disseminate.

Validity and Practicality of Interactive Textbooks Indonesian

The results of the analysis of student and lecturer responses show that interactive textbooks in the category strongly agree. So, it can be said that the interactive textbooks from the development were responded positively by students and lecturers of Indonesian courses at PGSD Unismuh Makassar. The results of the data analysis of student activities are categorized as very active. So it can be concluded that the development of interactive textbooks using flipbooks in Indonesian courses in the PGSD Unismuh Makassar Study Program is effectively used in learning.

CONCLUSION

Based on the results of the research that has been described, it can be concluded as follows:

✓ The process of developing interactive textbooks in supporting Indonesian learning at PGSD Unismuh Makassar begins with student analysis, task analysis. Next is the stage of textbook design and material development. At the material development stage, all materials are prepared that will be included in the application program and the packaging of textbooks into Interactive textbook products.

✓ The response of students and lecturers to the use of interactive textbooks at PGSD Unismuh Makassar in Indonesian course was very positive.

✓ Interactive textbooks are very effective in supporting learning. This can be seen from student activities in the learning process.

REFERENCES

Amiroh. 2012. *Kupas Tuntas Membangun E-Learning dengan Learning Management System*. Sidoarjo: Genta Group Production. Berkah Mandiri Globalindo

Ariesto. 2012. *Teknologi Informasi dan Komunikasi dalam Pendidikan*. Yogyakarta:

Cronje JC El-hussein MOM. Defining Mobile Learning in the Higher Education Landscape. Educ Technol Soc. 2010;13 (3):12–21.

Darimi. 2007. *Psikologi Pendidikan*. Rineka Cipta: Jakarta.

Dermawan, Deni. 2018. *Pengembangan E-learning Teori dan Desain*. Rosda: Bandung. Graha Ilmu.

Gunawan, Heri. 2009. *Pendidikan Karakter Konsep dan Implementasi*. Bandung: Alfabeta.

Kemendikbud. 2018. *Pengembangan Pendidikan*. Jakarta: Kemdikbud.

Kumalasari. 2010. *Media Pembelajaran*. Rosda: Bandung.

Kurniawan, Syamsul. 2018. *Pendidikan karakter*. Ar Ruzz Media: Yogyakarta.

Main Sufanti dkk (2006), "Pembinaan Bahasa Indonesia dalam RuangPelajar di Radio Republik IndonesiaCabang Muda Surakarta", WARTA, Vol. 9, No. 1, Maret 2006: 39 – 44.

Majid, Abdul. (2012). Perencanaan Pembelajaran, Mengembangkan Standar Kompetensi Dosen. Bandung: Remaja Rosdakarya.

Majid. 2011. *Pendidikan Karakter Berbasis Etika di Sekolah*. Jakarta. Rineka Cipta.

Martono (2010), "Peningkatan Kemahiran Berbahasa Indonesia dalam Menulis Ilmiah Mahasiswa Bimbingan dan Konseling Melalui Collaborative Writing And Multiple Drafting", Fakultas Kedosenan dan Ilmu Pendidikan.

Nurdin. 2007. *Pengantar Komunikasi Massa*. Jakarta: PT Raja Grafindo Persada.

Nusa. 2012. *Research & Development Penelitian dan Pengembangan :Suatu Pengantar*. Jakarta: RajaGrafindo Persada.

Peraturan Menteri Pendidikan Nasional Nomor 109 Tahun 2013 tentang penyelenggaraan Pendidikan jarak jauh pada Pendidikan tinggi. Depdiknas.

Prawiradilaga. 2017. *Mozaik Teknologi Pendidikan E-Learning*. Prenada Media Group: Jakarta.

Putra, A. (2013). Penerapan pembelajaran fisika SMA berbasis kegiatan laboratorium. Prosiding Semirata FMIPA Universitas Lampung, Vol. 2, No. 37, 227-233.

Putra, Nusa. 2011. *Research and development Penelitian dan pengembangan:suatu pengantar*. Jakarta: Rajagrafindo Persada.

Putrayasa, Ida Bagus. (2006). Pembelajaran Bahasa Indonesia Secara Tematik dan Integratif yang Berorientasi KBK. Makalah. Disampaikan dalam Pendidikan dan Pelatihan (Diklat) Dosen Mata Pelajaran Bahasa Indonesia. Tanggal, 16 – 20 Mei 2006. Denpasar: Hotel Darmawan.

Rahardi Kunjana, (2010) "Bahasa Indonesia untuk Perguruan Tinggi". Yogyakarta: Erlangga.

Raka, G, Mulyana,Y, Markam, S.S, Semiawan, C.R, Hasan, S.H, Bastaman, H.D, Nurachman, N. 2011. Pendidikan Karakter di Sekolah dari Gagasan ke Tindakan. Jakarta: PT. Elex Media Komputindo

Ratumanan, G.T., dan T, Laurens. (2006). Evaluasi Hasil yang Relevan dengan Memecahkan Problematika Belajar Dan Mengajar. Bandung : CV Alfabeta.

Ratumanan, G.T., dan T, Laurens. (2011). Penilaian Hasil Belajar Pada Satuan Tingkat Pendidikan Edisi kedua. Surabaya: Unesa University Press.

RI. 2012. Undang-Undang RI No 12 Tahun 2012.Tentang Sistem Pendidikan Nasional. Jakarta: CV Eka Jaya.

Ristekdikti. (2016) Panduan Penyusunan Kurikulum Pendidikan Tinggi. Jakarta : Kementrian Riset, Teknologi dan pendidikan Tinggi Direktorat Jenderal Pembelajaran dan Kemahasiswaan.

Rosada dan Afandi, A. 2018. *Implementasi Pendidikan Nilai Moral (Living Value) Untuk Membina Karakter Pada Mahasiswa Program Studi Pendidikan Sejarah Fakultas Kedosenan Dan Ilmu Pendidikan Universitas Muhammadiyah Mataram.* Jurnal vol. 4 No. 2 tahun 2013.

Rusman. 2011. *Pembelajaran Berbasis Teknologi Informasi dan Komunikasi Mengembangkan Profesionalisme Dosen*. Jakarta: RajaGrafindo Persada.

Rustaman, A. (1997) Prinsip-Prinsip dan Teknik Evaluasi Pengajaran. Bandung : PT Remaja Rosdakarya.

Samani, Muchlas dan Hariyanto. (2012). Konsep dan Model Pendidikan Karakter. Bandung: PT Remaja Rosdakarya

Setyosari. 2012. *Metode Penelitian Pendidikan dan Pengembangan*. Jakarta: Kencana Prenada Media Group.

Somadi. 2012. *Panduan Menyusun Silabus dan Rencana Pelaksanaan Pembelajaran (Konsep dan Implementasi)*. Yogyakarta: Familia (Group Relasi Inti Media).

Sugiono. 2015. Metodologi *Penelitian Kualitatif dan kuantitatif*. Bandung: Alfabeta.

Sukardjo dan Lis Permana Sari. 2008. *Metodologi Penelitian Pendidikan Kimia*. Yogyakarta: FMIPA UNY.

Thiagarajan, Sivasailam, dkk. 1974. *Instructional Development for Training Teachers of Exceptional Children*. Washington DC: National Center for Improvement Educational System.

Wahyana. 2001. *Perencanaan dan Pengelolaan Pembelajaran IPA*. Jakarta: Universitas Terbuka.

Youmi, Muhammad. 2017. *Pendidikan karakter, landasan, pilar dan implementasi.* Prenada Media Group : Jakarta

Zuhdan, dkk. 2011. *Pengembangan Buku ajar Sains Terpadu Untuk Meningkatkan Kognitif, Keterampilan Proses, Kreativitas serta Menerapkan Konsep Ilmiah Peserta Didik SMP*. Program Pascasarjana UNY.

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