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DESIGNING A DIGITAL TEXTBOOK OF LANGUAGE ASSESSMENT AND EVALUATION ON FACILITATING FLEXIBLE LEARNING FOR UNDERGRADUATE STUDENTS

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Abstract

The purpose of this project is to identify the digital textbook that students need in language assessment and evaluation courses require, and to create that textbook using fliphtml5. This study employed the addie model as part of its research and development (r&d) methodology. A questionnaire, document list, and validation sheet are the methods used to collect the data. The department of English education of UIN Sultan Syarif Kasim Riau held this study on July 10, 2024. UIN Sultan Syarif Kasim Riau was the study's location. Participants in this study included lecturers and sixth-semester eed students. Data was also sent to learning material experts and media experts for validation in addition to need analysis. The study's findings demonstrate the need for digital textbooks as a tool in the teaching and learning process for both lecturers and students. The digital textbook, however, was based on a syllabus that appropriate with the higher curriculum. Additionally, the average calculation results (average measure) yielded a value of 0.620 with a moderate category, while the ICC reliability results (individual value, single measure) obtained an individual value of 0.450 or included in the poor category.

Keywords: Digital Textbook; Flexible Learning; Language Assessment and Evaluation

INTRODUCTION

Language assessment and evaluation is a subject learning by the student in higher education, especially in English Education Tosuncuoglu (2018), language assessment and evaluation are the main parts of teaching and learning activities. Assessment and evaluation is a general item, which consists of methods and techniques used to gather information about student ability, knowledge understanding and motivation, and also the activity of collecting



necessary information to determine if a program answers its goals. It aims to discover which methods work and which do not. Assessment is an important aspect of every learning process that a lecturer must consider. The reason for this is that regardless of the curriculum used, whether competency-based or previous curriculums, learning is closely related to a planned and measurable process to achieve the content of the curriculum being applied.

In classroom practice lecturers use a variety of strategies in teaching language assessment to ensure that learning outcomes are consistent with those outlined in the lesson plan. According to Saputra et al (2018), there are many kinds of teaching strategies that can be applied in the language teaching process. The first is brainstorming. Brainstorming is a process for generating a large number of ideas or options in which judgment is suspended until a certain number of ideas have been generated. Some advantages of brainstorming include: actively involving learners in higher levels of thinking; promoting peer learning and creating synergy; promoting critical thinking; and assisting groups in reaching consensus.

The second strategy is case-based discussion in small groups, small groups of 5-10 students address case-based tasks, exchanging ideas and working through a problem-solving process. Case-based are some advantages to small-group discussions. They could be, actively engages participants and stimulates peer group learning; assists participants in exploring prior knowledge and building on what they know; facilitates the exchange of ideas and awareness of mutual concerns; and encourages the development of critical thinking skills. The last is demonstration. Demonstration is the act of performing an activity so that learners can see how it is done in order to prepare them to apply theory in practice. The benefits of demonstration include assisting people who learn well by modeling others, promoting self-confidence, allowing for targeted questions and answers, and allowing attention to be focused on specific details rather than general theories.

Based on the preliminary study at one of English Education Department in Pekanbaru, language assessment is taught twice a week in six semester. The lecturer used some strategies and techniques in teaching language assessment there are presenting, discussion, summarizing the material that will be discuss on the next meeting, and also individual assignment. However, even the lecturer has used a several strategies and techniques in teaching language assessment and the lecturer have given references to explain the material, the student need a clear guide to achieve learning outcomes. Furthermore, it is very difficult to find a book that appropriate with the curriculum of the higher education. To do individual or group assignments, students need to look for references from different books or journals because the results they get must be in accordance with the material contained in the curriculum and must adjust to the lesson plan that has been compiled by the lecturer.

According to Bachman (2013) for classroom language assessment, the challenge when teaching language assessment is how to develop assessments that will serve the purposes of learning and instruction, and to provide training in language assessment for classroom language lecturers. To assess and evaluate, the lecturer need to make a journal or portfolio for students, so the author thought that the student need a teaching and learning materials that suitable of language assessment to support student in learning activity and to facilitate flexible learning.

However, in this digital era technology greatly facilitates the learning process. Lecturers are also required to provide facilities that are suitable for digital developments. The digital era also offers a wealth of innovations that can be created, including useful learning media that can be accessed anytime and anywhere using technology to attract



students' interest in learning. Technology has a very valuable contribution and is considered the future of education because it creates opportunities to design and innovate learning devices in various institutions. Thus the innovation that will be designed in this study is designing a digital textbook using fliphtml5. Using a digital textbook is also very practical, when compared to carrying a book amounting to a hundred pages or even more, digital textbook can be opened and be carried anywhere is clearly in a cellphone in more convenient and practical. With digital textbook, students can see directly the material they want to read anywhere and anytime. Textbook according to Zmazek et al. (2022), is for acquisition of new knowledge

According to the research background explained in the preliminary study, the writer identifies problems as follows; students have difficulties in find the reference that contained by the curriculum, there is no media that support language assessment and evaluation in higher education. Besides, even the lecturer has used several techniques and strategies in teaching language assessment and evaluation the lecturer have given references to explain the material, the student still needs a clear reference to achieve learning outcomes. Therefore, the writer find that the student needs is the learning media to support language assessment and evaluation witch contained the suitable curriculum and also facilitate flexible learning. This research will focus on answering the following question; 1). What kind of digital textbook is needed by student and lecturer in language assessment and evaluation course?; 2). How to design a digital textbook of language assessment and evaluation for higher education student?; 3). How valid is digital textbook to facilitate flexible learning?

LITERATURE REVIEW

A digital textbook is a book that serves as a standard source of information for formal study of a subject as well as a tool for teaching and learning. It should be regarded as one of many resources that lecturers can use to create an effective lesson, and it may provide a framework for guidance and orientation. Furthermore, the digital textbook provides confidence and security to an inexperienced lecturer who finds it difficult to adapt existing digital textbooks, particularly for tailored work related courses (Walker, 2011). The structure of a digital textbook described here is intended for general use in teaching and learning at school and at home. Pupils, students, lecturers, and parents are thus the users. A curriculum-based menu structure enables clear structure and simple content accessibility.

It is common knowledge that using textbooks benefits both lecturers and students in practice. The digital textbook helps lecturers by directing discussions, providing direction for lessons, and making it easier to assign homework. The digital textbook serves as a guide for the students in organizing their learning both inside and outside of the classroom, helping them with independent study, homework, and test preparation. In the process of teaching and learning, digital textbooks may serve as the students' primary source of language input or as a medium through which they can practice their language skills. One of the core components of teaching English language today is the use of digital textbooks. A lot of ESL/EFL lecturers use digital textbooks as their primary teaching tools in their classes and programs (Maret & Repository, 2014).

A good digital textbook must first and foremost adhere to content-pedagogical recommendations: professional suitability and appropriateness, curriculum coverage, multimedia elements, inductive approach, continuously guided individual content from



beginning to end, environment for in-depth experience, unique cover design and operational view, correspond to the users' age group, as well as methodic, didactical, and linguistic relevance. Basically the technical operational a digital textbook are open source authoring tools, free accessibility and flexibility of individual materials, automatic resizing of content to display resolution, table of contents must be visible at all times, clear and easily accessible (Zmazek et al., 2012).

The use of digital textbooks in the classroom has both advantages and disadvantages, depending on how they are used and the contexts in which they are used. What one lecturer sees as an advantage or disadvantage. There are numerous advantages to using digital textbooks over printed textbooks. They are more environmentally friendly, appeal to a generation raised on electronic devices, can be revised and delivered more quickly, and are more portable than printed texts.

Furthermore, they are generally less expensive, necessitate less storage space, and do not result in obsolete inventories. One of the advantage of using digital textbooks is that it provides a syllabus for the course because the authors of the syllabus have decided what will be learned and in what order. It provides students with security because they have a road map of the course: they know what to expect and what is expected of them. It provides a collection of visuals, activities, readings, and so on, saving the lecturer time in searching for or developing such materials. It gives lecturers a foundation for assessing students' learning. Some digital textbooks include tests or assessment tools. Supporting materials (lecturer's guide, CD, worksheets, and video) may be included. If all lecturers use the same digital textbook, it provides consistency within a program across a given level. It provides consistency between levels if digital textbooks follow a sequence, such as within a series (Walker, 2011).

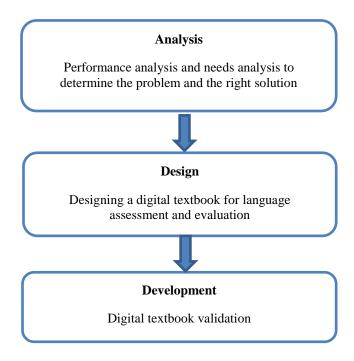
The digital textbook's role as a direct cause of learning or teaching failure is oversimplified, given that even strict adherence to a well-constructed digital textbook necessitates as much mastery in teaching as the ability to employ flexible and creative teaching techniques after fully integrating its contents and structure. The digital textbook, in this sense, is a mediating effect that determines how quickly lecturers can achieve a threshold of standardized teaching and how much room there is for teaching flexibility and creativity once digital textbook training is complete. A well-constructed digital textbook should present not only communicable and interactive language content to the student, but also provide a framework for adequate lecturer improvisation and teaching flexibility to develop and gradually improve (Wen-cheng et al., 2011).

METHOD

The type of research used in this study is research and development (Research and Development). Research and development (R&D) is a research method used to produce certain products and test the effectiveness of the products. The research and development carried out aims to produce effective products to support flexible learning in language assessment and evaluation courses. This study is categorized as an ADDIE Model research, which produce a products in the form of learning media. According to (Bhushan, 2006) the ADDIE Model (Analysis, Design, Development, Implementation, and Evaluation) is a process used in instructional design to generate intentional learning episodes.. The researcher selected the ADDIE development model because it has been used extensively in research and



development. Based on the ADDIE development model, the researcher will focus on analysis, design, and development, because the purpose of this research is only to develop and produce a valid learning media to be implemented based on the ADDIE model, this type of ADDIE model research is only carried out up to the Development stage as it had been done by Setiawan et al. (2021).



Data collection techniques used in this study is questionnaire, document list, and validation sheet. Questionnaires are a set of open-ended or closed-ended questions to which respondents respond using likert scale. Questionnaires can be administered via phone, mail, live in a public place or in an institute, electronic mail, or fax, among other methods. The questionnaire consists of two, namely the response of lecturers and students to the media that has been made in the learning process by using media. Document list is a guideline when designing digital textbook, which contained the researcher need to check when design digital textbook. The document list also used to ensure the digital textbook content can be used for language assessment and evaluation courses. Validation is the stage of the product to be examined by an expert, in this case, a media expert. This is intended to check and assess the products that have been made, if there are some errors and deficiencies that must be corrected, then the products that have been made previously are revised again according to material expert criticism until it becomes a product that is ready for use (Yulando et al., 2019). The statements of this survey instrument validation rating scale will validate the development of digital textbook.

The data analysis technique used in this research is descriptive analysis technique. The data that has been collected using research instruments is questionnaire techniques, document lists, and validation sheets to determine the effectiveness of digital textbook learning media. The data will be analyze using SPSS. SPSS is the statistical methods that used to collect, summarize, analyze, and interpret variables in numerical data.



FINDINGS AND DISCUSSION

The research's outcome was the designing digital textbook of language assessment and evaluation for English Education Department Students. This research was focused on student and lecturer need in language assessment and evaluation course. To collect the data, researcher used questionnaire and interview for students and lecturers.

1. Need Analysis

To answer the first question on formulation of the study, the researcher collected responses from students using a need analysis questionnaire via Google form. The researcher both directly and indirectly referenced the student's response during an interview. The interview guide includes some questions that demand satisfactory responses. Interviews were conducted to gather information that was required to fulfill the researcher's anticipated research objectives, such as facts, beliefs, feelings, desires, and others. In this study, the researcher used model of need analysis by Hutchinson and Waters. Needs analysis is divided into two parts in the model: target situation needs and learning needs. Target needs include "necessities," "lacks," and "wants." "Necessities" are determined by the demand of the target situation. They are the requirements that enable the learner to use effectively in the target situation. "Lacks" are the gaps between "necessities" and what the learner already knows, or the learners' existing proficiency. "Wants" are learners' subjective needs, which have no direct relationship to the objective needs perceived by lecturers and course designers (Li, 2014).

The results of student needs analysis are shows in table below:

SA D SD Assessment Α N **Items** F P F P F P F P F P Aspect Student 2% 2 4% 8 16% 38% 10 20% Q1 Q2 8 16% 20 40% 12 24% 0% 0% responses to language Q3 3 6% 12 24% 17 34% 8 16% 0 0% assessment and 19 Q4 38% 14 28% 5 10% 2 4% 0 0% evaluation course Q5 14% 24 48% 8 16% 1 2% 0 0% Student Q6 6 12% 18 36% 13 26% 3 6% 0 0% responses of Q7 2 4% 52% 20% 2 4% 0% 26 10 0 using teaching 7 Q8 14% 23 46% 9 18% 1 2% 0 0% materials and 25 50% 8% 2 4% 0 0% Q9 18%

Table 1. Student Needs Analysis

Assessment	Items	SA			A		N	D		SD	
Aspect	Itellis	F	P	F	P	F	P	F	P	F	P
learning media in class	Q10	12	24%	23	46%	4	8%	1	2%	0	0%
	Q11	9	18%	20	40%	10	20%	1	2%	0	0%
Student	Q12	6	12%	22	44%	8	16%	4	8%	0	0%
responses to	Q13	4	8%	21	42%	13	26%	2	4%	0	0%
digital textbook	Q14	4	8%	23	46%	12	24%	1	2%	0	0%
	Q15	3	6%	16	32%	17	34%	4	8%	0	0%
	Q16	9	18%	22	44%	8	16%	1	2%	0	0%
Student	Q17	9	18%	23	46%	7	14%	1	2%	0	0%
responses to	Q18	8	16%	22	44%	9	18%	1	2%	0	0%
flexible learning	Q19	8	16%	22	44%	6	12%	4	8%	0	0%
	Q20	9	18%	22	44%	8	16%	1	2%	0	0%

Based on the finding the student needed a digital textbook that support flexible learning where the teaching materials can be opened through electronic devices such as computers, mobile phones or gadgets. This situation also found at Doering & York (2012) study, who stated that students who used print books, they had a difficult time connecting with the content, whereas students who used digital textbook seemed to appreciate user-friendly search options and the overall experience.

The results of teacher needs analysis are shows in table below:

Table 2. Lecturer Needs Analysis

Assassment Aspact		SA		A		N		D		SD	
Assessment Aspect	Items	F	P	F	P	F	P	F	P	F	P
	Q1	0	0%	2	4%	0	0%	0	0%	0	0%
Lecturer responses to language	Q2	0	0%	2	4%	0	0%	0	0%	0	0%
assessment and evaluation course	Q3	0	0%	0	0%	2	4%	0	0%	0	0%
	Q4	2	4%	0	0%	0	0%	0	0%	0	0%
Lecturer responses to digital	Q5	0	0%	2	4%	0	0%	0	0%	0	0%
	Q6	0	0%	2	4%	0	0%	0	0%	0	0%
	Q7	0	0%	2	4%	0	0%	0	0%	0	0%
textbook	Q8	0	0%	0	0%	2	4%	0	0%	0	0%
	Q9	0	0%	2	4%	0	0%	0	0%	0	0%
	Q10	0	0%	2	4%	0	0%	0	0%	0	0%
	Q11	0	0%	0	0%	0	0%	2	4%	0	0%

Lecturer responses of using teaching	Q12	0	0%	0	0%	1	2%	1	2%	0	0%
materials and learning media in class	Q13	0	0%	0	0%	2	4%	0	0%	0	0%
	Q14	2	4%	0	0%	0	0%	0	0%	0	0%
	Q15	0	0%	2	4%	0	0%	0	0%	0	0%
	Q16	0	0%	0	0%	0	0%	2	4%	0	0%
Lecturers responses to flexible learning	Q17	0	0%	0	0%	2	4%	0	0%	0	0%
	Q18	0	0%	0	0%	2	4%	0	0%	0	0%
	Q19	0	0%	2	4%	0	0%	0	0%	0	0%
	Q20	0	0%	2	4%	0	0%	0	0%	0	0%

Based on the findings, lecturers also required digital textbooks as tools for achieving curriculum objectives and smartphone-accessible teaching materials because, in the digital age, these resources are easily accessible and very beneficial for educators in the teaching and learning process. Besides, according to Walker (2011), the digital textbook provides confidence and security to an inexperienced lecturer who finds it difficult to adapt existing digital textbooks, particularly for tailored work related courses.

2. Designing Digital Textbook of Language Assessment and Evaluation

The textbook on language assessment and evaluation was written by a lecturer in the field. The product was originally intended to be a printed textbook and then created digitally. Therefore, the researcher as a collaborated with the lecturer to support the data, the researcher assisted the lecturer in design the assessment in align to Indonesia context. This step of designing is a progression of the requirements analysis, which involves designing a textbook for language assessment and evaluation based on a syllabus that suitable to higher education curriculum. The first step in designing process is to identify the materials that will be used in the language assessment and evaluation teaching and learning process. However, the material was based on a syllabus that appropriate with the higher education curriculum, followed by the creation of lesson plans (RPS) for language assessment and textbook material. The lecturer of language assessment and evaluation already created the most recent version of the RPS that is complies with the curriculum.

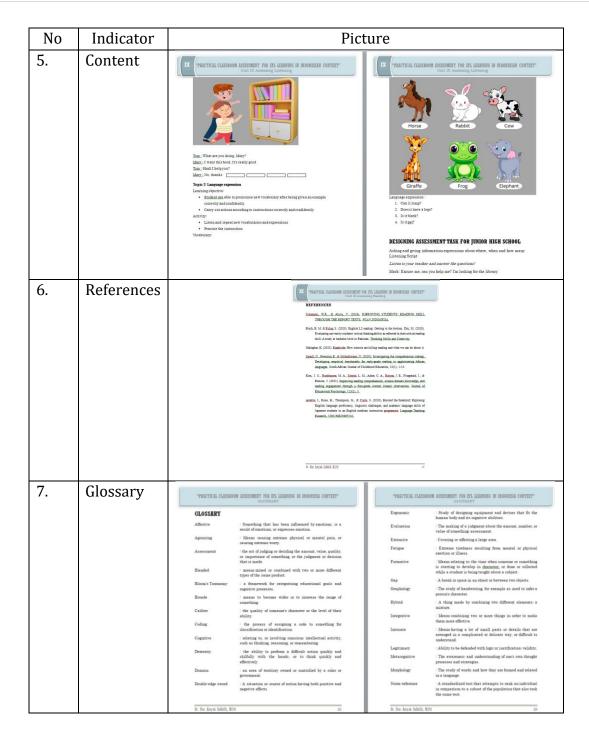


Evaluation Indicator Picture No 1. Cover Dr. Nur Aisyah Zulkifli. M.Pd PRACTICAL CLASSROOM ASSESSMENT FOR EFL LEARNING IN INDONESIA CONTEXT Title 2. Dr. Nur Aisyah Zulkifli. M.Pd PRACTICAL CLASSROOM ASSESSMENT FOR EFL LEARNING IN INDONESIA CONTEXT 3. Preface THE GO SHARETY OF THE STATE OF List of 4. LIST OF CONTENT Content Contents PREFACE i Unit I Concept of Language Assessment 1 1.1 Testing, Measurement, Assessment, and Evaluation 1 1.5 Assessment and Teaching 21 1.6 Type of Assessment 26 1.7 Approach to Language Testing 30 1.8 Current Issue in Classroom Testing 36 Unit II Principles of Language Assessment 12 2.1 Validity 12 2.2 Reliability 13 2.3 Practicality 14 2.4 Authenticity 15

Table 3. The Result of Designing Digital Textbook of Language Assessment and Evaluation



2.5 Backwash or Wash-back 16



3. Developing Digital Textbook

After finishing the printed book of language assessment and evaluation, researchers will work to make it into digital book for more visually appealing material. The fliphtml5 program was used to create the digital textbook. Furthermore, the researcher used the fliphtml5 application, version 6.6.2. Before processing language assessment and evaluation book to be digitalized, the revision were given by the validators. The validators are the expert



of teaching English as a foreign language. They have experience as assessor in assessing media design and accreditation. Validation sheet was given to them to ensure the data or product meets the required standard.

Table 4 The Result of Reliability test Using ICC Intraclass Correlation Coefficient

Intraclass		95% Confide	nce Interval	F Test with True Value 0					
	Correlation b	Lower Bound	Upper Bound	Value	df1	df2	Sig		
Single Measures	.450a	.065	.718	2.634	23	23	.012		
Average Measures	.620°	.122	.836	2.634	23	23	.012		

Based on the categorization, the researcher chose the ICC reliability test results. ICC results below 0.5 indicate poor reliability, ICC > 0.5 indicates moderate reliability, ICC > 0.75 indicates good reliability, and ICC > 0.9 indicates very good dependability. The ICC reliability results, which are shown in Table 4.6, were classified as poor with an individual value (single measure) of 0.450. The average calculation (average measure) obtained a moderate category with a value of 0.620. This shows that the digital textbook need to be revised and is not yet suitable.

CONCLUSION

This study aims to find out the digital textbook that needed by students in language assessment and evaluation course and to design digital textbook of language assessment and evaluation course designed using fliphtml5, and to measure the validity of e-module in teaching language assessment and evaluation designed using fliphtml5. This study was conducted at UIN Suska Pekanbaru, Riau. Based the finding of the students needed digital textbook for teaching material in learning language assessment and evaluation. According to students in learning language assessment and evaluation with used printed textbook, they still find difficulty to understanding the material because the subject matter was considered challenging for them. Therefore they need interesting teaching materials that can be accessed via smartphone so they can learn independently and easier for student to understanding the material. Besides students, the lecturers also needed digital textbook as a tools to achieved curriculum goals and teaching material that can be accessed by smartphone because it is very helpful and efficient for lecturer and students. In designing digital textbook of language assessment and evaluation, the digital textbook was designed based on the lesson plan (RPS) which is based on syllabus that reflected curriculum in higher education. The teaching materials module will be including the selection of theories, topics, concept, and tasks that are appropriate to the lesson plan (RPS). The digital textbook of language assessment and evaluation will be created into an e-module using the fliphtml5 application. Additionally, media and material experts approve the digital textbook. The ICC reliability findings, as determined by the validator's study, had an individual value (single measure) of 0.450, placing it in the poor category, whilst the average calculation results (average measure) had a value of 0.620, placing it in the moderate category. This suggests that the digital textbook has to be updated and is not yet usable.



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