Developing An Auditing Interactive Electronic Textbook with Google Slide and Quizizz

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ARTICLE INFO

Keywords:
Interactive Electronic Textbook;
Auditing;
4D;
Google Slide;
Quizizz.

ABSTRACT
This research was carried out at an undergraduate Accounting Department in a university at Pekanbaru, Riau. The participants were three auditing experts, an information technology expert, eight lecturers teaching auditing, and 87 students from the auditing department (they took Auditing 1, auditing 2, and auditing practice courses). This study adopted the R & D method to develop an Interactive Electronic Textbook (BAEI) for Auditing courses using Google Slides and Quizizz applications. The results revealed that the auditing BAEI was designed to be validated by experts, a lecturers group, and students indicating a high interest in the developed auditing BAEI.

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1. INTRODUCTION

Education is a comprehensive process to cultivate skills, attitudes, and forms of behavior bringing positive values. This is a human obligation as a servant to Allah SWT. Law no. 20 of 2003 concerning the National Education System states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively foster their potential to have religious-spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, their societies, nation, and state.

The Covid-19 pandemic has been a challenge and an opportunity. As an example, it stimulates teachers and students to utilize technology helping them more competent in this 21st-century era and welcoming society’s 5.0 era. One of the most predominant skills in the 21st century is self-directed learning or autonomous learning as the ultimate educational outcome. Regarding this, this pandemic period can train and instill the students’ learning habits to be autonomous learners through various online learning activities, such as online classes and webinars. This situation has become a challenge for them in performing teaching practices. To illustrate, they should be able to ensure that their students comprehend the learning materials conveyed through e-learning as an innovative learning system. In response to such a circumstance, they should be able to design learning resources and materials with online means.
The auditing course is one of the most vital courses which should be mastered by the Auditing Department students. Djamil (2018) affirms auditing is a process of audit work carried out by the auditor in a systematic, planned, and integrated manner with particular stages and procedures. Technically, the auditing practices involve the process to collect and assess supporting evidence. Besides, it is headed to the process of corroborating evidence related to management statements and presented in the financial statements about economic activities or events. This aims at reporting the conformity level of the statements presented by management in the financial statements. It is conducted in peculiar criteria to communicate the assessment results in reporting to the specified parties. The auditors’ job in an audit is to collect, evaluate supporting and corroborate the evidence about managing statements in the financial statements. The ultimate goal of a financial report prepared by management is to accumulate relevant and reliable financial information communicated to various parties as consideration to decide on economic policy.

Djamil (2018) adds the information presented will be objective if it presents the financial statements having values for its users. Objective information is information that is relevant and reliable. To obtain relevant and reliable information, in compiling financial statements, a generally accepted criterion must be accomplished. These generally accepted criteria in accounting are called Generally Accepted Accounting Principles.

The importance of generally accepted accounting principles in the preparation of financial statements is to unite perceptions in diverse concepts, standards, definitions, methods, and presentation of an item presented in the financial statements. With these unified perceptions, it was expected that the entire financial information can be understood with the same understanding by various parties to make the financial information have use-value. In the financial accounting standards, it was explained about the problems of recognizing, measuring, recording, appraising, presenting, and grouping each item in the financial statements.

Based on the results of the pre-research, information was obtained that students were still not skilled in solving problems. As evidence, there were still students who were not able to prepare working papers and apply audit procedures. Then, some students still incorrectly determined the audit opinion based on the real situations in the field. In other words, students seemed to be less competent in overcoming audit problems. Hence, adopting digital technology can be a breakthrough to create high-quality learning outcomes, engaging the students’ learning activities, and maximizing the students’ achievement. With these in mind, shifting from print to digital teaching materials can be a potential solution to resolve the current problems. One of them is to develop interactive electronic textbooks through Google Slides and Quizizz.

Nursela (2021) verbalized that teachers and students needed other teaching materials other than textbooks. They asserted that they required interactive electronic textbooks (BAEI) assisted by Google Slides and Quizizz. The main reason was such a type of book enables them to arise their motivation in teaching and learning practices both in online and offline modes.

Several studies have been conducted related to the development of electronic textbooks. As a matter of fact, Hwang (2018) stated the e-book development strategy with integrated guidance. The findings demonstrated a significant effect on the learning experience. Concerning the existence of ebooks, the research and development of ebooks can increase innovative thinking and reduce cognitive delays. Another investigative attempt was carried out by Nopriyanti (2015). She contended that the resulting product is in the form of interactive learning multimedia software, basic competencies for installing lighting systems and electrical wiring for external lighting system materials in class XI SMK in the field of Light Vehicle Engineering expertise were suitable for supporting the learning practices. Likewise, Purnama (2021) pinpointed that interactive electronic teaching materials (BAEI) assisted by Google Slides and Quizizz were able to enhance students’ learning outcomes. With interactive electronic teaching materials (BAEI) assisted by Google Slides and Quizizz, teachers were able to build active, creative, and innovative learning activities. This was in line with the designed real purposes of learning.
practices, namely deploying proper and contextual teaching materials to mitigate students’ passive learning attitudes.

Asrowi et al (2019) explained that textbooks were one of the indispensable elements in learning. As a result, the government has provided textbooks as a form of curriculum management to support the effectiveness and efficiency of learning. Although teachers and students perceived that the government-mandated textbooks were helpful, it does not mean that they did not have weaknesses. Hence, the proposed interactive electronic teaching materials have been proven to improve students’ learning outcomes in the form of knowledge. In short, interactive electronic teaching materials can be an alternative solution to the limitations of textbooks (printed). This was supported by those claiming that interactive electronic teaching materials showed better learning outcomes than those employing printed textbooks.

Allred (2019) confirmed that the trend of interactive electronic teaching materials (e-textbooks) in higher education has provided reasons for additional research on their effectiveness when compared to traditional printed textbooks. Specific investigation on interactive e-textbooks enriched with embedded links, videos, quizzes, or other activities remained scarce. The study showed a significant positive correlation between overall course scores and two of the three variables tested (time and engagement). The survey results revealed a high level of comfort and convenience in implementing interactive electronic teaching materials. Furthermore, Susiaty et al (2021) in their research explained that Google Slides were an online presentation application that functioned to create, store and share documents with other users. The use of textbooks with the Google Slides application prevents users from damaging or losing their textbooks. In a similar vein, Sari et al (2019) argued that Quizizz was an online application where lecturers can design quizzes in the form of multiple-choice questions and other choices. In addition, Quizizz can be developed or presented in the form of a game.

The choice of developing interactive electronic textbooks using the Google Slides and Quizizz applications is due to their easiness. As an illustration, lecturers, and students can access the application via a computer, notebook, or smartphone. Google Slide and Quizizz have never been fostered and applied in auditing courses at the Accounting Study Program at the Religious University in Pekanbaru Riau.

Therefore, the current study aimed at developing an interactive electronic textbook (BAEI) on auditing through Google Slide and Quizizz. Quizizz application was selected as an interactive electronic textbook (BAEI). In previous studies, Quizizz was only utilized as a learning evaluation tool to design interactive questions for supporting classroom interaction where lecturers created interactive quiz questions. These questions can be employed during the tests or final exam. In 2021, quizizz added a new feature allowing lecturers to be able to design new materials or textbooks in the form of interactive presentations. It works by combining material slides, media, and questions accompanied by interesting pictures. In addition, the present study adapted research and development methods (R & D) with the 4D method.

2. METHODS

The method applied in this research was Research and Development (R & D). The development model utilized in this study was a 4D model. The investigative steps of this 4D development model consist of defining, designing, developing, and disseminating (Thiagarajan as cited in Sugiyono, 2017). In this study, the author only limited this R & D until the developing stage not disseminating. This was caused by the main objective of this research was to cultivate an interactive electronic textbook (BAEI) auditing media at the validator level.

This research was conducted in one of the Accounting Departments at a Religious University in Pekanbaru, Riau. The participants were experts (validators) and students. The validators consisted of four material experts, three media experts from the accounting Department (concentrating on the auditing), and one lecturer in the information technology Department (concentrating on machine learning and computer vision expertise).
The participants were three auditing experts, an information technology expert, eight lecturers teaching auditing, and 87 students from the auditing department (they took Auditing 1, auditing 2, and auditing practice courses). The data were collected through indirect communication and measurement techniques. On the one hand, indirect communication encompassed the utilization of validation sheets and questionnaires to identify the validity and practicality of the developed products. On the other hand, the measurement technique was a test with problem-solving questions to seek the effectiveness of the developed products. The auditing problem-solving ability test was implemented to obtain data on students’ problem-solving abilities before and after the use of interactive electronic textbooks (BAEI) assisted by Google Slides and Quizizz.

3. FINDINGS AND DISCUSSION

Sanjaya (2015) stipulates that the development of a teaching material should be based on the students’ needs analysis. There are several reasons why it is necessary to develop teaching materials, namely:

1. The availability of materials based on the demands of the curriculum. It means that the developed teaching materials must be following the curriculum.
2. Target characteristics. It means that the developed teaching materials can be adapted to the characteristics of students as targets, such as the social, cultural, and geographical characteristics.
3. The development of teaching materials must be able to solve problems in learning.

Thus, the development of teaching materials in schools needs to focus on the students’ characteristics. In this case, it should be adjusted to the students’ needs based on the curriculum requirement (participatory and active students). The development of student activity sheets is one of the alternative teaching materials that will be useful for students to master certain competencies. These sheets enable students to enrich information about the teaching materials systematically.

3.1. Characteristics of Teaching Materials

Teaching materials have several characteristics, Prastowo (2018) reveals that the characteristics of teaching materials ideally cover:

1. Self-instructional. This characteristic enables students to be able to teach themselves with the developed teaching materials. Therefore, there must be clearly defined objectives in the teaching materials. Besides, they should provide teaching materials packaged into more specific units or activities.
2. Self-Contained. It means that the entire subject matter should be grounded in a unit of competencies and sub-competencies wrapped in developed teaching materials.
3. Stand Alone. The developed teaching materials should not rely on other teaching materials.
4. Adaptive. It means that teaching materials should be adapted to the advancement of sciences and technology.
5. User Friendly. It means that every displayed instruction and information should be helpful and friendly to the users (e.g. the ease with which the user can respond and access as desired).

3.2. Strategies for Developing Teaching Materials

According to Cahyadi (2019), pedagogically there are four strategies to develop teaching materials, namely:

1. By Development
   This strategy builds teaching materials from scratch (empty) since what teachers want to convey is very unique and special. In this case, teachers can create teaching materials from nothing to something. Further, teachers can explain more specific teaching materials where such teaching materials remain original since they were generated from the teachers’ ideas authentically.
2. By Utilization
This strategy takes ready-made teaching materials without any modification. In particular, teachers can convey teaching materials without any frills. For example, teachers get references from government-mandated books based on the 2013 curriculum.

3. By Modification
   This strategy attempts to adjust teaching materials taken by making modifications and adjustments. This strategy tends to be identical because it is obtained from the same source. However, in practice, teachers can modify the teaching materials based on the students’ needs.

4. By Customization
   This strategy develops teaching materials by combining miscellaneous objects of diverse contents. In this strategy, teachers enable to mix the previous strategies of teaching materials development. From the explanation above, teachers can develop teaching resources and materials through supporting tools/media. In this study, Google Slides and Quizizz were applied to cultivate an interactive electronic textbook (BAEI) for auditing courses.

Utomo (2020) adds that thematic teaching materials and learning practices run more effectively in Quizizz-based learning activities. Moreover, they provide optimal results for students. Hence, teachers should use Quizizz in the thematic teaching process to invigorate students’ learning outcomes. In addition, teachers should try to use instructional media appropriate to the particular teaching materials to attract and engage the students learning practices. Further, it should attract the attention of students to engage them in the classroom learning activities.

Smaldino (2014) adds that learning technology is theory and practice in the design, development, utilization, management, and evaluation of processes and resources for learning. Learning technology is a combination of three streams of mutual interests, namely media in education, psychology of learning, and systemic approach in education.

3.3. Procedure for developing 4D teaching materials

The procedure for developing the 4D Thiagarajan model textbook (Sugiyono, 2017) in this study can be explained as follows:

1. Defining Stage
   In defining stage, the researcher defines instructional needs to locate what is needed, what concepts are adopted/adapted, what evaluation is applied, and what learning specifications will be implemented later in BAEI auditing. More specifically, the stages are as follows:
   a. Front end analysis
      This stage aims at determining the subject matter of the learning process time. It tries to find out which existing textbooks need to be developed. The analysis was carried out in the pre-research stage through interviews with accounting lecturers teaching auditing courses at the Accounting Department at a religious university in Pekanbaru, Riau. Based on the results of interviews with lecturers, lecturers have not applied the latest version of textbooks, such as interactive electronic textbooks (BAEI) during the COVID-19.
   b. Analysis of students’ characters
      At this stage, the students’ reading interests remained low since teachers still used traditional textbooks. These analysis results became initial information for the lecturers to develop a new version of teaching materials in the form of a textbook.
   c. Task analysis
      At this stage, teachers identify the main skills that will be learned and analyzed. Then, they adjust it to additional skills required by students. This analysis ensures a thorough review of the tasks in the teaching materials.
   d. Concept analysis
      At this stage, the interviews were performed to seek the main concepts in the auditing courses. In addition, it is a process of conceptualizing the teaching materials based on the students’ needs and the Indonesian National Qualifications Framework (KKNI).
e. Formulation of learning objectives

At this stage, the goal is to combine the results of the previous stages. Also, its functions determine the object of research. From the concept analysis, the learning objectives which should be achieved in the textbook have been obtained.

2. Designing Stage

The purpose of this stage is to design a prototype learning device through Google Slides and Quizizz. In this stage, the preparation of textbooks was carried out. There were four steps operationalized at this stage, namely:

a. Preparation of test standards (constructing criterion-referenced test).

In this stage, the researcher employed Quizizz to prepare the test standards. The preparation of test standards was based on the analysis results of the specific learning objectives and students' analysis. From this point, a learning outcomes test grid was compiled. The test was adjusted to the student's cognitive abilities. Additionally, the scoring of the test results deployed an evaluative guide containing a scoring guide and an answer key.

b. Selecting media should be harmonious with the characteristics of the teaching materials and learning objectives.

Media selection was conducted to pinpoint instructional media relevant to the characteristics of students and teaching materials. Media selection was based on the results of concept analysis, task analysis, and the characteristics of students as users. At this stage, the researcher utilized Google Slides and Quizizz.

c. Selecting formats functions to examine the formats of existing textbooks and determines the format of the textbooks to be developed.

Creating an initial design according to the selected format

Figure 1. Initial design using Google Slides

Figure 2. Initial design using Quizizz
3. Developing Stage
This stage aims at producing learning devices been revised based on input from the validators. This stage includes six steps, namely:

a. Expert appraisal

The researcher conducted interviews to collect the data and distributed a questionnaire to confirm the obtained data. The questionnaire was validated by experts and students before being distributed.

The validators in this study were four material experts, three media experts (consisting of three lecturers with auditing expertise in an Accounting Department), and a lecturer with machine learning & computer vision expertise in an Information Technology Department.

On the one hand, the qualitative data were generated from the suggestions and input of experts. On the other hand, the quantitative data were generated from the validating and testing results.

The effect size test technique was deployed to analyze the data (Nursela, 2021). The following are the validating results carried out by auditing experts and information technology experts. More specifically, it can be viewed in Table 2 and Table 3.

| Table 2. The results of the first phase of Feasibility Test by Auditing Experts

| 1. Aspects of the suitability of the material with KKNI

| Scores | Expert Validation Conversion | Score(s) | Conclusion | Score(s) | Conclusion | Score(s) | Conclusion |
|--------|------------------------------|----------|------------|----------|------------|----------|------------|
| 81 - 100 | Very Valid | Expert 1 | 75 | Valid | Expert 2 | 67 | Valid | Expert 3 | 81 | Very valid |
| 61 - 80 | Valid | | | | | | |
| 41 - 60 | Less Valid | | | | | | |
| 0 - 40 | Very Less Valid | | | | | | |
| 2. Aspects of material accuracy

| Score | Expert Validation Conversion | Score(s) | Conclusion | Score(s) | Conclusion | Score(s) | Conclusion |
|-------|------------------------------|----------|------------|----------|------------|----------|------------|
| 81 - 100 | Very Valid | Expert 1 | 78 | Valid | Expert 2 | 70 | Valid | Expert 3 | 80 | Valid |
| 61 - 80 | Valid | | | | | | |
| 41 - 60 | Less Valid | | | | | | |
| 0 - 40 | Very Less Valid | | | | | | |
| 3. Aspects of material recency

| Score | Expert Validation Conversion | Score(s) | Conclusion | Score(s) | Conclusion | Score(s) | Conclusion |
|-------|------------------------------|----------|------------|----------|------------|----------|------------|
| 81 - 100 | Very Valid | Expert 1 | 79 | Valid | Expert 2 | 77 | Valid | Expert 3 | 80 | Valid |
| 61 - 80 | Valid | | | | | | |
| 41 - 60 | Less Valid | | | | | | |
| 0 - 40 | Very Less Valid | | | | | | |
| 4. Aspects of presentation technique

| Score | Expert Validation Conversion | Score(s) | Conclusion | Score(s) | Conclusion | Score(s) | Conclusion |
|-------|------------------------------|----------|------------|----------|------------|----------|------------|
| 81 - 100 | Very Valid | Expert 1 | 72 | Valid | Pakar 2 | 70 | Valid | Pakar 3 | 72 | Valid |
| 61 - 80 | Valid | | | | | | |
| 41 - 60 | Less Valid | | | | | | |
| 0 - 40 | Very Less Valid | | | | | | |

Source: Analyzed data results, 2021
Table 3. Results of the first phase of Feasibility Test by Information Technology Experts

| Score (s) | Expert Validation Conversion | Expert 4 | Score(s) | Conclusion |
|-----------|------------------------------|----------|----------|------------|
| 81 - 100  | Very Valid                   | 69       | Valid    |            |
| 61 - 80   | Valid                        | 69       | Valid    |            |
| 41 - 60   | Less Valid                   |          |          |            |
| 0 - 40    | Very Less Valid              |          |          |            |

2. Content Aspects

| Score (s) | Expert Validation Conversion | Expert 4 | Score(s) | Conclusion |
|-----------|------------------------------|----------|----------|------------|
| 81 - 100  | Very Valid                   | 69       | Valid    |            |
| 61 - 80   | Valid                        | 69       | Valid    |            |
| 41 - 60   | Less Valid                   |          |          |            |
| 0 - 40    | Very Less Valid              |          |          |            |

3. Convenience Aspect

| Score (s) | Expert Validation Conversion | Expert 4 | Score(s) | Conclusion |
|-----------|------------------------------|----------|----------|------------|
| 81 - 100  | Very Valid                   | 73       | Valid    |            |
| 61 - 80   | Valid                        | 73       | Valid    |            |
| 41 - 60   | Less Valid                   |          |          |            |
| 0 - 40    | Valid                        |          |          |            |

4. Aspects of presentation technique

| Score (s) | Expert Validation Conversion | Expert 4 | Score(s) | Conclusion |
|-----------|------------------------------|----------|----------|------------|
| 81 - 100  | Very Valid                   | 73       | Valid    |            |
| 61 - 80   | Valid                        | 73       | Valid    |            |
| 41 - 60   | Less Valid                   |          |          |            |
| 0 - 40    | Very Less Valid              |          |          |            |

Resources: Data Analysis Results, 2021

b. First Revision by the experts
   1) Auditing Experts

Based on the results of BAEI validation by auditing experts, it has been declared valid. However, there are several parts to be revised. Revisions are made by the validators’ suggestions which can be seen in the following table:
Table 4. List of revisions by auditing experts

| NO | Suggested Improvements                                                                 | Results of Improvements                                                                 |
|----|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 1  | Images in BAEI materials are still difficult to understand                              | Following up the suggested improvements by fixing images according to expert directions |
| 2  | For materials of Auditing Standard, it is recommended to adopt the latest standard rules | Following up the suggested improvements by invigorating and adding new rules to the materials of Auditing Standard according to experts' directions |
| 3  | The materials of auditing opinions should be accompanied by a case                     | Following up the suggested improvements by adding cases according to experts' directions |

Source: Data Analysis Results, 2021

2) Information Technology Experts

Based on the results of BAEI validation by information technology experts, it has been declared valid. However, several parts need to be revised. Revisions are made based on the validators’ suggestions which can be seen in the following table:

Table 5. List of revisions by Information Technology experts

| NO | Suggested Improvements                                                                 | Results of Improvements                                                                 |
|----|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 1  | It is recommended to improve the interface to make it more attractive                  | Following up the suggested improvements by optimizing the interface according to expert directions |
| 2  | It is recommended to apply a combination of additional images, music or sound           | Following up the suggested improvements by adding and combining images and sounds according to expert directions |

Source: Data Analysis Results, 2021
The following is the results of the second phase of feasibility by auditing experts:

**Table 6. Results of the second phase of Feasibility Test by Auditing Experts**

1. Aspects of the suitability of the material with KKNI

| Score (s) | Expert Validation | Expert 1 | Expert 2 | Expert 3 |
|-----------|-------------------|----------|----------|----------|
| 81 - 100  | Very Valid        | 80       | 80       | 83       |
| 61 - 80   | Valid             |          |          |          |
| 41 - 60   | Less Valid        |          |          |          |
| 0 - 40    | Very Less Valid   |          |          |          |

2. Aspects of material accuracy

| Skor      | Expert Validation | Expert 1 | Expert 2 | Expert 3 |
|-----------|-------------------|----------|----------|----------|
| 81 - 100  | Very Valid        | 82       | 82       | 84       |
| 61 - 80   | Valid             |          |          |          |
| 41 - 60   | Less Valid        |          |          |          |
| 0 - 40    | Very Less Valid   |          |          |          |

3. Aspects of material recency

| Skor      | Expert Validation | Expert 1 | Expert 2 | Kesimpulan | Expert 3 |
|-----------|-------------------|----------|----------|------------|----------|
| 81 - 100  | Very Valid        | 81       | 80       | 84         | Very Valid |
| 61 - 80   | Valid             |          |          |            |          |
| 41 - 60   | Less Valid        |          |          |            |          |
| 0 - 40    | Very Less Valid   |          |          |            |          |

4. Aspects of presentation technique

| Skor      | Expert Validation | Expert 1 | Expert 2 | Expert 3 |
|-----------|-------------------|----------|----------|----------|
| 81 - 100  | Very Valid        | 80       | 80       | 83       |
| 61 - 80   | Valid             |          |          |          |
| 41 - 60   | Less Valid        |          |          |          |
| 0 - 40    | Very Less Valid   |          |          |          |

**Resources:** Results of data analysis, 2021

The following is the results of the second phase of feasibility by information technology experts:

**Table 7. Results of the second phase of Feasibility Test by Information Technology Experts**

1. Design Aspects

| Score (s) | Expert Validation | Expert 4 |
|-----------|-------------------|----------|
| 81 - 100  | Vert Valid        | 81 Very Valid |
| 61 - 80   | Valid             |          |
| 41 - 60   | Less Valid        |          |
| 0 - 40    | Very Less Valid   |          |

2. Content Aspects

| Score (s) | Expert Validation | Expert 4 |
|-----------|-------------------|----------|
| 81 - 100  | Very Valid        | 82 Very Valid |
| 61 - 80   | Valid             |          |
| 41 - 60   | Less Valid        |          |
| 0 - 40    | Very Less Valid   |          |
3. Easiness Aspects

| Skor   | Validation Conversion | Expert Validation Conversion | Score(s) | Conclusion |
|--------|-----------------------|------------------------------|----------|------------|
| 81 - 100 | Very Valid          | Expert 4                      | 73       | Valid      |
| 61 - 80   | Valid                |                              |          |            |
| 41 - 60   | Less Valid           |                              |          |            |
| 0 - 40    | Very Less Valid      |                              |          |            |

4. Aspects of presentation technique

| Skor   | Validation Conversion | Expert Validation Conversion | Score(s) | Conclusion |
|--------|-----------------------|------------------------------|----------|------------|
| 81 - 100 | Very Valid          | Expert 4                      | 73       | Valid      |
| 61 - 80   | Valid                |                              |          |            |
| 41 - 60   | Less Valid           |                              |          |            |
| 0 - 40    | Very Less Valid      |                              |          |            |

Resources: Results of data analysis, 2021

Once the BAEI has been considered valid by the experts, the researcher will carry out the next stage, namely conducting limited trials for lecturers and students. This is in line with the research of Suarsana (2013) reporting that the prepared e-modules indicated good quality. Conversely, they still need to be refined.

3) Limited trials

The following are the results of the limited trials for lecturers and students:

Table 8. Test Results for Lecturers and Students

| Score (s) | Validation Conversion | Lecturers | Students |
|-----------|-----------------------|-----------|----------|
|           |                       | Score(s)  | Conclusion | Score(s)  | Conclusion |
| 81 - 100  | Very Interesting      | 12        | Very Interesting | 9         | Very Interesting |
| 61 - 80   | Interesting          | 88        | Interesting | 91        | Interesting |
| 41 - 60   | Less Interesting     |           |           | 27        | Interesting |
| 0 - 40    | Very Less Interesting|           |           |           |          |

2. Aspek Kesesuain Materi dengan KKNI

| Skor     | Validation Conversion | Lecturers | Students |
|----------|-----------------------|-----------|----------|
|          |                       | Score(s)  | Conclusion | Score(s)  | Conclusion |
| 81 - 100 | Very Interesting      | 57        | Very Interesting | 73        | Very Interesting |
| 61 - 80  | Interesting          | 43        | Interesting | 27        | Interesting |
| 41 - 60  | Less Interesting     |           |           |           |          |
| 0 - 40   | Very Less Interesting|           |           |           |          |

3. Aspects of Accuracy and Updatingness of Materials

| Skor     | Validation Conversion | Lecturers | Students |
|----------|-----------------------|-----------|----------|
|          |                       | Score(s)  | Conclusion | Score(s)  | Conclusion |
| 81 - 100 | Very Interesting      | 67        | Very Interesting | 75        | Very Interesting |
| 61 - 80  | Less Interesting     | 33        | Less Interesting | 25        | Less Interesting |
| 41 - 60  | Less Interesting     |           |           |           |          |
| 0 - 40   | Very Less Interesting|           |           |           |          |

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4. Aspects of Presentation Techniques

| Score(s)       | Validation Conversion | Lecturers| Students |
|----------------|-----------------------|----------|----------|
|                |                       | Score(s) | Conclusion | Score(s) | Conclusion |
| 81 - 100       | Very Interesting      | 80       | Very Interesting | 88       | Very Interesting |
| 61 - 80        | Interesting           | 20       | Interesting | 12       | Interesting |
| 41 - 60        | Less Interesting      |          |           |          |            |
| 0 - 40         | Very Less Interesting |          |           |          |            |

Sources: Results of Data Analysis, 2021

3.4. Analysis

Limited testing was carried out on a small group of lecturers of the Auditing Department (N=8) representing 100%. Also, it represented a group of students for the Accounting Department at a Religious University in Pekanbaru, Riau. 87 students of the Accounting Department taking auditing courses for the 2018 batch (Audit 1, Audit 2, and Audit practice courses) participated in the current study.

Lecturers

Based on the results from table 8, the lecturers tested the development of BAEI with the help of Google Slides and Quizizz.

In terms of design and content

As many as 12% of lecturers showed very interesting responses. 88% of lecturers indicated interesting responses. It means that lecturers were very interested in the designed interactive electronic textbooks.

Viewed from terms of conformity of the material with KKNI

As many as 57% of lecturers gave very interesting responses. 43% of lecturers gave interesting responses. It means that following the material with the KKNI, lecturers were very interested in interactive electronic textbooks that are being designed.

In terms of accuracy and up-to-date material

As many as 67% of lecturers gave very interesting responses. 33% of lecturers expressed interesting responses. It means lecturers were highly interested in the designed interactive electronic textbooks.

In terms of presentation technique

As many as 80% of lecturers denoted very interesting responses. 20% of lecturers gave interesting responses. It means that in terms of presentation technique, lecturers are very interested in interactive electronic textbooks being decided.

Students

Based on the results from table 8, the lecturers tested the development of BAEI with the help of Google Slides and Quizizz.
In terms of design and content

As many as 9% of students reported very interesting responses. 91% of students provided interesting responses. It means that in terms of design and content, students are very interested in the designed interactive electronic textbooks.

In terms of the suitability of the material with the KKNI

As many as 73% of students revealed very interesting responses. 27% of students expressed interesting responses. It means that in accordance with the material with the KKNI. Similarly, students are very interested in the designed interactive electronic textbooks.

In terms of accuracy and up-to-date material

As many as 75% of students showcased very interesting responses. 25% of students displayed interesting responses. It means that in terms of accuracy and up-to-date material, students are very interested in the designed interactive electronic textbooks.

In terms of presentation technique

As many as 88% of students indicated very interesting responses. 12% of students gave interesting responses. This means that in terms of presentation techniques, students are very interested in the designed interactive electronic textbooks.

Based on the abovementioned data analysis results, the development of BAEI auditing courses in the undergraduate Accounting Department at the Religious University in Pekanbaru Riau using Google Slides and Quizizz can be well received by lecturers and students. As an example, lecturers and students were very interested in cultivating this BAEI, especially during online lectures (e.g. Classroom activities during COVID-19). Then, this development can also support the discourse of changing industry 4.0 to society 5.0 which is currently running.

This is in line with the research of Suarsana (2013). To illustrate, the use of e-modules could enhance the students’ critical thinking skills. Besides, students’ responses to e-modules were very positive. Another empirical evidence was reported by Susiaty (2021). She claimed that after applying to learn with Interactive Electronic Textbooks (BAEI) assisted by Google Slides and Quizizz, the students’ problem-solving abilities reached a value of t = 7.396 where t arithmetic > t table (7.396 > 1.699) then H0 was rejected. Thus, learning with the designed Interactive Electronic Textbooks (BAEI) assisted by Google Slides and Quizizz can increase the students' problem-solving abilities.

Fadillah (2021) also obtained the same research results. As a matter of fact, the use of tools (e.g. video media and quizizz) were effective to increase the students’ comprehension of the delivered teaching materials. In a similar vein, Purwati (2021) argued that there was an increase in the mathematical problem-solving abilities of junior high school students before and after being given BAEI.

Disseminating

The dissemination process is the final stage of development. The dissemination stage is carried out to promote the development product so that it can be accepted by users, either individuals, groups, or systems. However, in this study, the author only limited the 4D development model until the developing stage to cultivate the book as the product. In other words, it did not involve the disseminating process. This was because the main objective of this research is to develop an interactive electronic textbook (BAEI) auditing media at the validator level.
4. CONCLUSION

The Interactive Electronic Textbook (BAEI) for the auditing course in this study was developed using a 4-D development model from Thiagarajan (Sugiyono, 2017) consisting of four stages, namely, (1) defining, (2) designing, (3) developing, and (4) disseminating. BAEI validation results have been declared valid and feasible to be developed based on the experts’ validation. The response of lecturers and students in research is very good. To illustrate, lecturers and students were highly interested in the development of the BAEI being designed in terms of the suitability of the material with the Indonesian National Qualification Framework (KKNI). Additionally, lecturers and students were also very interested in the BAEI being designed.

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