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FORMATIVE EVALUATION OF AUTHENTIC READING ASSESSMENT MODEL ON BLENDED LEARNING TO PROMOTE SELF-DIRECTED LEARNING SKILLS

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Abstract

This study aims to investigate the quality of the authentic reading assessment model on blended learning in promoting self-directed learning skills as the research product in the form of a basic reading book. This study follows formative evaluation activities proposed by Tessmer in Plomp & Nieveen (2013) comprising self-evaluation, expert review, one-to-one evaluation, small group, and field test. The selecting participants involve six experts to review the research products in the form of basic reading book, five users in one-to-one evaluation, 15 students in small group, and 35 students in field test. Data were collected through the specification checklist to determine the specification of the research product. Then, a validation sheet was used to get information about the validity, the interview for one-to-one evaluation, and the questionnaires for students and lecturers to determine the practicality. Data of the effectiveness was collected through a comparison of pretest and posttest values. The data were analyzed quantitatively and qualitatively depending on the instruments used. It was found that the components of reading, authentic assessment, blended learning, and self-directed learning achieved the criteria. Viewing the validity of the research product, the results of the experts review show that it was very valid (4.01). Meanwhile, from the result of the one-to-one evaluation, the book was valid from the users' review. The book was categorized as very practical with a score of 4.22. Authentic reading assessment model on blended learning developed that promotes students' self-directed learning significantly reached the score of t-calculated 14.17, higher than t-table 2.02. It indicates that the research products were effective in enhancing students' reading skills. The authentic reading assessment model on blended learning developed achieved quality with high resistance to revision.

1. INTRODUCTION

Assessment is viewed as an essential part of the learning process that is useful for measuring the learning outcomes. Assessment should be integrated into the teaching and learning cycle that must be obtained continuously to enhance learning, (Kamli & Almalki, 2024). Since assessment also provides information about student learning and progress, teaching quality, and program and institutional accountability (Opre, 2015). The common way to examine the EFL learners' can be done by doing an assessment. It is a method to estimate a student's understanding of a lesson (Harahap et al., 2024). It can be said that assessment is the main part of the learning process that determines the quality of the instruction. The objective of instruction is designed to relate to learning activities and the assessment process (Hosseini & Azarnoosh, 2014). The assessment must be designed as effectively as possible by considering the instruments' procedures and authenticity.

Although the issue of authentic assessment has appeared since 1988 and became popular in the early '90s (Frey et al., 2012), some problems in implementing it still appear in education recently. Firstly, the teachers have difficulties in developing the instrument of attitude, implementing the authentic assessment, formulating the

indicators, designing the assessment rubric for the skills, and gathering the scores from multiple measurement techniques (Retnawati et al., 2016). Secondly, the English teacher still experienced some constraints during instructional activities, so the assessment process did not run effectively (Fitriani, 2017). Especially in assessing reading, it is challenging to implement authentic reading assessment (Fitriani, 2017; Prasetyo, 2017; Sutarto & Jaedun, 2018).

It needs authentic materials with more effort and time to prepare. When teachers are supposed to give a reading task, they must select from available sources, prepare a particular book report format, and make a certain scoring rubric (Prasetyo, 2017). Without adequate and proper knowledge and skills, problems in implementing assessment can potentially happen (Suarimbawa et al., 2017). Based on these phenomena, educators are expected to improve their insight about authentic assessment to improve the quality of teaching and learning.

Nowadays, the educational system is concerned with using technology besides onsite learning activities. Universities face increasing pressure to enhance students' academic performance and offer students an optimal learning environment by providing blended (Ali et al., 2023). Blended learning is an approach that integrates conventional classroom instruction with online learning regarding group comprehension and individual achievement and satisfaction (Nassar et al., 2023). It is suggested that lecturers maximize the use of technology in assessing students' learning in higher education.

In the higher education context, the interest to self-directed learning has been growing. This is because 21st-century learning environments require students to engage in online activities. Online learning supports students to be aware of their responsibility to control and monitor their learning as self-directed learners (Hassan et al., 2024).

The idea of self-directed learning comes from Knowles (1975) who describes SDL as the process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes (Knowles, 1975).

Self-directed learning is linked to self-regulated learning in that both are necessary for students to be independent in learning. However, the difference between self-directed learning (SDL) and self-regulated learning (SRL) is that SDL constructions are at the macro level, whereas SRL constructions are at the micro level (Mercado, 2024). Self-regulated learning is an active, constructive process whereby learners set goals for their learning and attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and contextual features of the environment (Quesada-Pallarès et al., 2019) .

As a result, SRL allows learners to learn to control their behavior through the social context in which learning occurs and interaction with self-reward (Sayukti, 2018). This study concerns to self-directed learning to prepare the students better for higher education, work and life in life in the 21st century (Verster et al., 2024).

Technological developments have made learning accessible almost everywhere by providing opportunities for students to study independently according to their individual needs. However, SDL activities still need guidance because educators play a role in fostering a sense of responsibility in students to involve them in learning.

Many studies are currently being conducted to investigate self-directed learning skills among students in higher education. Digital and mobile technologies emerged as important resources supporting self-directed learning (Curran et al., 2019). It was found that self-directed learning is an obliged, creativity-enhanced as well as flexible and fast-paced practice for workers in workplace learning (Lemmetty & Collin, 2020).

Then, the finding also shows that self-directed learning skills were found to have a significant impact on learning achievement (Yoo, 2024). These findings motivate the researchers to promote self-directed learning skills through the authentic reading assessment

Model on blended learning.

Based on the researcher's preliminary study, the result of students' responses to the questionnaire shows that the students need the authentic reading assessment model on blended learning. Then, based on the interviews with three lecturers who taught Basic Reading at University, they also perceived that they authentic reading assessment model on blended learning is needed in assessing students' reading skills because the students are close to technology.

Meanwhile, the documents were lack of the implementation of authentic reading assessment on blended learning and have not supported self-directed learning yet. They need the guidelines to practice authentic reading assessments on blended learning to promote students' self-directed learning skills.

The research gap shows that in this study the researchers want to develop an authentic reading assessment model in higher education. Then, the quality of the research products was evaluated in the form of formative evaluation as proposed by Tressmer.

It is hoped that this study can help lecturers to apply authentic blended assessment for better reading in higher education. This study is formulated under the question: "How is the quality of the authentic reading assessment model on blended learning to promote students' self-directed learning skills?

a) To what extent does the assessment model developed meet the criteria of an authentic reading assessment model on blended learning oriented to self-directed learning?

b) To what extent was the validity of the assessment model developed?

c) To what extent was the practicality of the assessment model developed t?

d) To what extent was the effectiveness of the assessment model developed?

2. LITERATURE REVIEW

2.1 Reading in English as a Foreign Language Context

Mastering reading is essential for English as a second/foreign language (ESL/EFL) students. In teaching reading, teachers must teach them how to read and how to apply their knowledge to comprehend any text Reading is also characterized as a cognitive process that integrates background knowledge and textual information to construct meaning (Chongsomboon, 2024). Reading helps the learners acquire a foreign language by indicating their understanding of the reading text.

Furthermore, reading comprehension is the capacity to understand a reading well and the ability to summarize it. The objectives of reading are to 1) determine the main idea; 2) determine core points; 3) understand the flow and instructions; 4) determine the organization of reading materials; 5) determine images of reading; 6) conclude; 7) predict meaning; 8) summarize; 9) distinguish between facts and opinions, and 10) get information from various sources, such as encyclopedias, atlases, maps, or digital annotation tools (Reflianto et al., 2021). The objectives can be achieved by using authentic material. The authentic materials include newspapers, literary and art publications, marketing brochures, business proposals, formal letters, and poems (Al-Shammari, 2021). So, in reading, there are reading activities that show students' comprehension of information in reading text that develop students' thinking in learning. The activity can be related to the assessment to see whether learners can get information from the text or not.

Therefore, in teaching reading, the language program must be focused on emphasizing how language is used rather than how it should be used to provide various meaningful experiences to learners (Shan-Shan, 2013) . The students should be prepared to develop reading using meaningful activities.

Regarding EFL, students of English tend to improve themselves by accomplishing reading tasks involving other areas of language learning such as vocabulary, writing, and grammar (Trang, 2017). In the Indonesian context, the role of reading instructors determines the students' literacy in learning English. They can select reading material and activities that match the learners' daily life context. As a result, it helps learners develop their reading skills more efficiently.

Assessing reading is closely linked to how the constructed text is understood. A recurring finding in the literature is that reading comprehension results from the cumulative interaction of the diverse skills and sub-skills that readers employ during the reading process (Kushki & Nassaji, 2024). Thus, assessment should help teachers understand how students construct meaning from text, the nature of the constructed meaning, and how they use the constructed meaning in related tasks.

2.2 Authentic Assessment

In education, assessment plays a crucial role in enhancing the effectiveness of teaching and learning. Classroom-based assessment was found to be particularly advantageous for students, offering them valuable feedback and fostering an awareness of their learning progress to achieve academic outcomes (Chongsomboon, 2024).

Recently, an important aspect of classroom-based assessment is assessment for learning (AfL) which encourages maximum feedback on learner performance and highlights student-teacher interactions. This shift also emphasizes the dynamic nature of reading, taking into account diverse factors such as sociocultural influences, reader engagement, and individual differences in learning styles and preferences (Kushki & Nassaji, 2024). Considering these statements, educators need to provide an authentic assessment in assessing students' reading ability.

Authentic assessment is an assessment that takes place in a context to evaluate students' knowledge or skills with real conditions (Martika & Zaim, 2021). It needs a variety of techniques to collect information about the progress of the students. Authentic assessments as a way to evaluate individuals in genuine contexts that offer

meaningful opportunities to gauge how much students have learned (Stewart-Wells & Keenan, 2020). It is hoped that from authentic assessment, there will be improvement in students' learning.

Authentic assessment contributes to the development of effective classroom measurement that encourages students to be more active and helps teachers reflect on their teaching and improve instruction (Fitriani, 2017). Through authentic assessment, learners have the experience to practice real-life problem-solving skills, communication, critical thinking, collaboration, and networking (Aziz et al., 2020). Thus, an assessment is authentic when the results contain accurate information about student progress.

The characteristics of authentic assessment are: (1) Complete learning, students can learn about the new material in the basic competence if the students have mastered the previous material, (2) Authentic, measuring the students' input, process, and output, (3) Continuous, providing continuous time, (4) Using a variety of techniques, and (5) Based on criteria preference (Supardi, 2015).

Furthermore, there were three important aspects in developing authentic assessment: (1) authentic assessment should be aligned to authentic instruction; (2) authentic assessment requires students to demonstrate relevant competence through a significant, meaningful, and worthwhile accomplishment; (3) authenticity is subjective, which makes student perceptions important to be accommodated in the planning process (Sutarto & Jaedun, 2018). Meanwhile, three parts must be available in designing an authentic assessment: context, instruction, and rubric (Hasanah et al., 2018).

Moreover, authentic reading assessment aims to assess many different kinds of literacy abilities in contexts (Hiebert et al., 2014). In more authentic contexts, literacy involves such things as reading and responding to newspaper articles or editorials, escaping through a novel, finding out about the people of another culture, or using information from a bus schedule or equipment manual. Those ideas show the real-life contexts of students.

2.3 Blended Learning

Technology has become part of the process of teaching and learning. Therefore, pedagogical practice at 21 must integrate technology in designing and developing instructional designs. Blended learning is a formal educational program through digital and online media using students' control from time to time, place, line, or speed (Hamzah et al., 2022). Thus, an alternative to technology-assisted learning that raises the standard of instruction is blended learning.

Blended learning involves combining technology with face-to-face instruction to deliver conventional class activities via computer-mediated and online training models (Ali et al., 2023). Thus, students will be motivated to arrive at class well-prepared. Blended learning can enrich students' learning experience because the learner can access unlimited resources from the internet while still receiving teacher guidance through face-to-face learning (Yaniawati et al., 2023).

So, the learning process can be balanced by combining electrical learning (E-Learning) and traditional learning (face-to-face) instructional models (Ikhwan & Widodo, 2019). The blended learning model can create a positive learning environment without being limited by space and time.

The arrival of COVID-19 accelerated the adoption of blended learning in higher education, merging traditional and online teaching methodologies (Lee et al., 2024). Over time, blended learning has evolved to encompass a variety of learning methods that leverage the internet and digital media within the traditional classroom setting, requiring active engagement from both teachers and students (Nantha et al., 2024).

Additionally, with the blended teaching model, teachers can provide a full role in the guidance and supervision to guide students to learn independently, actively, and creatively (Qin, 2019). Online technology also helps students to get additional information to meet competency and enrichment demands. Blended learning solves the challenge of customizing learning and individual needs. It is an opportunity to integrate the innovative and technological advances that learning offers.

Blended learning is categorized into three main themes: combining instructional modalities, instructional methods, and online and face-to-face instruction (Ghazizadeh & Fatemipour, 2017). In blended learning, students are expected to be active learners and able to understand the material. Therefore, when a teacher uses blended learning, students can learn optimally and get more information supporting the teaching and learning process.

Therefore, educators must become facilitators in implementing blended learning. Blended learning can be seen as a pedagogical approach that applies various learning approaches. One of the main reasons why teachers should consider blended learning is to support different types of individual learners better (Farrell, 2018). Because the types of individuals are different, blended learning can accommodate these differences.

Compared with traditional classroom learning, blended learning combines online and face-to-face instruction with the aim of optimizing students' learning environment, achieving thoughtful reflection, and enabling personalized instruction (Zhang, 2020). Moreover, in online learning, students learn through internet technology so that they can choose their content according to their needs and find and solve problems.

Blended learning encourages a teaching and learning process that combines and integrates conventional education systems with all digital systems (Maya, 2020). Meanwhile, a basic blended learning model consists of three stages, (1) seeking of information, (2) acquisition of information, and (3) synthesizing of knowledge. The stages of seeking information include seeking information from various sources and choosing critically from sources that provide information. At the information acquisition stage, students, individually or in groups, try to find, understand, and confront them with ideas already in their minds. Finally, synthesizing knowledge is reconstructing knowledge through assimilation and accommodation (Nasution et al., 2019). With blended learning, students also put more effort into doing assignments. Assessment in blended learning needs attention because, from the assessment, an educator knows whether or not the learning objectives are achieved.

Technology can also help students see and evaluate their work and the work of others from different perspectives (Milad, 2017). The blended assessment provides opportunities for students to be independent and collaborate in an online learning environment. Furthermore, the transition period following the COVID-19 pandemic has had a profound impact on teaching and learning. Thus, given its adaptability and effectiveness in integrating technology into the learning environment, the Blended learning model stands out as the most viable solution for navigating the challenges

posed by the 'new normal' (Nantha et al., 2024). With technology, self-directed learning facilitates personal autonomy, responsibility, and growth. In practice, using technology allows students to access various sources of information, search for and evaluate information, follow their interests, and interact with experts and colleagues.

2.4 Self-directed Learning

The success of online learning depends on learners' awareness of the ability to direct their own learning. Self-directed learning is considered a necessary 21st-century skill that plays a principal role in the success of learning acquisition as well as in predicting learners' readiness for online learning (Zhu et al., 2024).

Self-directed learning is defined as a learner's autonomous ability to manage his or her own learning process, by perceiving oneself as the source of one's own actions and decisions as a responsibility towards one's own lifelong learning (Foo & Hussain, 2010). Such definitions indicate that self-directed learners as the practice of autonomous learning (Zhu & Kadirova, 2022). Therefore, the teacher plays a vital role in fostering a sense of responsibility in students. Self-directed learning is a process in which a learner bears primary responsibility for planning, implementing, and evaluating the learning process. Therefore, the role of language in self-directed learning must be considered in the context of assessment and other aspects of the learner's activities (Mentz & Lubbe, 2021). Since self-directed learners can acquire new knowledge and manage the learning process throughout their entire lives skillfully (Pokhrel et al., 2024). In other words, students must have a high level of self-management to deal with various problems.

Self-directed learning empowerment represents an educational approach that gives students more control in managing and directing their learning (Morris, 2019). This approach encourages students to learn more independently, according to personal interests and needs. In other views, self-directed learning can be considered as learning by oneself that increases learner's autonomy and reliance on active learning (Yoo, 2024).

Meanwhile, self-directed learning skills are slightly associated with lifelong learning habits and workplace skills such as creativity, communication, and cooperation (Tekkol & Demirel, 2018). In a pedagogical environment, students take on most of the tasks that teachers usually do until they plan and do their learning activities (Mercado, 2024). So, self-directed learning allows students to become more effective learners. Self-directed learning helps students to be motivated to increase their participation in learning. Because students perceive independence and a sense of responsibility, they have initiative in learning (Geng et al., 2019). It indicates that self-directed learning can view students as owners and managers responsible for their learning process.

The use of technology in language learning allows students to practice their language skills wherever they want (Haidari et al., 2019). In this case, self-directed learning and technology support each other to implement quality learning to the demands of education in this century. By developing self-directed learning, students become more aware of learning strategies that suit their learning needs and how to manage academic challenges in teaching and learning (Du Toit-Brits & van Zyl, 2017).

3. METHOD

3.1 Procedures

This study was conducted ten, to determine the quality of the products, the researcher followed the activities suggested by Tessmer in Plomp & Nieveen (2013) as shown in Figure 1.

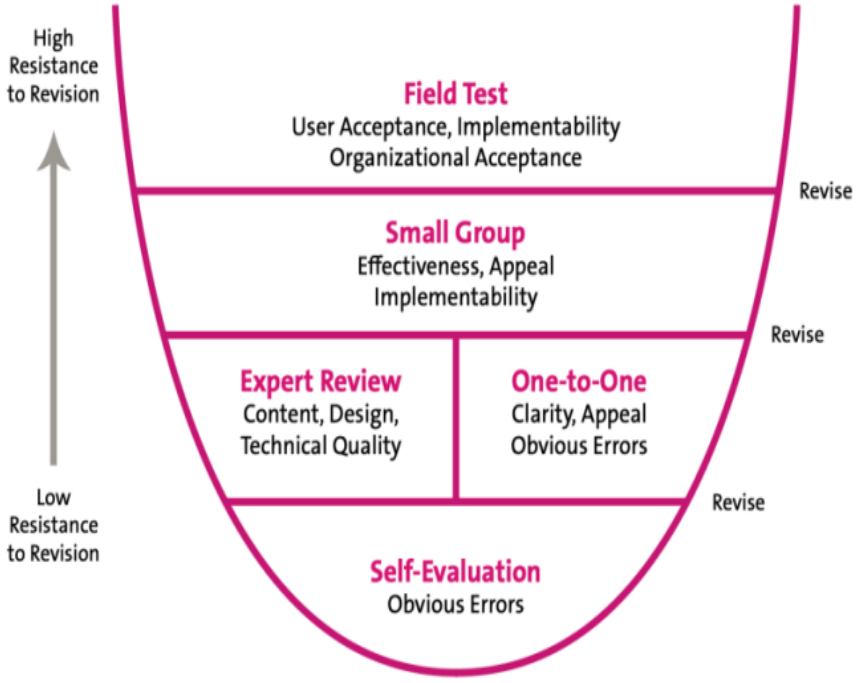

Figure 1: Layers of Formative Evaluation by Tessmer

3.1.1 Self-evaluation

Self-evaluation was conducted by the researcher on the prototype developed. The researcher checked the important characteristics related to the specifications of the model developed. These activities were assisted by colleagues to explore the feasibility of the model developed.

3.1.2 Expert Review

An expert review is an evaluation that provides an extrinsic view of the products developed. The relevant experts were asked to give suggestions or advice on the products developed. In this study, six experts reviewed all the products. They are reading experts, language experts, teaching experts, instructional design experts, educational technology experts, and graphic design experts.

In this phase, the researcher obtained a validation stage in developing the prototype. Three kinds of validation have been conducted; content validation, constructs validation, and face validation.

3.1.3 One-to-one Evaluation

The one-to-one evaluation was conducted by involving students (participants) to evaluate the prototype developed. The researcher and participant had intensive interaction during the evaluation process. This interaction was useful for information related to the intrinsic aspect and impact aspect.

The intrinsic aspect consists of clarity, ease of use, the sequence of use, and the completeness element of the product. Meanwhile, the impact aspect consists of performance and satisfaction with using the products. This evaluation was conducted to see students' insight into the rough draft of the assessment model developed for innovation.

3.1.4 Small Group

In this stage, the researcher evaluated the research products in a small group with the users (students and lecturers). Small group evaluation was focused on the practicality of the product. These stages were done after the lecturers and students implemented the authentic reading assessment model on blended learning to promote self-directed learning.

This stage was established after the assessment model developed can be implemented without serious problems. The activity was focused on evaluating whether the prototypes are practical to measure the students' reading skills in higher education or not. The practicality aspects are the ease of use, and the appropriate time and cost.

3.1.5 Field Test

At this stage, the researcher evaluated the research products in the field test. The activity was done to see the effectiveness of the product by involving students and lecturers. It focuses on evaluating whether the prototype can be implemented effectively to measure students' reading skills in higher education or not. This activity was supported by experimental research within a randomized One Group Pretest-Posttest design.

3.2 Participants

The participants of this research were the researchers in doing self-evaluation, six experts to review the research products, two students and one lecturer in one-to-one evaluation, 15 students and two lecturers in small groups, and 35 students in field test.

3.3 Instruments

3.3.1 Specification Checklist

A specification checklist was used to check the prototype of the product, and whether the assessment model developed is suitable for the specification of the expected product or not. The specification checklist was related to the criteria of the authentic reading assessment model on blended learning to promote self-directed learning to make sure whether this model has been implemented or not. The document Checklist was valid with a score of 95. It can be interpreted that the document checklist can be used without revision.

3.3.2 Validation Sheet

Validation sheets were used to validate the products developed. Three validation sheets have been conducted in this research. They are validation sheets for the Model Book, Students' Book, and Lecturer's Book. The indicators of validation of the products can be seen in the tables below. The result of the validity of validation sheets for the model book is in Table 1.

Table 1: Validation Result of Validation Sheet for Research Products

No	Research Products	Validation Score	Category
1	Validation Sheet for Model Book	94	Very Valid
2	Validation Sheet for Students' Book	95	Very Valid
3	Validation Sheet for Lecturer's Book	95	Very Valid
	Validation Result of the Validation Sheet	95	Very Valid

The validation result of the validation sheet for the research products is very valid with a score of 95. It can be interpreted that the validation sheet for the research products can be used without revision.

3.3.3 Interview Protocol

Structured interview protocols were used to analyze lecturers' need for an assessment model and to get information about the implementation of assessment for basic reading course. The researcher used the interview to do intensive interaction with the candidate users (lecturer and students) in doing one-to-one evaluation. The result of the validation of interview protocols for lectures and for students are very valid with scores of 87 and 88. It can be interpreted that the interview protocol for lecturers can be used without revision.

3.3.4 Questionnaires

The questionnaires were used to determine the practicality of the research product distributed to the users (the lecturers and the students). The questionnaire for the lecturer was very valid, with a score of 94. The questionnaire for students is also very valid with the same score, 94, and a reliability of 0.93.

3.3.5 Test

In testing the effectiveness of the product, the researcher did a Field Test Evaluation. This activity was supported by experimental research within a randomized One Group Pretest-Posttest design. The researcher used the reading test in pre-test and post-test. This stage was established after the assessment model could be implemented without serious problems. Multiple Choice Questions consisting of 30 items were developed that have been tried out to 15 students to ensure the validity of the test items. Statistically, the test items were validated through SPPSS. The results of the r-count of all test items used in this research were valid because they were more than the t table (0.482).

3.4 Data Collection and Analysis Technique

The researcher established some activities in collecting and analyzing the data that were based on the instruments used.

3.4.1 Specification Checklist

In doing self-evaluation, the researcher collected the data through a specification checklist to make sure the criteria of the expected product were achieved. The data from the specification checklist were also analyzed qualitatively. The data were the information about the specifications of the products developed.

3.4.2 Validation Sheet

The researcher used a validation sheet within the Likert scale to get the review from the experts. The validation sheet consists of the items involving content, construct, and face validity. The items of validation were designed based on the indicators and

sub-indicators of the validity. The data from the validation sheet were obtained from experts' judgments about the products developed; model book, students' book, and lecturer's book. The data were analyzed by using the Likert scale.

3.4.3 Interview Protocol

The data collected through the interview protocol was the validity of the products from the users in one-to-one evaluation. The researchers developed some questions for the interview and analyzed the data qualitatively. The researcher asked the participants some questions based on the indicators. The researcher transcribed the results of the interview. The last, the research analyzed the information obtained from the interview qualitatively.

3.4.4 Questionnaires

The data to determine the practicality of the product were collected through questionnaires that were distributed to two lecturers who implemented the product and the students who received treatment. All the questionnaires were developed using a Likert scale in a 5-point format, Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1) (Ginja & Chen, 2020). The data were analyzed quantitatively using descriptive statistics through SPSS.

3.4.5 Test

After conducting the pre-test and post-test, the results of the test were analyzed by comparing the scores obtained in the previous and after the test. The scores were processed by using statistical calculation of the T-test formula with a significant degree of 5%. The T-test was used to find out the average differences gained between the two tests, to get the empirical result of whether there is a significant difference or not. While the gained score is between the pre-test and post-test of each class of the experiment, it determines the effect of the assessment model developed. Then, hypothesis testing was also conducted to determine the result whether the assessment model developed was effective or not. If the value of t-obtained is less than the value of the t-table, the hypothesis is rejected, but if the value of t-obtained is higher than the critical value of the t-table, so, the hypothesis is accepted (Gay et al., 2012). If the alternative hypothesis (Ha) was accepted, it means that the authentic blended assessment model oriented to Self-Directed Learning was effective.

4. RESULTS

4.1 Product Specification

After all the products were developed, the researcher conducted a self-evaluation to evaluate the research products. Self-evaluation is a systematic procedure to observe, analyze, and assess the research products obtained to stabilize own performance. In this study, researchers evaluated the products of the authentic blended assessment model oriented to self-directed learning that has become prototype 1 above. The researcher explored and evaluated the student book developed using a specification checklist. The products developed are by the specifications providing four components that are used as product specifications including reading, authentic assessment, blended assessment, and Self-Directed Learning. It was found that the component of reading, blended learning, and self-directed learning were achieved the criteria. However, the component of authentic assessment was not complete yet. There is no

information about students' strengths and weaknesses in reading. Having little revision, the researcher has completed the product specification as prototype 2.

4.2 The Validity of the Research Products

4.2.1 The Validity from Experts

After getting information about the specifications of the products through self-evaluation, the researcher asks for expert review about the products. Six experts have validated the products within the different area of expertise. They were reading expert, language expert, language teaching expert, graphic design expert, educational technology expert, and instructional design experts. The different areas expertise was needed to make the products better from their valuable suggestion. The area validation consists of content, construct, criteria, and Face (Graphic) validity. The results of validation for the model book from the experts are displayed in Table 2.

Table 2: Validation Results of the Research Products

No	Research Products	Aspects			Percentage	Criteria
		Content	Construct	Face/Graphic		
1	Model Book	3.75	4.15	4.35	4.1	Very Valid
2	Students Book	3.8	4.05	4.4	4.05	Very Valid
3	Lecturers Book	3.75	4.1	4.5	4.1	Very Valid
Average					4.1	Very Valid

Table 2 shows that all the products were very valid with an average score of 4.1. It indicates that the products can be used without revision. However, the researcher also considered the suggestions from the validators. Consequently, there are some revisions were done for the research products. The cover of the books added the picture of learning activities. The writing mechanism was also corrected after checking the overall books. Some grammar corrections were also obtained based on the last checking of the books. Some errors in making shapes and lines were also corrected as the suggestion by validators. The overall revision of the research products can be seen in Table 3.

Table 3: The Revision of the Research Products

Products	Revision		
	Content	Construct	Graphic
Model Book	Planning activities, implementing activities, and evaluating activities were separated.	- There are some writing mechanism corrections. - There are some grammar corrections.	- Cover was added by the pictures of students in reading activity in classroom. - Some shapes in figure are fixed.
Students' Book	- The material was added with video using QR scan. - The assessment of Text with comprehension Question was changed using QR scan.	There are some grammar corrections.	- Cover was added by the pictures of students in reading activity in classroom. - The space in reading text was added become 1.5 to avoid the crowded lines.
Lecturer's Book	- Planning activities, implementing activities, and evaluating activities were separated. - Instructional evaluation is conducted and the nurturant effects are evaluated.	- Syntax, learning strategy, and learning materials were clarified.	- Cover was added by the pictures of students in reading activity in classroom. - Some parts are moved to the next page.

From the experts' review, the researcher gets suggestions based on the expertise of each expert. The suggestions were used to revise the products to become prototype 2. Then, prototype 2 was continued to the next evaluation from the users in a one-to-one evaluation.

4.2.2 The Validity from Users

In this evaluation, there were two students and one lecturer involved in reviewing the developed products. The researcher and participant had intensive interaction during the evaluation process, called one-to-one evaluation. The students and lecturer reviewed the product developed by giving answers to several questions related to the intrinsic aspect and impact aspects. The intrinsic aspect consists of clarity, ease of use, the sequence of use, and the completeness element of the product. Meanwhile, the impact aspect consists of the impact and worthiness of using the products.

The researcher got some information and suggestions from the results of the interview with the users (students and lecturer).

4.2.2.1 Clarity

In the question about the clarity of the material in Basic Reading Book the students and lecturer answered that it is clear for them, but one student is still confusing the reading text "Steven Paul Job". Because the text talks about Jobs as a founder of technology products, so this text uses many of the terms of technology. But the student can overcome this problem and from the text, she knows the new terms in technology.

4.2.2.2 The ease of use

The reading texts are quite easy to understand, but they found the mistyping and it is still quite difficult to do the activities as on page 34, the assignment about the reference. The students also found the ambiguous part, so they need examples. Meanwhile, the lecturer said that some chapters seem to have too much text or the texts are too long. She suggested giving examples in every number 1 of the activity in self-assessment.

4.2.2.3 The sequence of use

The students and the lecturer perceive that the sequence of the book developed is very helpful, because it helps the students master the Basic Reading course. However, the lecturer suggested the material on context clues be placed at the beginning.

4.2.2.4 The completeness element of the product.

According to the participants, the element of the book is complete. The students have references and quickly understand. The elements of the book support the students to understand the material and read the text quickly. On the lecturer's side, the elements of this book are complete because it has reached the assessment used.

Questions 9 and 10: *Do you think the components in the Basic Reading book are complete?* If not, which part would you like to improve?

(S1): The structured components helped me understand the lessons easily. This book has the concept of Reading choices and learning Goals that can measure how much knowledge I have before entering the lesson. In the Learning Material, more explanations can be added, so that students have references and quickly

understand. But for me, with this brief explanation, I understand the purpose of the discussion more quickly.

(S2): I think it's more than enough. In the section on the new chapter page, in my opinion, if the material has entered a new chapter, an explanation of additional material should be given, for example: understanding the main idea, in my opinion, it should be explained understanding main idea is what, for example what is the main idea? What are the examples?

(L): In my opinion, it is complete, because it has reached the assessment used.

4.2.2.5 Impact of using the products.

Using this book improves the attitude, perception, and reading skills of the students and lecturer. Whereas before using this book they less interested to Reading. Related to the improvement of students' reading skills, the students realize that this book motivated them to read and search for information because it requires them to learn and understand English vocabulary which aims to make reading in English easier. In addition, the book requires the students to learn and understand English vocabulary which aims to make reading in English easier, so their understanding of Basic Reading has increased. Meanwhile, the lecturer also thinks that this book is very helpful in developing students' reading skills because it presents the material as well as the assessment. The students and the lecturer are also satisfied using this book because it keeps them motivated with the activities in each chapter. The students also think that there are fun activities for them. The lecturer was also satisfied with using this book because this book has provided sufficient material and was equipped with assessments.

4.2.2.6 The worthiness

The students and the lecturer think that the book has sufficient time to carry out the learning activities. The time is enough for them to do learning activities, because they feel, as new students, the material is quite easy to learn. On the contrary, the lecturer thinks that not enough time seems to be available because there are many texts and exercises in certain chapters. She asked to consider how much time the lecturer will use to share material and how many exercises must be done by students in class. The students and the lecturer perceive that this book fits the context of learning Basic Reading. So there is no part to be revised any more.

Related to questions about difficulties, it is especially given to the lecturer.

What difficulties did you experience when using this Basic Reading book?

(L) : Practice, because there are many exercises in certain materials.

Is there anything confusing about using this Basic Reading book?

(L): None, but I recommend using a single font, such as the commonly used Times New Roman.

Which areas need to be revised?

(L) I think the writer should pay more attention to the mechanics of writing, such as punctuation, and spelling, and the fonts used are too diverse and not the same size.

From the result of the one-to-one evaluation, the book was valid from the review of the students and the lecturer as the users of Basic Reading book in the implementation of

the authentic blended assessment model oriented to Self-Directed Learning in the teaching-learning process. The book is clear, easy to understand, helpful, and complete. The book also has a good impact on students' attitudes, perceptions, and reading ability and makes the students and the lecturers satisfied in using it. Although there are some mistyping or errors in the writing mechanism, this book can be used with little revision.

Table 41: The revision of the products for Prototype 3

Research Products	Finding	Revision
Student's Book	Errors in writing mechanism	The writing mechanisms were corrected.
	Lack of material	The materials were added by the explanation from YouTube trough QR scan.
	Close passage is potential to be cheated in online assessment.	Close passage was done in offline settings. It was changed by Reading with comprehension Question trough e-learning, whereby before it is done in classroom.
Lecturer's Book	There is no description about advantages of using the book in the introduction section as the guide of the lecturer in using the book.	The advantages of using the lecture's book are explained in introduction section.
	It was found some Indonesian language in the book	The book used English language at all.
	There is no photo in the profile of the author.	The photo was added in the profile of the author.

From the results of the one-to-one evaluation, the researcher revised the products based on the suggestion given. The products revised become prototype 3 of the products to be continued on testing the practicality of the products.

4.3 The Practicality of Research Product

The practicality of the product was determined through the evaluation in small groups. The researcher distributed the questionnaire to the users (the students and the lecturers).

4.3.1 The Practicality of the Product from the Students

Fifteen students gave their opinions about the products by responding the questionnaire.

Table 5: The result of Practicality from the Students

Students' Need	5	4	3	2	1	Total	%	Category
Easy to understand							4.00	Very Practical
I easily understand the learning materials in the Basic Reading book.	4	8	3	0	0	61	4.07	Very Practical
My knowledge has increased after using the Basic Reading book.	3	9	3	0	0	60	4.00	Very Practical
My reading skills improved after using the Basic Reading book.	2	11	2	0	0	60	4.00	Very Practical
I easily understand the assessment rubric in the Basic Reading book.	3	6	6	0	0	57	3.80	Practical
Easy to do							4.04	Very Practical

I easily follow the instructions for each task.	4	8	3	0	0	61	4.10	Very Practical
Ii is easy to do the learning activities in the Basic Reading book.	3	8	4	0	0	59	3.93	Practical
I give my best effort when completing tasks.	7	6	2	0	0	65	4.33	Very Practical
It is easy to do the assessment activities in the Basic Reading book.	2	8	5	0	0	57	3.80	Practical
Easy to carry							3.50	Practical
I can carry the Basic Reading book anywhere because it is not too big and not heavy.	2	7	2	2	2	50	3.33	Practical
It is not hard to get this book.	1	9	4	1	0	55	3.67	Practical
Appropriate time and cost							3.78	Practical
For me, the time allocation is sufficient for the activities provided.	2	7	6	0	0	56	3.73	Practical
For me, there is enough time to do the assignment.	2	7	5	1	0	55	3.67	Practical
The price of this book is affordable.	3	8	4	0	0	59	3.93	Practical

Table 5 shows that the product was practical with an average score of 3.83. Based on the students' responses, the developed product was easy to use and the time and cost were appropriate.

4.3.2 The Practicality from the Lecturers

In addition, the practicality of the product was also determined by the questionnaire from two lecturers.

Table 6: The Result of Practicality from the Lecturers

Students' Need	L1	L2	Total	%	Category
Scoring				4.63	
The assessment rubric in this book is easy to understand.	5	5	10	5	Very Practical
The grading system in this book is feasible.	4	5	9	4.5	Very Practical
The assessment procedures in this book are easy to use.	5	5	10	5	Very Practical
The scoring procedure is efficient in the use of time.	4	4	8	4	Very Practical
Administering				4.75	
Assessment results can be given smoothly.	4	5	9	4.5	Very Practical
This book provides benefits for students in learning.	5	5	10	5	Very Practical
Time and Cost				4.5	
The time allocation is determined according to the modules in the syllabus and the activities carried out.	4	3	7	3.5	Practical
Time is designed based on the learning procedure.	5	4	9	4.5	Very Practical
Students know the time needed to do the task.	5	5	10	5	Very Practical
The price of this book is affordable.	5	5	10	5	Very Practical
Ease of Interpretation				4.57	
The learning objectives in this book are easy to understand.	4	5	9	4.5	Very Practical
Learning activities in the book are easy to do.	5	4	9	4.5	Very Practical
The text in the book is easy to understand.	4	4	8	4	Very Practical
Assessment results are easy to interpret.	5	5	10	4	Very Practical

Student books are easy to carry around because they are not too big and not heavy.	5	5	10	5	Very Practical
This book improves students' reading knowledge and skills.	4	4	8	4	Very Practical
This book is easily available.	5	5	10	5	Very Practical
Average				**4.61**	

Table 6 shows that the product was very practical with an average score of 4.61. Meanwhile, the data in the table below were the students' responses to the book of Basic Reading developed.

4.4 The Effectiveness of Research Products

Field test evaluation was done to know the effectiveness of the products. The researcher gave experiments to thirty-five students using the one-group pretest-posttest design. The results of the pretest and post-test have been carried out within statistical analysis in Table 7.

Table 7: Pretest—Posttest Results

Testing	Total of Students	Learning Outcomes		Persentage	
		Total Passed	Total Not Passed	Total Passed	Total Not Passed
Pretest	35	19	16	54%	46%
Postest	35	29	6	83%	17%

Table 7 shows that the total of students who followed the pretest was 35 students. The total number of students who passed was 19 students with a percentage score of 54%, while 16 students who did not pass had a percentage score 46%. While students who passed the post-test were 29 students with a percentage score of 83%, while students who did not pass were six students with a percentage score of 17%. It indicates that the students who used the authentic reading assessment model on blended learning to promote self-directed learning had higher than before when they did not use it.

Related to the t-test analysis, the researchers found t-calculated was higher than the t-table as seen in Table 8.

Table 8: Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	T	df	Sig. (2-tailed)
Score before treatment – Score after treatment	-16.82857	7.02720	1.18781	-14.168	34	.000

Based on Table 8, the t-calculated was 14.17 at the degree of freedom 34 and the level of significance 0.05 within the t-table 2.04. It is possible to infer that the authentic blended assessment model oriented to self-directed learning had a significant effect on students' reading ability because the t-calculated is higher than the t-table (14.17 > 2.02) within the sig. score was 0.00 < 0.05.

DISCUSSION

The study emphasizes the importance of measuring students' actual outcomes using the authentic reading assessment model on blended learning. The importance of blended learning has been argued that blended learning development is closely tied to advances in ICTs for language learning (Nassar et al., 2023). Learning activities should be able to provide students with comfort and calm providing students' memory

(Apriastuti, 2017). Within self-directed learning, students can become more independent when they know the desired learning outcomes and receive constructive feedback about their progress during the learning process. Assessment should support learners in self-direction, and what matters most in any assessment strategy is whether learners are becoming increasingly self-directed (Mentz & Lubbe, 2021). Meanwhile, this study believes that the assessment process should support self-directed learning.

Learning activities with the self-directed learning model can measure several aspects of independent learning. Aspects measured in independent learning include self-management, desire for learning, and self-control. Self-directed learning will also enable students to manage the learning process through self-initiative, independence, self-regulation, and self-exploration (Song & Hill, 2007). With self-directed learning, lecturers give freedom to students in learning activities to develop independence and achieve optimal learning achievement.

Assessment should support learners in self-direction, and what matters most in any assessment strategy is whether learners are becoming increasingly self-directed (Mentz & Lubbe, 2021). With self-directed learning, lecturers give freedom to students in learning activities to develop independence and achieve optimal learning achievement. Instructional design should provide a relevant learning environment to support students in taking responsibility for their learning (Diep et al., 2019). The implementation of an authentic reading assessments model on blended learning gives benefits to improve students' self-directed learning skills.

CONCLUSION

This study aimed to investigate the quality of the authentic reading assessment model on blended learning in promoting self-directed learning skills following formative evaluation activities proposed by Tessmer comprising self-evaluation, expert review, one-to-one evaluation, small group, and field test. The existence of an authentic blended assessment model oriented to self-directed learning for Basic Reading course is needed in the current situation. The products developed are very much needed in the current condition to motivate students' independent learning. This model supports the pace of development of the digital world and technology in education based on the Industrial Revolution 4.0. Three research products have been developed for the Basic Reading course, namely, the model book, the lecturer's book, and the students' book on the authentic reading assessment model on blended learning to promote self-directed learning. The assessment model developed was categorized as valid, practical, and effective.

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