

**KAHOOT APPLICATION FOR GRAMMAR AND READING
COMPREHENSION TESTING: DESIGNING, DEVELOPING, AND
VALIDATING**

Dina Ayu Putri^{1*}, Arifmiboy²

¹IAIN Bukittinggi

*Email : dinaayuputri100@gmail.com

²IAIN Bukittinggi

Email : arifmiboy@yahoo.co.id

ABSTRACT

This study aims to develop Kahoot application for grammar and reading comprehension tests on the subject of simple past tense, recount text, and narrative text. The type of this research was Research and Development (R&D) by using Borg & Gall model. There were only applied three stages in this research: 1) research and information collection 2) product planning 3) development of a preliminary form of the product. At the stage of research and information data collection, the researcher conducted need analysis. To find out the need analysis, the researcher interviewed an English teacher and some students. The next stage was product planning. In this stage, the researcher determined the exam content outline as a reference to make a quiz and collecting the material. The next stage was to develop a preliminary form of the product. It involved designing, developing, and validating the product. The subjects were 28 students in class X network computer engineering at SMKS Pembina Bangsa Bukittinggi in the academic year 2020/2021. The data collection techniques were interview and validation sheets. Based on the results of the validation sheet from three experts by the means score of percentage was obtained 68,66%, It means that English quiz using Kahoot application for grammar and reading comprehension test was feasible to be used in learning English.

Keywords: Kahoot application, Grammar testing, Reading comprehension testing

INTRODUCTION

Evaluation is one of the competencies that the teacher must-have. Evaluation is a process of collecting the data taken from test results for the decision-making process. According to Reflinda (2017:14), evaluation is the process that determines the conditions where a goal has been achieved. The importance of the evaluation process conducted by the teacher is to measure students' understanding level and it is an overview of the teacher's pedagogical competence, which the teacher must have a competency such as conducting the

assessment and also evaluation process. In addition, the National Education Minister's Regulation no. 16 of 2007 about academic qualification and teacher competence standard stated that teachers must have core competence such as conducting assessment and evaluation of the learning process and outcomes and also utilizing the result of evaluation for the benefit of learning.

To measure the evaluation requires an evaluation tool. An evaluation tool is a series of tools used to carry out the process of evaluating. According to Djamarah & Zain (2006: 106), there are some factors that influence learning success follows as purpose, teacher, students, learning process, evaluation tools, material evaluation, and evaluation atmosphere. With the development of technology, using evaluation tools technology-based seems to need to be applied in the schools.

One of the evaluation tools based on technology is the Kahoot application. Kahoot is an online application that uses internet networks. Kahoot application was released by Johan Brand, Jamie Brooker, and Morten Versik in 2013. There are two websites to access the Kahoot application namely <http://kahoot.com> as teacher and <http://kahoot.it> as students. According to Woo in Iwamoto et al (2017:82), Kahoot is an online application where quizzes can be developed and presented in-game format. Points are given for the correct answer and participating students will immediately see the results of their responses. Game-based learning has the potential to be an effective learning tool because–this stimulates visual and verbal components of our processing.

According to Gemma et al (2018:1), Kahoot is a game-based student response system, an application of which transforms the classroom into the format of a game show. Via a laptop or pc, the teacher presents questions on the classroom screen and students answer them utilizing the mobile devices. Meanwhile, According to Resmayani & Putra (2019:11), Kahoot is a free student-response platform that allows anyone, in this case, is a teacher, to pose questions, then let the whole class respond from a selection of answers electronically on their own devices in real-time. It means a tool for evaluating prior learning by asking a few questions related to It. In addition, Dellos (2015:3) adds that Kahoot is a digital game resource that provides teachers an opportunity to create quizzes, surveys, and discussions that engage students in content knowledge in a competitive gameplay format. Kahoot application gives benefits to teachers evaluating learning.

Several studies have mentioned the benefits of Kahoot in the teaching process. Widya Syafitri et al (2017:2) state that the Kahoot application enables students' motivation in

learning English. It can improve their knowledge and increase their thinking. Whereas Sabandar (2018:129) stated that the benefits of the Kahoot application follow as free there is no cost for creating, playing, and sharing Kahoot, the application easily fits a wide range of learning environments, it presents a fun and challenging way to engage modern learners into learning and the quiz game can be done not only individually but also in teams. In addition, Altun in Wibisono (2019:89) stated that Kahoot application can improve the quality and experience in the teaching process which can also be a media that can facilitate and support the process. As a result, the learning will be meaningful and the class participation will authentically appear to build students' motivation and improve their scores.

Based on the previous studies above, it shows that Kahoot is one of the effective media to be used in the teaching process. For that reason, this study concerns with using Kahoot as a learning evaluation tool in grammar and reading comprehension tests. It is based on the assumption that the development of language tests using Kahoot can lead students to do the test easily, be interactive, and be fun.

Grammar testing is a test that measures the structure of language. There are many types of grammar testing follows as multiple-choice tests, error correction, completion test, sentence combining exercises, word changing items, transformation items, items to test knowledge of word/sentence order items to test knowledge of word/sentence order. In this research, the researcher used multiple-choice and true or false tests.

Reading comprehension testing is a test that measures the understanding of someone in written text. There are many kinds of testing techniques for reading comprehension follows as word matching, sentence matching, pictures and sentence matching for initial stages of reading, matching tests for intermediate and rearrangement, cloze procedure, open-ended and miscellaneous items, cursory reading, reading aloud, written response, picture-cued items, advanced stages; true/false reading tests, multiple-choice items, completion, editing, gap-filling test, cloze test, short-answer test, ordering test, and summarizing test, C-test, cloze-elide test. In this research, the researcher used multiple-choice and true or false tests.

Based on the preliminary research by interviewing with the English teacher in SMKS Pembina Bangsa Bukittinggi, the researcher found some problems related to the learning evaluation done by the teachers. The first problem was the teacher did not use the quiz based on the technology. The teacher still used the conventional quiz. The teacher used the quiz to know the understanding of students of the material being taught. The teacher gave a quiz to students about the material being taught before. Then the teacher gave several questions. The

students wrote the answer in the paper and for the first ten collectors. The second problem was the teacher didn't use various evaluation tools. To find out the student's initial ability, the teacher only asked a few questions related to what will be learned. While to know how well the students understanding the material that has been learned, the teacher only does the exercises

Hence, the researcher is interested in developing a Kahoot application for grammar and reading comprehension tests as supporting evaluation tools. This study aims to develop, design, and validity of Kahoot application for grammar and reading comprehension tests on the subject of simple past tense, recount text, and narrative text.

METHOD

The research design used in this study was research and development. According to Gay (2012:17), research and development (R&D) is the process of researching customer needs and then developing products to fulfill those needs. The purpose of R&D effort in education is not to formulate or test theory but to develop an effective product for use in schools. This research was conducted in Private Vocational High School Pembina Bangsa Bukittinggi. This research was undertaken on X computer network engineering class in the academic year 2020/2021.

In this research, Borg and Gall's model was used. It followed three-step of Borg and Gall model. They were research and information data collection, product planning, and develop a preliminary form of a product. The instruments of this study were interviews and a validation sheet. The researcher used semi-structured interviews. The researcher interviewed an English teacher and some students. The researcher used a cells phone to record the interview. The researcher asked some questions related to the evaluating tools. The interview was used to get the problem of the research. Then, the validator consists of three persons namely the media expert, material expert, and language expert. The researcher gave the product to the validator to measure the validity of product.

To analyze the data about validity, the researcher used descriptive analysis. Linda (2010:316) stated that to assess validity means to find out how well we are measuring what we intend to measure. Two concerns are paramount in determining the validity of student ratings: how effectively they serve as an indicator of student learning or achievement and what biases may reduce that effectiveness. The researcher used modified statistic formula from Riduwan.

$$V = \frac{f}{N} \times 100\%$$

Explanation:

V : Final Score
 f : Score Acquisition
 N : Maximum Score

Table 1. Criteria for Determining the Validity of Modified from Riduwan

Interval	Category
81-100	Very Valid
61-80	Valid
41-60	Enough Valid
21-40	Invalid
0-20	Very Valid

FINDINGS AND DISCUSSION

Findings

Research and Information Data Collection

At this stage, the researcher conducted the needed analysis. Needed analysis aimed to find the initial problem in learning English especially evaluating of learning. Developing this product aimed at evaluation tools.

Based on the interviews with an English teacher, it was generally known that teacher had used quiz in learning the English process. The teacher gave some questions to students then students answered the questions on paper or wrote on the whiteboard. The time limit to answer the questions was two or three minutes, the time limit that is given depends on the total of questions. This quiz is given before starting learning and after of learn. The teacher did not use the media based on technology. The teacher did not know the Kahoot application and the teacher had never used the Kahoot application in the learning process.

Besides that based on the info that researchers got from students, students will be excited to learn English if learn to use technology such digital dictionary, mobile phone, and laptop. Students are allowed to carry android to school but android is only used if needed in the learning process. All students have an android. This school has a computer and a Wi-Fi network.

Product Planning

Based on the interview results, the researcher made product planning to make an English quiz. First, the researcher determined the exam content outline as a reference to make a quiz. The researcher identified the syllabus. The goal was for each item to be made appropriate with indicators and purposes of the learning. The material being developed was recount text, simple past tense, and narrative text. The researcher chose this material because it was the most difficult material by students during the second semester. Second, the researcher collected the material. The material got from various sources as follows the book and other sources such as the internet.

Develop Preliminary Form of Product

Designing

The procedure to design a quiz using the Kahoot application follows as:

1. Open the Kahoot application on the website page <http://kahoot.com>

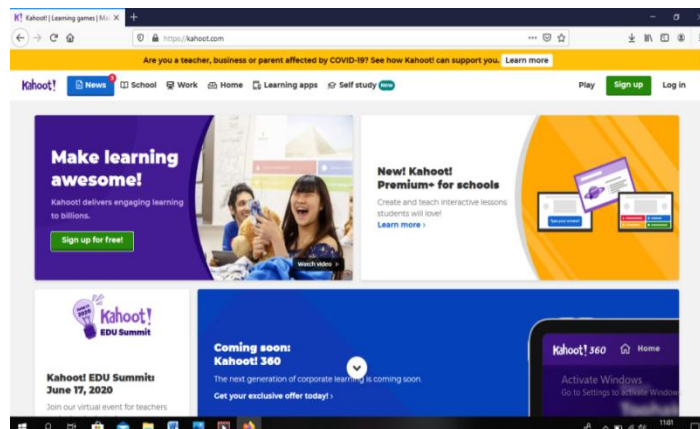


Figure 1. Initial Display of Kahoot Application

2. Then Homepage Kahoot appear, click sign up as a teacher

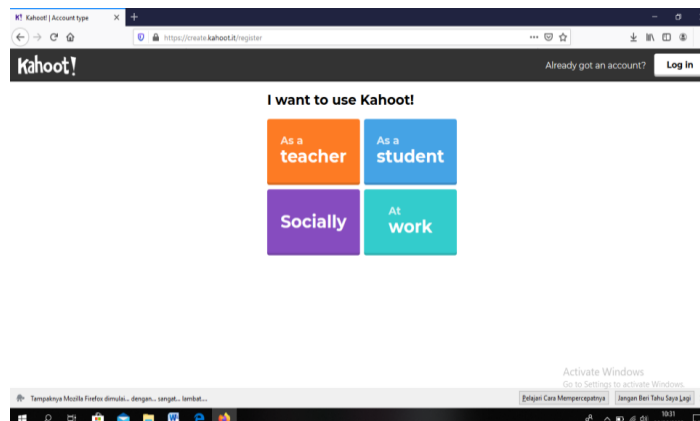


Figure 2. Homepage Sign up to the Teacher

3. After that click sign up with an email to make Kahoot account

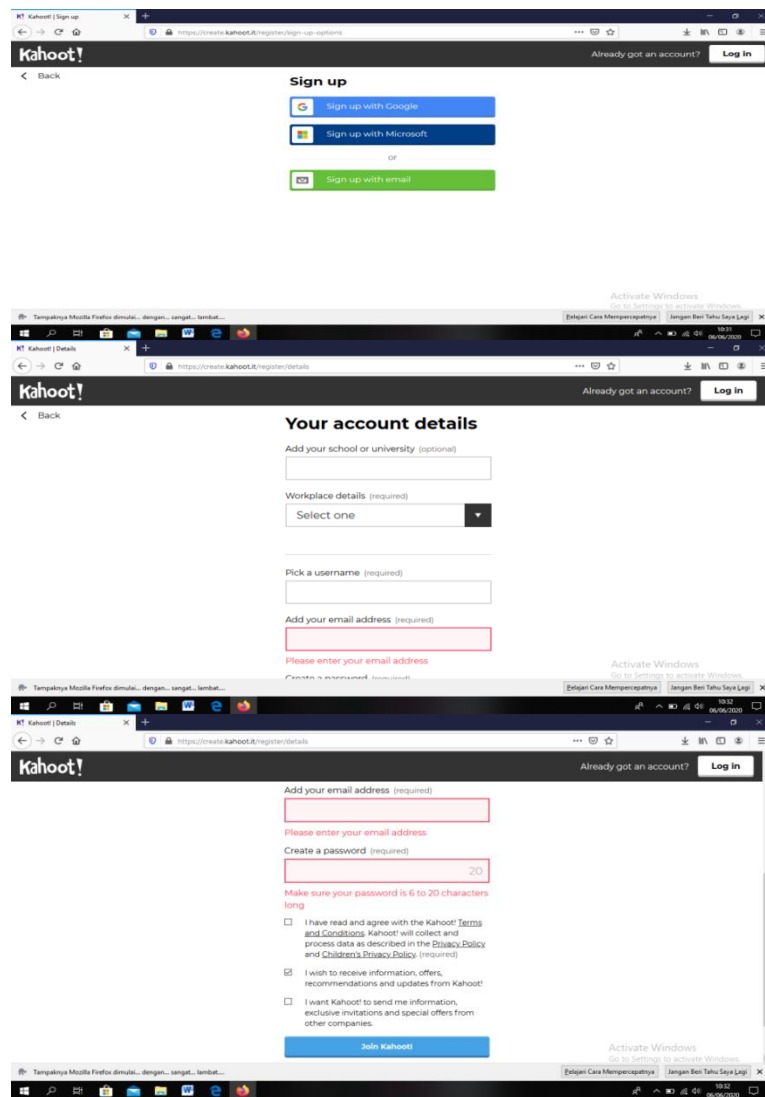


Figure 3. Homepage to make Kahoot Account

4. After that back to the homepage then click login

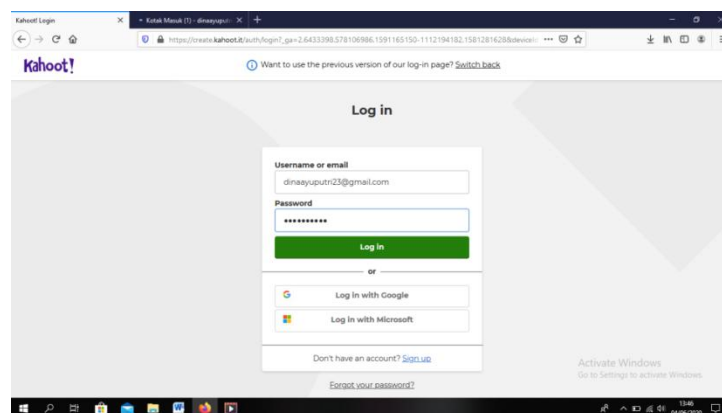


Figure 4. Display Log in of Kahoot

5. Next, the initial display appears, and click create

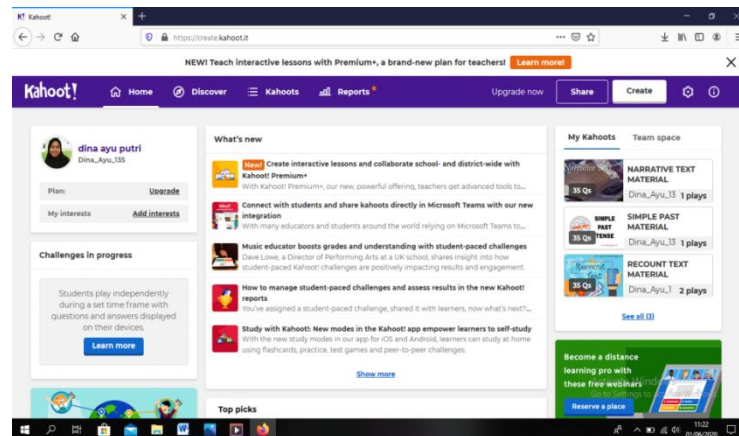


Figure 5. Display to make Quiz

6. After that will appear display below. Fill in draft questions that have been made.

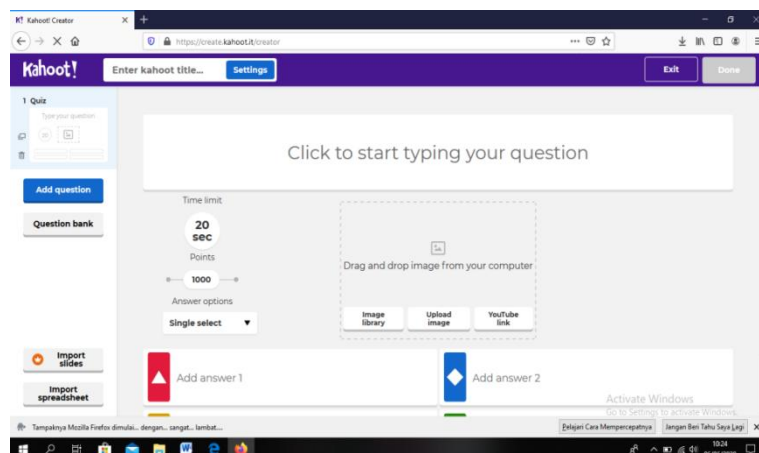


Figure 6. Display to make Draft Questions

7. Finished all questions will appear as below

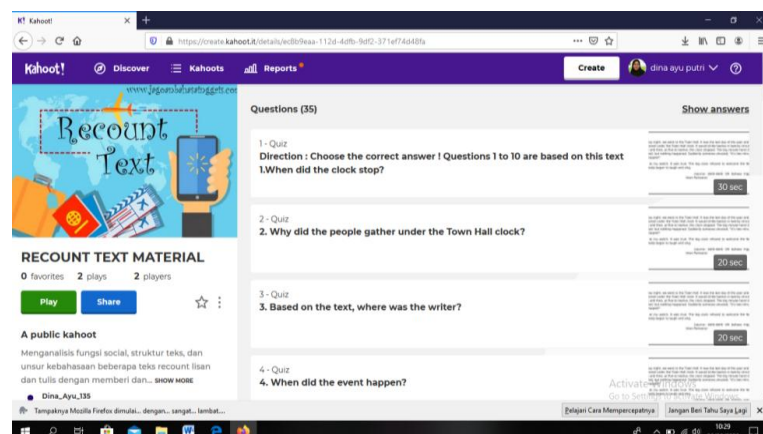


Figure 7. Display of all Questions

Flowchart designed Kahoot application for grammar and reading comprehension can be seen in the picture below:

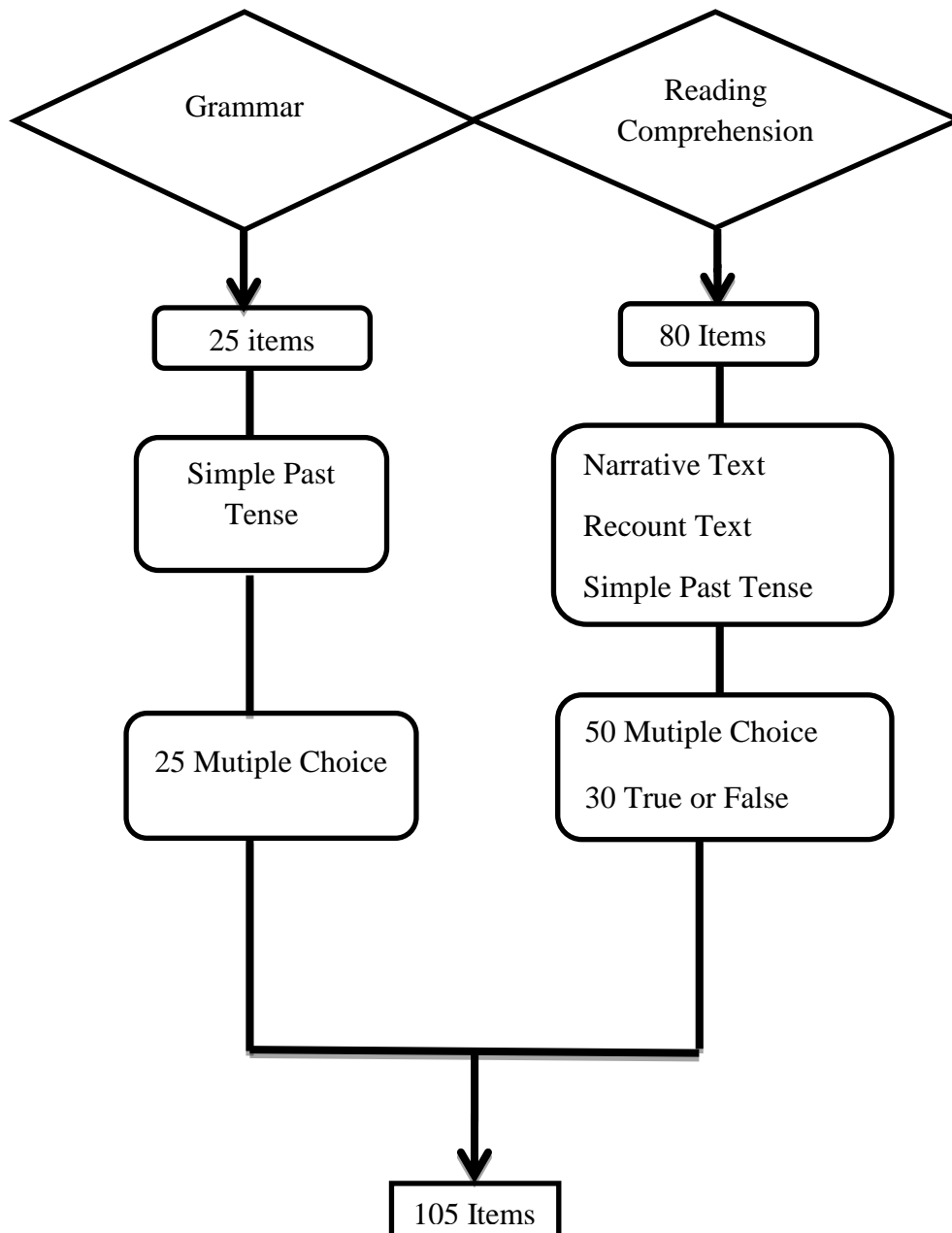


Figure 8. Flowchart Designed Kahoot Application for Grammar and Reading Comprehension

Developing

1. Making an Account

First, the researcher was making account. There are three ways to making an account follows as through email, google, and Microsoft. The researcher chose through email to make an account. On the account, there were user information and account details. On

user information, there were username, email, and name. On account details, there were organization, language, account type, and workplace. Examples can be seen in the picture below:

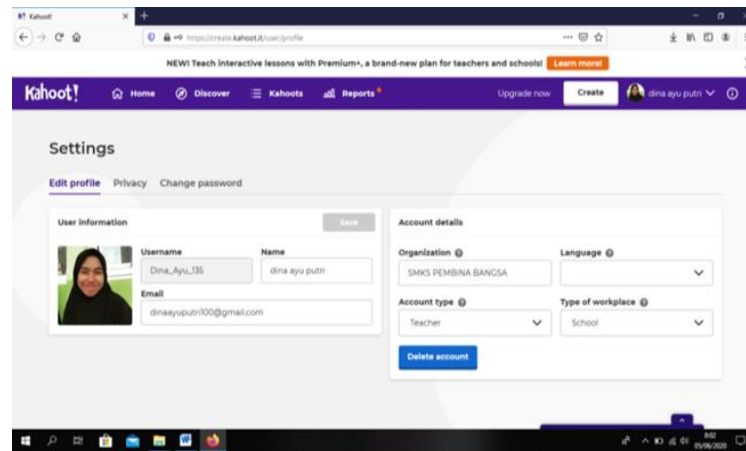


Figure 9. Display of Kahoot Account

2. Creating English Quiz

The next step was creating an English quiz. On the Kahoot application, there were four types follows as a quiz, jumble, discussion, and survey. The researcher developed a quiz at application. The researcher click, create the development of an English quiz developing based on the indicator. At this stage was creating an English quiz. Developing Kahoot application for grammar and reading comprehension can be seen in the pictures below:

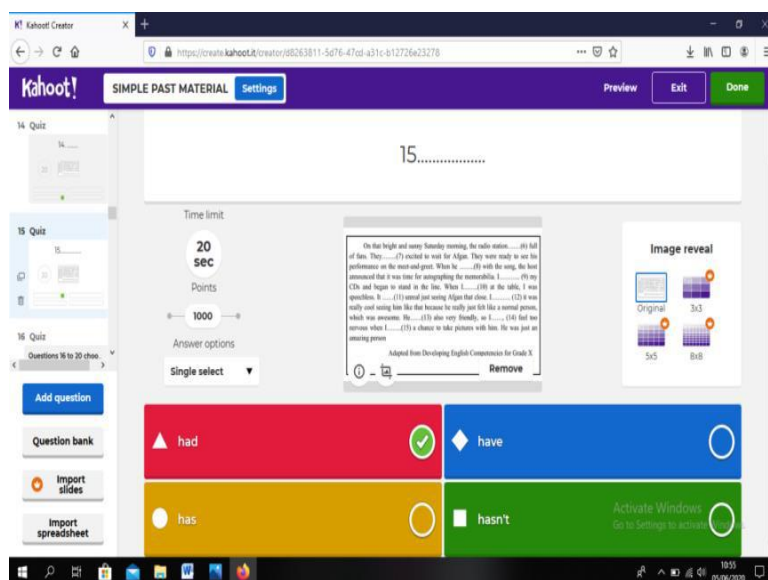


Figure 10. Question Design for Grammar Testing

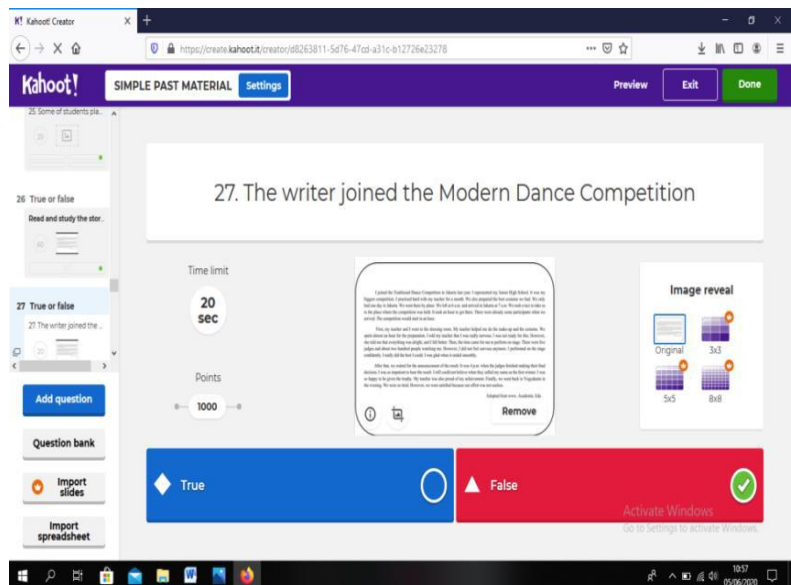


Figure 11. Question Design for Reading Comprehension Testing

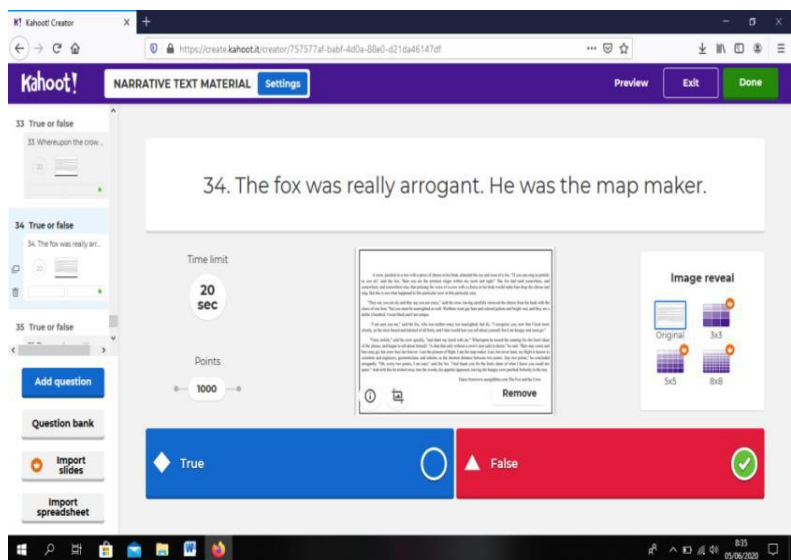


Figure 12. Questions Design for Reading Comprehension Testing

Validating

After designed and developed, the researcher took the next step. There were three experts to validate the product follows as media experts, material experts, and language experts. The result of the product validity from validation sheets can be seen as follows

Table 2. Score of Validity Product

No	Assessment Aspect	Assessment
Media Expert		
1	Penyajian	24

2	Desain Isi	16
3	Desain	16
4	Kemudahan Penggunaan	16
Percentage		100%
Material Expert		
1	Penyajian	23
2	Kualitas Isi	16
3	Kontruksi	11
4	Penggunaan	8
Percentage		81%
Language Expert		
1	Lugas	8
2	Komunikatif	10
Percentage		25%
Final Score		68,66%
Criteria		Valid

From the data above, the product was obtained percentage of every expert, the media expert was 100%, language expert was 25%, the material expert was 81% it can be concluded that product was valid by having mean score 68,66%

Discussion

This research was about developing a Kahoot application for grammar and reading comprehension tests in SMKS Pembina Bangsa Bukittinggi. This section discusses the research finding based on the related study. Technology is an important thing to support the learning process. Technology makes it easy for the teacher to make learning media and practical evaluation tools. By utilizing existing technology, learning will be more interesting and students will become more enthusiastic about learning. According to Debbita et al (2018: 569), the use of technology has been proven to foster learning and reinforce learning. The fostering and reinforcement of learning through the use of computers, smartphones, and tablets have improved learners' engagement and active participation in classrooms. The use of technology is also undoubtedly great assistance to teachers in terms of helping to increase motivation as well as increase the level of student participation in class, and in terms of evaluating students' overall comprehension and development.

One of the technology can be used by educators in the learning process is Kahoot application. Kahoot application is an online application that uses internet networks According to Gemma et al (2018:1), Kahoot is a game-based student response system, an application of which transforms the classroom into the format of a game show. Via a laptop or pc, the teacher presents questions on the classroom screen and students answer them utilizing the mobile devices. It means that the Kahoot application is an application based on educational technology that makes the students enthusiastic to learn.

Kahoot application was very helpful for the teacher to measure and assess the extent to which the learning process is accepted by students. Kahoot application can access using a variety of different devices such as smartphones, tablets, laptops, and other devices easily. Kahoot application was a practical evaluation tool because the result of the test can be saved and downloaded. Kahoot application can also help the teacher to gather informal feedback from students, assess students understanding of learning, and make polls about matters relating to learning that occur in class. From the explanation above, it can be concluded that the Kahoot application was feasible to be used in learning English. Kahoot Application was suitable for use in learning at home because it can be used for distance learning.

CONCLUSION AND SUGGESTION

From the study, it can be concluded that developing Kahoot application for grammar and reading comprehension test has developed for the tenth grade of vocational high school have fulfilled the criteria good and valid as an evaluation tool in learning English.

From the conclusion above, the researcher would like to suggest as to English teachers can use the Kahoot application as a reference to make learning evaluation in addition to adding to the learning experience also make the students are not bored in learning English. To the next researchers, Kahoot application can be developed with the other features with the other material.

REFERENCES

- Boden, G. M., & Hart, L. (2018). Kahoot! Game Based Student Response System. *Journal of Learning and Teaching*, 11 (1), 1-4.
- Dellos, R. (2015). Kahoot! A digital Game Resource for Learning. *International Journal of Instructional Technology and Distance Learning*, 12 (4), 49-52.

- Dellos, R. (2015). Kahoot! s Digital Game Resources for Learning. *International Journal of Instructional Technology and Distance Learning*, 49-52.
- Djamarah, D. B., & Zain, A. (2006). *Strategi Belajar Mengajar* . Jakarta : Rineka Cipta.
- Gay, L., & E Millset, G. (2012). *Educational Research Competencies for Analysis and Application*. Pearson.
- Iwamoto, D., Hargis, D., Taitano, E. J., & Vuong, K. (2017). Analyzing The Efficacy of The Testing Effect Using Kahoot On Student Performance. *Turkish Online Journal of Distance Education*, 18 (2), 80-93.
- Lin, D. T., M, G., & Kaur, M. (2018). Kahoot! it Gamification in Higher Education. *Pertanika J.Soc.Sci & Hum* , 26 (1), 565-582.
- Permendiknas. (2007, Mei 4). *Lampiran Peraturan menteri Pendidikan Nasional No 16 tahun 2007*. Retrieved Agustus 22, 2020, from <http://vervalsp.data.kemdikbud.go.id>
- Reflinda. (2017). Purpose, Function and Principles of Language Learning Evaluation. *Jurnal Vision*, XI (11), 1-15.
- Resmayani, N. A., & Putra, I. N. (2019). Gamification: Using Kahoot! to Make Students Love the Class from the Very Beginning. *Linguistic and English Language Teaching Journal*, 7 (1), 10-18.
- Sabandar, G. N. (2018). Kahoot: Bring the Fun Into The Classroom! *Indonesian Journal of Informatics Education*, 2 (2), 127-134.
- Safitri, W., Putri, H. P., & Reflinda. (2020). Kahoot: Engage Students Into English Economic Fun Learning. *Journal of Physics Conference Series*, 1-5.
- Wibisono, D. (2019). The Effects of Kahoot in Teaching Reading to Tenth Grade Students. 86-105.