



# Learning Fun With Games Kahoot For Elementary School Students Grade 1

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**Abstract.** Teaching and mentoring students in grade 1 SD is a big challenge for teachers. These constraints are felt by the teacher during the learning process. The difficulty in organizing students to follow and understand the lessons given so that not a few teachers use unique media so that students can be interested in the material that has been given. One example of manual learning media that teachers do in introducing letters, numbers, and objects is still using stickers or objects sold in the market. manual learning is good enough, but it does not rule out boredom and lack of responsiveness from students. The development of technology today is very good and has even become something that is very much needed, be it the use of social media, games, or other things. One of the features that kids usually like is Games. Therefore, I try to be able to combine the use of technology, especially learning media by using a laptop or headphones to make quizzes or games with the theme of learning using Kahoot to help teachers provide learning with unique media that students like and like. make students more interested and more creative in the learning process.

**Keywords** - Gamification, learning process, elementary school students, young children.

## INTRODUCTION

Every human being needs education to make them smart [1], their education starts when people are born and raised by parents in a family environment. In addition to a family, education is also obtained in the school environment. Starting from kindergarten, elementary school, junior high school, high school, and college [2]. advanced education is also urgently needed to provide new insights to people. Primary schools are the primary places where children are introduced to curriculum-based education [3].

In elementary school starting from grades 1 – 6. For grade 1 alone, students are taught to get to know letters, numbers, and images. It takes a special time to be able to provide education to elementary school students in grade 1. That is needed because in the learning process grade 1 student still desperately needs an extra level of teaching so that students can understand every lesson the teacher is given [4]. Teaching first graders has very high difficulty. Teachers must have high patience as well as creativity. Where teachers have to prepare a lot of interesting things as a learning medium so that students can more quickly understand the lessons given [5].

Nowadays, the learning media used by teachers is still manual such as using letter stickers, numbers, and pictures purchased in the shop, as well as using markers to write on the board. In a way, the manual is also quite effective but less efficient because it has to buy in the shop and can also be a very boring thing for students.

At this time, technological developments are increasingly sophisticated and can be applied in all fields. smartphone use is the most frequently used technology [6][7]. According to survey data, the results most people

use on smartphones are listening to music (93%), taking selfies and recording videos (89%), playing games (73%), setting alarms (33%), reading the latest news (34%), looking at the current weather (6%), making a list of jobs such as shopping (6%), and reading books, comics, or magazines (5%) [8]. Small children or students are very interested in the game [9]. They will be more pleased when given the game by their parents or teachers [10]. Based on this, researchers are trying to create a learning system by using games to connect the likes or hobbies of young children to assist teachers in providing effective and fun learning to elementary school first graders. Researchers will use the Kahoot app to create educational games about getting to know letters, numbers, and images to students through electronic items such as Headphones and Laptops.

## RELATED WORK

Dalam perancangan jaringan *hotspot* menggunakan *router* mikrotik pada Sekolah Menengah Kejuruan Negeri 5 Waingapu, penerapan jaringan akan dilakukan dalam beberapa tahapan. Tahapan dalam metode penelitian dapat dilihat pada gambar 1.

The research I first cited was a 2019 study, by Dhany Sari et al. the research that was done was to create an active and interactive lesson through quizzes using Quizlet and Kahoot. The use of Kahoot in this study is as a learning tool and evaluation tool because by using Kahoot students can play a game that can sharpen the brain and accuracy of students in working on the given question. The results of this study are proven that by using Kahoot can realize active and interactive learning [8]. Also, by learning using Kahoot

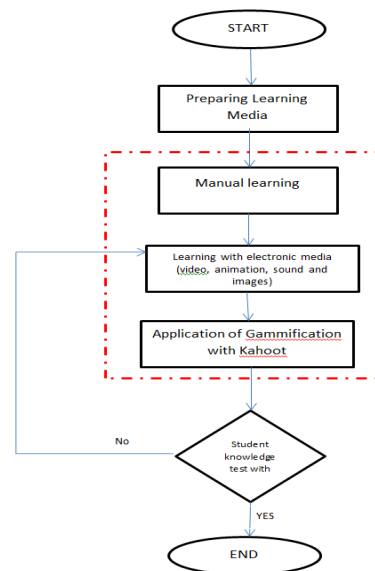
can improve good grades for students [11]. The same research and results were also conducted by Christine Holbrey in 2020 using Kahoot. Researchers combined traditional or manual learning with Kahoot games that succeeded in making students more effective in learning [12].

Research with literature studies in combining learning methods with Kahoot was also conducted by Grace Subandar et al. in 2018. The research was conducted by combining Kahoot games in the learning process. This research shows that using Kahoot can make it easier for teachers to provide assessments with gaming media such as multiple-choice, essays, and others [9]. The same result was also obtained by Paramjit Kaur and Reenuga Nadarajan, in 2020. The research they did was to give language lessons using Kahoot. The result of their research is to use Kahoot gamification in the teaching process and assessment of students providing positive experiences and students becoming more active in the learning process [13]. The application of Kahoot was also developed not only in language lessons but in other learning as well. This research was conducted by Dentina et al. in 2020. Researchers conducted the study by comparing the results of chemical studies using Kahoot and not using Kahoot. The results of this study show that more than 90% of students are very happy with using Kahoot as a fun and interesting learning medium [14][15].

Further research was conducted by Halise Sibel in 2018. The study also used Kahoot as a digital assessment tool for elementary school students. Kahoot's assessment experiment as a learning assessment tool was conducted on 23 students in Turkish primary schools, assessments were also conducted by interviewing students about learning using Kahoot. The result of this study is that by using Kahoot students can think innovative, fun, very useful in the learning process [16][17]. The last research I cited was research by Alf Wang and Rabail Tahir in 2020. Research in the form of literature studies the effect of Kahoot use in learning. In this study, they explained the benefits of Kahoot as well as its shortcomings. So the results of this study provide input to the researchers who later used Kahoot in the application for student learning [18].

## RESEARCH METHOD

Figure 1 will explain the flow diagram of the process of applying Kahoot gamification in the research carried out. This flowchart shows the interaction process between the user (teacher) and the learning system that will be carried out. Figure 1 below shows the YOLO algorithm block diagram.



**Figure 1.** Flow Diagram

In the figure the teacher prepares the learning media first. The learning media used is manual learning and electronic learning media. Manual learning media begins with the introduction of letters, numbers, and objects that still use props in the form of poster letters, numbers, and objects. Meanwhile, visual learning media is introduced by using electronic devices such as LCD, laptop, and headphones to introduce letters, images, and objects in the form of videos, animations, songs, and images.

In the image above, after studying with electronic media students will be taught to be able to play educational games with Kahoot [19] in recognizing numbers, letters, and objects that have been studied, so as to benefit students so as to speed up the memory of the material that has been learned from previous meetings. . and can make students more responsive to interesting learning. Students will take the test so they can know the abilities and results of the two lessons using different media. If the results are good then this study is successful. If the results are still poor, an identification process will be carried out to determine the cause of poor student learning outcomes. After the identification process, students who are still unable to learn will be taught using electronic media learning methods.

## RESULT AND DISCUSSION

Curriculum 13 (K13) is a learning guideline in schools that is still used today [20]. Learning to use whiteboard media, props, types of games that still use traditional materials, and means of recognizing letters, numbers, and images using posters are still used by teachers in teaching. Such media remains a learning medium that is still done from the past until now. below is a learning based on K13 applied in the teaching and learning process.

### 1. Letter recognition in students

Learning in letter recognition for grade 1 elementary school children starts with the recognition of letters from

A - Z and recognition of vowels A, I, U, E, O. In the teaching process currently carried out, it is still using letter stickers or posters.

2. Number recognition in students

In the process of teaching numbers, currently done by teachers, it is still done manually using posters as a teaching medium. In number, recognition is taught starting from numbers 1 - 100 which is done gradually.

3. Teaching Types of Pictures

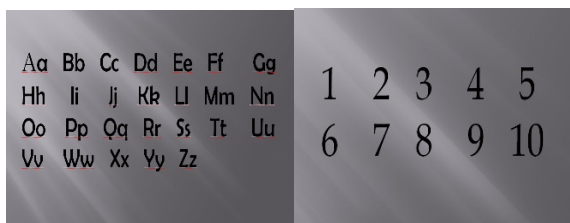
Image recognition is also an important part of the teaching process. The process of recognizing images for grade 1 sd students consists of several types of images such as pictures of animals, objects, and others. In this teaching process, there are still quite a lot of posters or stickers and various props directly.

In some types of teaching, it is the first stage that is applied to elementary school students in grade 1 manually. Subsequent learning will be carried out with the help of electronic media in the teaching process. The use of electronic media in this study is intended so that there is renewal in the teaching media. The electronic tools used in this learning process can be seen in Table 1 :

**Table 1. Electronic Devices In This Study.**

Electronic Devices	Total
Laptop and Headphone	1
LCD / Monitor	1
Active Speaker	1
Wifi Module	1

Laptops were used to make learning media which was carried out in the process of recognizing numbers, letters, and images to grade 1 elementary school students. The making of this electronic learning media includes the making of design of recognizing letters, numbers, and objects in the form of images, videos and equipped with sound so that students can respond more quickly in a more modern learning process. The use of LCD in this study is to display slides from the laptop so that students can see and learn about the lessons given. Active speakers are also used to be able to make the sound displayed by the pictures or videos given so that students become more enthusiastic in learning the lessons given. Meanwhile, the use of the wifi module is for the development of learning with game methods to train students to be more responsive in learning. For electronic learning media, it can be seen in Figure 2 below.



(a)

(b)



**Figure 2.** Numbers, letters, and animals on Electronic Media

The picture shows the learning media using electronics after manual learning is carried out. learning with the image refers to the 1st semester curriculum 13 with the theme of myself in the introduction of letters (a), numbers (b) and also pictures (c).

Figure (A) shows a display of learning using a slide to introduce the letters A - Z. Figure (B) shows the learning display to display numbers from 1 - 100. and Figure (C) shows the learning display to introduce images such as animals, objects, and others. Furthermore, learning will use the game method using Kahoot.

In the process of making this game-based learning media, the researcher will first prepare questions that are in accordance with the curriculum used in the learning and teaching process. A list of categories and questions can be seen in Table 2.

**Table 2. Category and Question**

Introduction Category	Question
Alphabet	What is this letter? Listen, what letters are mentioned in this video? Is this the letter U? What letters are in this video? The shape is round, what letter is this?
Number	Take a look and listen, what letters are in the video? This figure looks like a duck. What is this number? What is the number in the image below? Listen and see, what are the numbers below? In the video, is that the number 5?
Animal	What animal is this? Is this animal a chicken? This animal has a long neck, what animal is this? This animal has wings and can fly in the sky, what animal is this? This animal likes to hang on the trees, what kind of animal is this?
Object	This object is used for sitting. What is this thing? what objects are in the image below? What is this a shoe image? What is the name of the object below ? Which thing is called a hat?

Table 2 shows the categories and questions used in the process of making this game-based learning fun. The number of sample questions used is 15 questions divided into several types of question categories such as letters, numbers, animals, and objects. And each question has 1000 points.

With the use of Kahoot in this study, students can be more active in learning near all children's games. Games about education can be applied to students so that they can help students learn with a fun process [9]. Learning design using Kahoot can be seen in Figure 3.

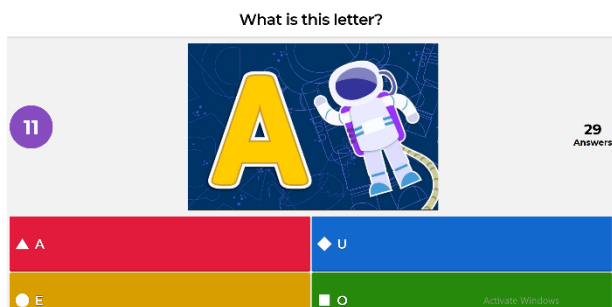


Figure 3. Alphabet Recognition Game.

This image shows a game-based game introducing fonts to 1st grade elementary school students, starting with the introduction of vowels such as A, I, U, E, O according to the currently used curriculum 13.

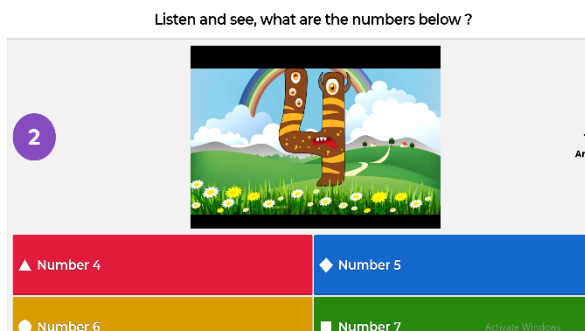


Figure 4. Number Recognition Game.

Figure 4 shows the recognition of numeric forms made in video form in the Kahoot application. The application of cartoon-based numeric videos is carried out so that students are more interested in following lessons using game media.

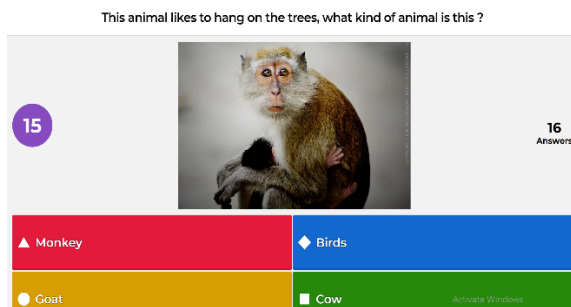


Figure 5. Animal Recognition Game.

Figure 5 explaining the process of identifying animals commonly found in the environment where students live and the types of animals in the wild. The application of animal pictures is intended so that students can be more

responsive and happy in this game-based learning.

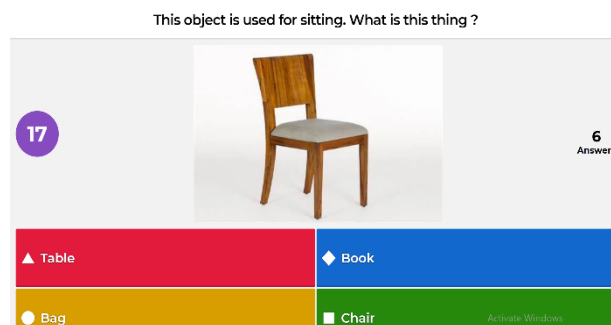


Figure 6. Object Recognition Game.

Figure 6 explains the objects that are around the class or the environment where students learn and are combined in the game so that students can more quickly remember the objects that exist and start from around them.

## CONCLUSION

In conclusion, the application of technology, especially fun learning for grade 1 elementary school students is very good because it can help teachers provide fun lessons with media that are tailored to students' preferences in playing games and learning with animation media so that it can make students more interested, creative, active, responsive, understand the lesson faster, and have good motivation in the classroom during the learning process. It is hoped that the use of Kahoot in the learning process can continue to be applied and developed again at the advanced education level and not only in the field of education but can be developed in other fields.

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#### **Conflict of Interest Statement:**

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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