Adaptive Learning of Sundanese Script Based on Android Games in The Digital Era

Linda Sari Wulandari^{1*}, Erlyn Rosalina², Amalina Shomami³

^{1,2,3} Politeknik Negeri Jakarta, Depok, Indonesia

¹ <u>linda.sari.wulandari@sipil.pnj.ac.id,</u> ² <u>erlyn.rosalina@bisnis.pnj.ac.id</u>, ³ amalina.shomami@mesin.pnj.ac.id

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Abstract

Based on the vitality of the language, Sundanese is still classified as safe because it is still used in daily communication from children to the elderly. However, it is different from the use of the Sundanese Script. This study aims to provide solutions and innovations in the Sundanese Script learning model. This study uses a qualitative method. Data collection techniques using observation and performance tests using a digital Sundanese Script flashcard based on Android Quizlet. Data analysis was analyzed descriptively. The results showed that digital Sundanese Script flashcards can be played by students through the Quizlet android-based application so that teachers can design various forms of Sundanese Script flashcard games via smartphones and know the progress of learning outcomes dynamically in a sustainable manner. This learning model is needed for language learning and adaptive Sundanese Script using Quizlet games in various modes, such as flashcards mode, learn (fast learning) mode, memorize mode, learn-apply mode, match mode, and test mode. When compared to conventional methods, learning language (Sundanese Scripts) using Quizlet is more acceptable to students who are Generation Z.

Keywords: Sundanese, Quizlet, Language Learning Approach, Digital Era

Abstrak

Berdasarkan vitalitas bahasa, bahasa Sunda masih tergolong aman karena masih digunakan dalam komunikasi sehari-hari mulai dari anak-anak hingga orang tua. Namun, berbeda dengan penggunaan Aksara Sunda. Penelitian ini bertujuan untuk memberikan solusi dan inovasi dalam model pembelajaran Aksara Sunda. Penelitian ini menggunakan metode kualitatif. Teknik pengumpulan data menggunakan observasi dan tes unjuk kerja menggunakan flashcard Aksara Sunda digital berbasis Android Quizlet. Analisis data dianalisis secara deskriptif. Hasil penelitian menunjukkan bahwa flashcard Aksara Sunda digital dapat dimainkan siswa melalui aplikasi Quizlet berbasis android sehingga guru dapat merancang berbagai bentuk permainan flashcard Aksara Sunda melalui smartphone dan mengetahui perkembangan hasil belajar secara dinamis secara berkelanjutan. Model pembelajaran ini diperlukan untuk pembelajaran bahasa dan pembelajaran Aksara Sunda adaptif di era digital bagi generasi Z. Siswa merasa lebih nyaman belajar Aksara Sunda dengan menggunakan permainan Quizlet dalam berbagai mode, seperti mode flashcards, mode belajar (belajar cepat), mode menghafal, mode belajar-menerapkan, mode menjodohkan, dan mode tes. Jika dibandingkan dengan metode konvensional, pembelajaran bahasa (Aksara Sunda) dengan Quizlet lebih dapat diterima oleh siswa generasi Z.

Kata Kunci: Bahasa Sunda, Quizlet, Pendekatan Pembelajaran Bahasa, Era Digital

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INTRODUCTION

The variety of languages based on the media consists of spoken language and written language. One language has a variety of written languages, namely Sundanese. Sundanese in Indonesia is a regional language in Indonesia with the second largest number of speakers after Javanese. Sundanese speakers based on the vitality of the regional language, the 2018 linguistic statistical data collection conducted by the Ministry of Education and Culture is classified in the safe category because it is still used by all children and all people of that ethnicity (Pusat Data dan Statistik Pendidikan dan Kebudayaan, 2019) which is 27,000,000 (Suharyo and

Nurhayati, 2020). Although it is still used by all children and all Sundanese people, its use is usually limited to the spoken language variety, while the written language variety is rarely used. Moreover, writing Sundanese using Sundanese Script.

The Sundanese Script is part of the Sundanese cultural heritage as a result of the orthographic work of the Sundanese people that must be preserved and preserved. Socialization of Sundanese Script is still rarely done (Fatah et al, 2020). The West Java government has now established Regional Regulation (Perda) Number 5 of 2003 concerning the Maintenance of Regional Language, Literature, and Scripts and the Governor's Decree Number 434/SK.614/dis-pk/1999 regarding the standardization of the Sundanese Script. Based on the Governor's Decree, it can be seen that the Sundanese Script studied at school is the standard Sundanese Script because based on its type, there are two types of Sundanese Script, namely the ancient Sundanese Script and the standard Sundanese Script is the result of the standardization of the ancient Sundanese Script (Sundari, 2016).

However, the Sundanese Script is still part of the Sundanese cultural richness that needs to be preserved in addition to the preservation of the use of the Sundanese language. The Sundanese Script is a cultural heritage that is still being preserved, for example, by including Sundanese Script lessons in the school education curriculum since 2013 at the elementary, junior high, and high school levels (Salsabila and Saputra, 2021). This Sundanese Script lesson is a challenge for students who are millennials. If it is no longer studied, the Sundanese Script will only be written without meaning. Therefore, it is necessary to learn Sundanese Script that is more interesting and innovative according to the style of the students who are millennials.

Millennials have a very high interest in smartphones (Sari, 2019). Especially with the COVID-19 pandemic, schools must be able to switch from conventional methods to blended learning (learning using online and offline methods). Since 2020, students have used smartphones to become a learning medium that connects teachers and students online. In fact, until now there are still many schools that continue to use the blended learning method as a learning method. Research related to innovation models in learning has been carried out by previous researchers, namely research that designs an interactive quiz game as a multimedia drill and practices learning to improve student learning outcomes. The method used is the method of development or R&D (research and development). In this study, it was found that almost all students gave positive responses regarding learning using drills and practicing multimedia learning with interactive quizzes so students got a score of 91.979% (an increase in learning outcomes) (Adiwisastra, 2016). The development of technology and responsiveness to the technology of the millennial generation must be welcomed by teachers to be able to modify techniques in the teaching process. One of them is the teachers of Sundanese Script lessons.

Some students find it difficult to learn the Sundanese Script because the current learning methods and techniques are still conventional, while this Sundanese Script must be studied to conserve Sundanese cultural heritage, especially for the millennial generation so that the Sundanese Script can still be understood its meaning, not only as a meaningless text. The philosophy of life in Sundanese culture is often found in Scripts/folklore/history written in the form of the Sundanese Script so by continuing to study Sundanese Script, the millennial generation is expected to be able to help preserve and live the life philosophy of the Sundanese in their culture.

Efforts to preserve the Sundanese Script are part of the conservation of cultural heritage. Conservation means preservation. Preservation is an effort to preserve/preserve the carrying capacity, quality, function, and capability of the environment in a balanced way (MIPL, 2010; Wayudin and Sugiharo, 2010). The purpose of conservation is to realize the preservation of living natural resources and the balance of their ecosystems to support efforts to improve the welfare and quality of human life and preserve the ability and use of living natural resources and their ecosystems in a harmonious and balanced manner. Based on the concept, scope, and direction of conservation, it can be stated that conservation is an effort to maintain, preserve, and accept change and/or development (Rachman, 2012). There are four values in the concept of conservation, namely planting, utilizing, preserving, and learning. Planting can be interpreted in two senses, namely physically and non-physically. In terms of cultural conservation, planting is defined non-physically, namely putting noble fundamental values that have crystallized into guidelines or views of life and the basis of the state. Furthermore, the meaning of planting can be realized in noble concrete values in the form of noble cultures, such as art and cultural heritage, which are now the conservation values of cultural heritage (Rachman, 2012).

Conservation education needs to be given as early as possible to children so that they are embedded in their hearts until adulthood. Conservation education is one form of effort to maintain and protect noble values, biodiversity, and existing historical heritage. The application or application of conservation education to cultural heritage can be built in several models and techniques or learning patterns that are by the surrounding environment, conservation/environmental issues that occur, and the abilities of the students themselves (Rachman, 2012).

Research related to innovation models in learning has been carried out by previous researchers, namely research that designs an interactive quiz game as a multimedia drill and practices learning to improve student learning outcomes. The method used is the method of development or R&D (research and development). In this study, it was found that almost all students gave positive responses regarding learning using drills and practicing multimedia learning with interactive quizzes so students got a score of 91.979% (an increase in learning outcomes) (Adiwisastra, 2016). Then, there are also other studies on developing various kinds of learning media by utilizing computer and smartphone technology. Android-based smartphones are used as media to support learning in the classroom (Nurcahyo, 2012). Students can study the material without being limited in time, meaning that students can study outside of class hours by using a smartphone (Fatimah and Mufti, 2014). In addition, android applications in smartphones can be an innovation of learning media that is considered appropriate to meet advances in information and communication technology as well as meet student habits so that they can be adapted to their current lifestyle, namely the lifestyle of the millennial generation (Rahmelia & Huda, 2014)

Based on the findings from the studies described above, learning methods in this digitalization era must be adapted to the needs of the millennial generation who always use technology and the internet to gain knowledge. Learning media can use android-based smartphones so that students do not only get knowledge from only one direction (books or teacher explanations at school). Learning media must begin to be developed through smartphones by utilizing interactive android-based applications that attract students' interest in learning, which can be packaged in the form of games so that they are easier to understand compared to textual theory alone.

The research that will be conducted by researchers uses a learning model in the form of a digital Sundanese Script flashcard game. The digital form is carried out with supporting media in the form of a smartphone based on the Quizlet android application so that teachers can easily design interactive games for students to learn Sundanese Script and also to make quizzes on learning evaluation results in one smartphone grip.

Then, other research can also be a reference for this research, especially in determining the appropriate android application to be used as a learning support media that is easy to use by teachers and students, especially for linguistic learning (language), namely the Quizlet android application. Based on the results of previous research, Quizlet can be used as a learning medium for all subject subjects and all ages of learners. Quizlet is very suitable for millennials in the learning process (Sari, 2019). Therefore, the research that will be carried out by this author will create a form of Sundanese Script flashcard innovation in print and digital form based on the Quizlet android application as a media innovation to support Sundanese Script learning in schools for the millennial generation. This is also one form of effort to foster a sense of interest in students who are millennials towards Sundanese Script lessons which is indirectly an effort to conserve Sundanese culture.

The researcher will make a Sundanese Script design in the form of a flashcard. Flashcards have often been used in language learning in the form of games. However, the flashcard that is usually used is in the form of a printed flashcard. Therefore, in this study researchers will create a digital flashcard product so that it can be played easily via an Android smartphone. Digital Sundanese Script flashcards can be played in the Quizlet android-based application where the way the game can be arranged as attractively as possible by the teacher who is the host of the game, and the teacher can also give quizzes to students to measure the level of students understanding of Sundanese Script lessons. Thus, learning is expected to be something fun for students and also interactive. The purpose of this study is to obtain an appropriate learning model to improve the understanding of Generation Z on the Sundanese Script so that it becomes the right solution in the current digitalization era.

METHODS

This research is a class room action research (CAR) that aims to overcome the problems of learning in the classroom. Action research is carried out when a group of students is identified with a problem, then the researcher determines an action to overcome it (Rahman and Haryanto, 2014). Problem that occur in the classroom is manual learning material. Currently, students are more interested in digital learning material than just books manual learning material. Students feel bored quickly if learning only from books. Digital learning materials can make students learn more interactive and quickly understood. This research design uses a cyclical model, namely the implementation of actions from one cycle to the next. Each cycle includes planning (planning), action (action) and observation (observation), and reflection (reflection) (Kemmis and Taggart, 1990). The steps in the next cycle are revised planning, action and observation, and reflection. The subjects in this study were students of SMK X.

The action design is by the action research model, which consists of planning, implementing, observing, and reflecting (Kemmis and Taggart, 1990). At the planning stage, namely observing classroom conditions and identifying problems in the classroom, equating perceptions with teachers, formulating action plans, designing learning scenarios, determining learning objectives, making the necessary media, making preliminary reading assessment instruments, making observation sheets and practice test questions for reading and writing the Sundanese Script. At the actual implementation stage at the same time as observation, the implementation stage of learning the teacher carries out all the learning scenarios that have been designed. Then observations were made when the action was carried out, the researchers made observations using the prepared observation sheet (Rahman and Haryanto, 2014). At the reflection stage, namely reviewing by evaluating, and analyzing the processes and learning outcomes that have been implemented. The results of the reflection analysis are then used to determine whether or not the continuation of the action is needed (Rahman and Haryanto, 2014).

The data collection techniques used were observation, performance tests, or the practice of reading and writing Sundanese Script. The data collection instruments were observation sheets, performance test questions, and assessment sheets for reading and writing the Sundanese Script. The data collected in the study were analyzed using Scriptive techniques.

RESULTS AND DISCUSSION

Results

This section provides insight into how Quizlet can be used in the classroom for learning Sundanese script and how students respond. The use of Quizlet in class is presented separately in each session so that it is represented in several stages according to the difficulty level. This is based on the existence of four types of divisions in the Sundanese script, namely *rarangken* (vocalization), numbers, ngalagena (consonants), and *swara* (vowels). The findings are discussed below based on student learning outcomes and the results are described descriptively. In this study, the learning started by introducing the form of *swara* (vocals), numbers, *ngalagena* (consonants), and vocalization. Quizlet has several game modes, including learning mode; flashcard mode; fast learning; test (gravity). Each stage of learning was adjusted to the level of difficulty. In learning letters, as is often done in early childhood, the use of vowels is introduced first (learning in terms of the sound of vowels), followed by the introduction of numbers, then the introduction of consonant (*ngalagena*) characters. After that, students mastered *swara*, *ngalagena*, and numbers, then were taught the form of *rarangken* (vocalization) so that students could read the word in Sundanese script, the last was the introduction of punctuation marks so that they could be applied when making sentences. However, before entering the learning stage, the process of making Sundanese script flashcards is as follows.

- 1. Study literature of Sundanese script
- 2. Sundanese script flashcard design using Canva
- 3. Swara character flashcard design
- 4. Ngalagena script flashcard design
- 5. Number flashcard design
- 6. Sundanese script punctuation design
- 7. Save the design in jpg format.
- 8. Go to the Quizlet app
- 9. Making learning sets per character type
- 10. Uploading flashcards per font

11. Learning mode setting
 12. Trial
 13. Evaluation

Sundanese script is a Sundanese cultural heritage in the orthographic form that still exists today. Regional Regulation Number 5 of 2003 concerning Maintenance, Script, Language, and Regional Literature in it describes the maintenance of the regional script, language, and literature in question is the Sundanese Script. The symbols of the Old Sundanese script are arranged into several types of script, namely *swara* script, *ngalagena* script, special script, *rarangken*, and pairs. However, in this study, as learning materials, special scripts will be included in the *ngalagena* script because the special script contains consonant sounds, although it is slightly different from other *ngalagena* scripts which contain a vowel syllable /a/, this special script contains a vowel syllable /eu/, /o/, /tra/. Then, in this study, there are also Sundanese characters in the form of numbers, as well as other forms besides rarangken (vocalization), namely *penghulu, panyuku, paneleng, and panolong*.

The Process of Making Sundanese Script Flashcard Design

The process of making the design is carried out after conducting a literature study on the types of Sundanese script. After knowing the types of Sundanese script, a flashcard background design was carried out using the Canva application. The background is adjusted to not too conspicuous and not too crowded so as not to interfere with the learning process, especially for memorizing the form of the Sundanese script. The process of making the background to writing characters starting from writing *swara*, *ngalagena*, numbers, to *rarangken* can be described as follows.

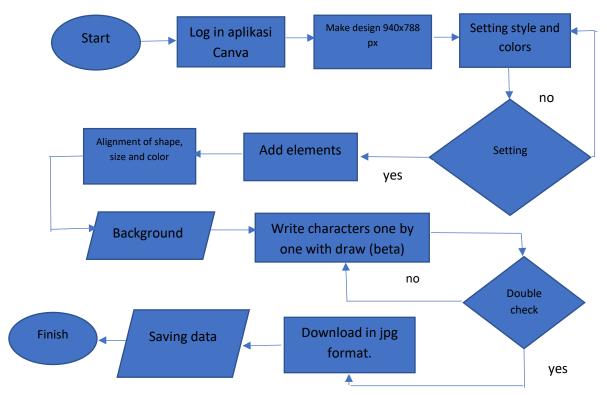


Figure 1. Flowchart of The Process for Making Sundanese Script Flashcard Design

Flashcard creation was made using the Canva application with the aim of making it easy to follow by all groups, both teachers and students. The design begins with setting the card size, this flashcard uses a size of 940x788 px, according to publications commonly used for social media, and the size is not heavy when uploaded to learning games applications. Next, in the blank canvas, the style and color palette began to be adjusted, in this design using soft/pastel colors so as not to catch the eye. After that, start the process of adding elements. In the addition of elements, there are many choices of shapes that can be adjusted to make them attractive. Alignment of shape, color, and size is needed so that the card is pleasing to the eye, the middle part

is left blank because it will be filled with Sundanese characters. After the background is finished, the design is continued with writing Sundanese script. The Sundanese script is written in the center of the card and is not obstructed/disturbed by any shape so that the focus is on the point of the Sundanese script. Character writing is done by drawing one character at a time. As shown in the following figure 2.

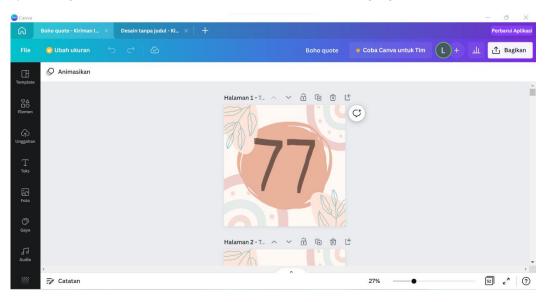


Figure 2. Drawing One Character of Sundanese Script

After finishing designing the cards, the next step is to download the cards in jpg format. And keep it in a safe folder. The following is a collection of Sundanese script card files

Ngalagena (Consonants)

Ngalagena is an ancient Sundanese script in the form of sound symbols which is seen as a consonant phoneme that syllably contains a vowel sound /*a*/. There are 25 ngalagena scripts whose sound comes from the positioning system of the speech organs (articulations). The sound symbols of the *Ngalagena* script in this study are /*ka*/, /*ga*/, /*nga*/, /*ca*/, /*ja*/, /*nya*/, /*ta*/, /*da*/, /*na*/, /*pa*/, /*ba*/, /*ma*/, /*ya*/, /*ra*/, /*la*/, /*wa*/, /*sa*/, /*ha*/, /*fa*/, /*va*/, /*qa*/, /*xa*/, /*za*/, /*kha*/, and additional special characters /*le*/ or /*leu*/, /*re*/ or /*reu*/, /*ro*/, and /*tra*/.



Figure 3. Ngalagena (Consonants) of Sundanese Script

Swara (Vocals)

Swara is an ancient Sundanese script that has a vowel sound. In this study, 6 forms of swara characters have been made, namely |a|, |i|, |u|, |e|, |eu|, |o| with consecutive sounds [a], [i], [u], [ɛ], [ə], [ɔ].

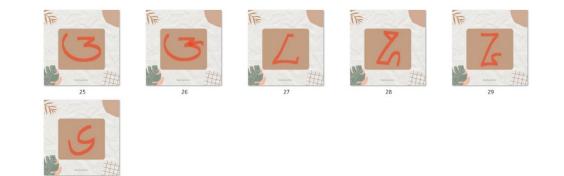


Figure 4. Swara (Vocal) of Sundanese Script

Number

The Sundanese script, like scripts in other languages, has the form of numbers. The form of numbers in the Sundanese script consists of ten numbers, namely the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0.

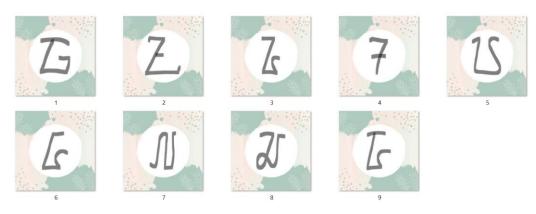


Figure 5. Number of Sundanese Script

Rarangken (Vocalization)

The vocalization marker or commonly called *rarangken* in the ancient Sundanese script consists of 14 forms whose writing method is placed above the basic script symbol, totaling 5 forms; under the basic characters there are 2 forms; and parallel to 6 forms. After conducting a literature study on various types and forms of ancient Sundanese script, then proceed with the process of making a Sundanese script flashcard design, which distinguishes this research from previous research on Sundanese script, namely in this study the design uses an application that is quite easy to operate by all circles, ie teacher or student. The application used is the Canva application.

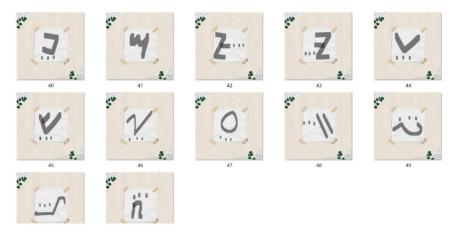


Figure 6. Rarangken (Vocalization) of Sundanese Script

After you finish saving it in a folder according to each type of character, then the process of making learning games using the Quizlet android application.

The Process of Developing Learning Instruments in the Quizlet Application

Teachers can access the quizlet.com website or download the application in the playstore. After that, if you haven't registered before, the teacher must register first or you can also choose to log in with Google if you already have a Google account on your respective device. After registering or log in in with Google, the teacher will enter the following page.

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In the menu bar, there is a blue "create" box. The teacher can click the box which will display the options for "class", "lesson materials", and "folders". To make a Sundanese script learning material instrument, the teacher can click "lesson material". Then the following page will appear.

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Teachers can enter a title and add a description of the set of teaching materials as shown below.

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* Tarik dan lepa	s gambar atau <mark>pilih gambar</mark> .		

After that the teacher can start to enter one by one the cards that have been prepared in the Sundanese script card folder.

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To be able to add as shown above, the teacher can click "add card" as shown below.

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Then, an empty column will appear as follows.

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The teacher can type the sound of the Sundanese script card that is entered in the term column, the definition section is left blank, then click the image icon to upload the card according to the sound of the script. As an example in the following image.

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The above process can be repeated to upload other types of Sundanese script cards, such as *Swara* cards, numbers, vocalizations, and others according to the previously designed cards. When it is finished, the teacher can click the "finish" column if later there are still additional teachers who can still re-edit the set of teaching materials. Furthermore, when the learning set has been created, the teacher can proceed to the trial display as follows.

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From the figure above, Quizlet shows that there are two types of activities that the teacher can choose from (1) Activities in the classroom; (2) independent learning activities. Classroom activities can be used in the classroom when meeting face-to-face with students. Then, for assignments, the teacher can ask students to choose independent learning activities that can be done from each student's cellphone from anywhere, without having to do it together in class.

Discussion

Implementation of Sundanese Script Learning Using Quizlet

Sundanese script learning is done by direct learning method through four stages, namely orientation, Sundanese script learning stage using Quizlet, and assessment stage. The orientation stage is the stage where the researcher introduces himself to the Sundanese script teacher and also to the students. At the orientation stage, it is also explained the learning objectives that are the objectives of the research carried out. Furthermore, the Sundanese script learning stage was carried out using the direct instruction method by the teacher assisted by the researcher. The teacher explains the types of Sundanese script and the researcher explains how to technically learn Sundanese script using the Quizlet application. Sundanese script learning instruments have been arranged in Quizlet so that in the process of applying this learning, teachers and students just use it. Teachers are assigned a teacher account to log in to Quizlet. The assessment stage is an assessment stage by periodically looking at student learning outcomes through the Quizlet application. The results of this assessment became the primary data source of this study.

The research was conducted offline by meeting in person to conduct the orientation phase with teachers and students regarding the technical use of Quizlet in learning. The teacher first explained the types of Sundanese script to the students and explained the purpose of learning Sundanese script. The researcher explained to the teacher that this learning process was carried out based on games so that it did not need to be done at a special time (according to class hours), but could be done periodically by students independently using their respective cellphones.

Students are asked to download the Quizlet application and join a class that has been created by the researcher. After they join, a trial is carried out according to the instructions from the teacher (after being explained by the researcher how to use it). The researcher helped the teacher to present the Quizlet application, in particular, on the Sundanese script learning set. Students are explained to be able to try and apply how to use various game selection modes in Quizlet. The teacher gives students the opportunity to ask questions in the use of Quizlet or about the Sundanese script.

Sundanese script flashcards that have been compiled in Quizlet, including *swara* script, *ngalagena* script, *numbers*, and *rarangken*. The teacher gives about 45 minutes for students to understand the content and sequence of the cards. The teacher prepares a learning evaluation test related to the material using two modes, namely learn and match modes. In learn mode (learn), the teacher gives questions related to the teaching materials that have been provided in the flashcard. The learning mode is almost the same as the questions in the form of Multiple Choice (MC), where students can choose one answer that they feel is right. Right or wrong answer choices will be directly displayed on the screen.

After 10 minutes had passed, the teacher again informed students via the Google Classroom platform regarding learning evaluation activities on the Quizlet application. The teacher asks students to open the learn mode and answer the questions that have been prepared by the teacher in that mode. The time given by the teacher to the students is 5 minutes. The results of the answers will be immediately visible when students finish answering. If the student's answer is wrong, a red notification will be displayed. However, if the student's answer is correct, a green notification will be displayed. Next, students are asked to open match mode (match).

In match mode, there are 6 pairs of cards that must be matched by students. The student who gets the best score is the student who answers correctly and in the fastest time. After students run these two modes, the cumulative result of all student scores will be recorded in the teacher's account graph. The system will automatically sort the results obtained by students according to the order of the top three. The teacher will announce the test results so that students can understand the results of the learning process.

Based on the observations made by the researchers, before the teacher carried out learning evaluation activities using the Quizlet application, the teacher first carried out three learning activities, namely preliminary activities, core activities, and closing activities. The three core activities are carried out through the Google Classroom platform and the Zoom application. The implementation of these three core activities aims to ensure that the integrity of learning activities is carried out properly before the learning evaluation activity takes place. After the three learning activities have been carried out, the teacher then carries out learning evaluation activities. This learning evaluation activity aims for teachers to know the progress and development and success of students after carrying out learning activities.

In the Quizlet application, the teacher chooses to use the learn mode and match mode because it is suitable for use in evaluation activities for learning Sundanese script. In the learn mode, the teacher provides flashcard images of Sundanese script starting from *swara*, numbers, *ngalagena*, and *rarangken* scripts that have been explained by the previous teacher. Students will choose the right answer according to the script flashcard prepared by the teacher. The learning mode is almost the same as the questions in the form of Multiple Choice (MC), where students can choose one answer that they feel is right. Whether or not the answer choices are correct will be directly displayed on the screen.

The questions given by the teacher to students in the learn mode include *swara* characters, numbers, *ngalagena*, and *rarangken*. In match mode, which is one of the game features in the Quizlet application. This mode is designed to match cards with the correct pair. This mode also provided a timer so that students can know the time it takes to complete each session (6 pairs of cards). Therefore, the resulting time gain can be recorded. The best score (fastest time) will be recorded and used as a criterion for subsequent attempts.

Oused on rearining and understand the subject matter went it was supported with the data below.																					
Question No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total
Student 1	4	5	5	5	4	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	97
Student 2	5	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	96
Student 3	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	4	96
Student 4	5	5	4	5	5	4	5	4	4	5	5	5	5	5	5	5	5	5	5	4	95
Student 5	5	5	4	4	5	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	91
Student 6	5	5	4	5	5	5	4	5	4	5	5	5	5	5	5	5	4	4	4	4	93
Student 7	5	5	4	5	5	5	5	5	5	5	4	5	5	5	5	4	5	5	5	5	97
Student 8	4	5	5	5	5	5	5	5	4	4	4	4	4	5	5	5	5	4	5	4	92
Student 9	5	5	5	5	5	4	4	4	4	4	4	5	5	5	4	4	4	5	5	5	91
Student 10	4	5	5	4	5	5	4	5	4	5	4	5	4	5	5	5	4	4	4	4	90
Student 11	5	5	5	5	5	4	5	4	5	4	5	4	5	5	5	4	5	5	4	5	94
Student 12	5	5	5	5	5	5	4	5	4	5	4	5	5	5	4	4	5	5	5	5	95
Student 13	5	4	5	5	5	5	4	5	5	5	5	5	4	4	4	4	5	5	5	5	94
Student 14	5	4	5	5	5	4	5	4	5	4	5	4	4	5	5	5	5	4	4	4	91
Student 15	5	5	5	5	5	4	5	4	4	4	4	5	5	5	5	5	4	4	4	5	92
Student 16	5	5	5	5	5	5	5	4	5	4	5	5	5	4	4	5	5	5	5	4	95
Student 17	5	5	5	5	5	5	5	5	4	4	4	5	4	5	4	5	5	5	5	4	94
Student 18	5	5	5	4	5	4	4	5	4	4	4	5	5	4	5	4	5	4	5	4	90
Student 19	5	5	5	4	5	5	5	5	4	5	5	5	5	5	4	4	4	4	4	5	93
Student 20	4	5	5	5	4	4	5	4	4	4	4	5	5	5	5	4	5	5	4	5	91
Student 21	4	5	5	5	5	5	5	4	5	4	5	4	5	4	5	4	5	4	4	5	92
Student 22	4	5	5	5	4	5	5	5	5	5	5	4	5	4	5	4	5	4	5	5	94
Student 23	5	5	5	5	5	4	5	5	5	4	5	4	5	4	5	4	5	4	4	5	93
Student 24	5	5	5	5	5	5	4	5	4	5	4	5	6	4	6	4	5	5	5	4	96
Student 25	5	4	5	5	5	4	5	5	5	4	4	4	5	5	5	5	4	4	4	4	91
Student 26	5	5	5	5	5	5	5	5	5	4	5	5	4	5	4	4	5	4	5	5	95
Student 27	4	5	5	5	5	5	4	5	5	5	4	4	4	5	5	5	5	5	4	5	94
Student 28	5	5	5	5	4	5	5	5	5	5	4	5	5	5	4	5	5	4	5	4	95
Student 29	5	5	5	5	5	5	5	5	5	4	5	5	5	4	4	4	4	5	5	5	95
Student 30	5	5	5	5	5	4	4	4	5	4	4	5	5	5	4	4	4	5	4	4	90
								A	Vei	age S	Score										93,4

The application of learning applications used by teachers is already interesting. Teachers use learning applications with the aim that evaluation activities in learning can be realized while motivating students to stay focused on learning and understand the subject matter well. It was supported with the data below.

Based on the data, the average score obtained using Quizlet is 93.4 from perfect score 100. It's like previous study that got excellent score with percentage 96,30% (Fatimah and Mufti, 2014). Seeing the responses and results of students' work in evaluation activities for Sundanese script learning, which on average scored above the MCC (Minimum Completeness Criteria), further proves that the strategy adopted by teachers in learning evaluation activities using the Quizlet application is very appropriate. The responses and results given by students using the Quizlet application in the evaluation of Sundanese script are able to provide a good understanding and make students able to work on the questions on the Quizlet application and achieve success in the learning process. More than that, there is new finding in adaptive learning. This new finding is making students more creative to arrange words with the available scripts.

CONCLUSION

Learning Sundanese script in the digital era is not only done conventionally but can also be digital-based. Digital learning of Sundanese script is a form of learning innovation in the form of flashcard games that no longer have to be printed. The Sundanese script flashcard game is carried out using an android-based Quizlet application that can be used for classroom learning and independent learning by students. The learning results show that the application of learning applications used by teachers is interesting. Seeing the responses and results of students' work in evaluation activities for learning Sundanese script, which on average scored above the MCC (Minimum Completeness Criteria), further proves that the strategy used by teachers in learning evaluation activities using the Quizlet application is very appropriate. The responses and results given by students using the Quizlet application in Sundanese script evaluation activities are able to provide a good understanding and make students able to work on questions on the Quizlet application and achieve success in the learning process. There is new finding in this research. The new finding is making students more creative to arrange words with the available scripts. If all learning is supported by utilizing the use of appropriate learning applications and appropriate strategies, an increase in students' success in learning Sundanese script will achieve. This is in accordance with the results of observations made by researchers.

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REFERENCES

- Adiwisastra, M. F. (2016). Perancangan Game KuisInteraktif sebagai Multimedia Pembelajaran Drill and Practice untuk Meningkatkan Hasil Belajar Siswa. J. Inf., 2(1), 205–211. doi: 10.31311/ji.v2i1.67.
- Fatah, H., Ichsan, N., Wahyuni, T., Ernawati, E. and Indriyanti, I. (2020). Rancang Bangun Program Aplikasi Pembelajaran Aksara Sunda Berbasis Android. *Sistemasi*, 9(2), 304. doi: 10.32520/stmsi.v9i2.770.
- Fatimah, S. & Mufti, Y. (2014). Pengembangan Media Pembelajaran IPA-Fisika Smartphone Berbasis Android Sebagai Penguat Karakter Sains Siswa," *J. Kaunia*, 10(1), 59–64.
- Kemmis and Taggart. (1990). The Action Research Planner. Victoria: Daekin University.
- Nurcahyo, P. A. (2012). The Effects of Android Application Learning Media on Students. 337–344.
- MIPL. (2010). Konservasi. Purwokerto: STMIK Amikom.
- Rachman, M. (2012). Konservasi Nilai dan Warisan Budaya. Indones. J. Conserv., 1(1).
- Rahman, B. & Haryanto. (2014). Peningkatan Keterampilan Membaca Permulaan Melalui Media Flashcard Pada Siswa Kelas I SDN Bajayau Tengah 2. J. Prima Edukasia, 2(2), 127. doi: 10.21831/jpe.v2i2.2650.
- Rahmelia & Huda, Y. (2014). Aplikasi Mobile Learning Ilmu Biologi untuk Siswa Kelas X Sekolah Menengah Atas Berbasis Android (Studi Kasus SMA N 10 Padang. J. Vokasional, 2(2), 2–7.
- Salsabila, R. & Saputra, E.R. (2021). Flashcard Aksara Sunda : Sebuah Inovasi Media Pembelajaran Untuk Sekolah Dasar. Lokabasa J. Kaji. Bahasa, Sastra, dan Budaya Drh. serta Pengajarannya, 12(2), 181– 190. doi: https://doi.org/10.17509/jlb.v12i2.
- Sari, D. E. (2019). Quizlet: Aplikasi Pembelajaran Berbasis Smartphone Era Generasi Milenial. JPIS J. Pendidik. Ilmu Sos., 29(1), 9–15. doi: 10.23917/jpis.v29i1.8150.
- Suharyo & Nurhayati. (2020). Pemilihan dan Pemertahanan Bahasa Jawa pada Kaum Perempuan Pesisir Rembang. *Litera*, 19(3), 397–413. doi: 10.21831/ltr.v19i3.28699.
- Sundari, J. (2016). Melestarikan Aksara Sunda Dengan Aplikasi Multimedia Jenie. J. Evolusi, 4(2), 28-32.
- Pusat Data dan Statistik Pendidikan dan Kebudayaan. (2019). *Statistik Kebahasaan 2019*, 1st ed. Jakarta: Pusat Data dan Statistik Pendidikan dan Kebudayaan Kementerian Pendidikan dan Kebudayaan.
- Wayudin, A. & Sugiharo, D. Y. P. (2010). Unnes Sutera: Pergulatan Pikir Sudijono Sastroatmojo Membangun Sehat, Unggul, Sejahtera. Semarang: Unnes Press.