




Development of Interactive Learning Media Kersosmi Bunisa Social Science Class IV Elementary School

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ABSTRAK

Tujuan penelitian dan pengembangan ini yaitu menghasilkan media pembelajaran interaktif Kersosmi Bunisa (Keragaman Sosial, Ekonomi, Budaya, Etnis, dan Agama) aplikasi android yang valid menurut ahli materi, ahli media, dan guru, serta praktis menurut peserta didik. Model penelitian dan pengembangannya menggunakan R&D oleh Borg dan Gall dengan tahapan potensi dan masalah, pengumpulan data, desain produk, validasi produk, revisi produk, uji coba produk, revisi produk, uji coba pemakaian, revisi produk, dan produksi massal. Hasil dari ahli materi sebesar 91,7 persen, ahli media sebesar 87,5 persen, dan guru sebesar 92,8 persen. Semuanya dengan kriteria sangat valid dan dapat digunakan tanpa revisi. Hasil angket respons peserta didik tentang kepraktisan pada uji coba produk skala kecil sebesar 100 persen dan uji coba pemakaian skala besar sebesar 94,2 persen dengan kriteria sangat praktis dan dapat digunakan tanpa revisi. Media pembelajaran interaktif Kersosmi Bunisa direkomendasikan untuk meningkatkan minat belajar siswa, menunjang efektivitas, efisiensi, dan peningkatan mutu pembelajaran IPS kelas IV.

ABSTRACT

The goal of this research and development was to create Android applications for Kersosmi Bunisa (Social, Economic, Cultural, Ethnic, and Religious Diversity) that are valid in the eyes of material experts, media experts, and teachers, as well as practical in the eyes of students. Potential and difficulties, data collecting, product design, product validation, product revision, product testing, product revision, user trial, product revision, and mass manufacturing are all steps in the Borg and Gall research and development paradigm. Material specialists scored 91.7 percent, media experts scored 87.5 percent, and educators scored 92.8 percent. These belong to very valid criterion and can be employed without revision. The findings of the student response questionnaire on practicality in small-scale product testing were 100 percent, and large-scale usage trials were 94.2 percent, which means very practical and may be used without revision. Kersosmi Bunisa interactive learning media is recommended for class IV social studies learning to boost student interest in learning, support effectiveness, efficiency, and improve quality.



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INTRODUCTION

Students in the educational system do have a wide range of learning preferences. According to research by Shamsuddin & Kaur (2020), there are four different learning styles: accommodators (who prefer to do rather than think), assimilators (who prefer organized and structured understanding and learning, reading, writing, and individual work), convergent (who have a strong capacity for thought and try to put ideas into practice), and divergent (have the greatest power in terms of diversification). One exposure to a range of ideas and they are eager to hear constructive criticism. This study looks for media that can address the wide range of student learning styles. According to the results of the student needs questionnaire, which was given out on October 14, 2021 and completed by 26 students, the material on social diversity, economics, culture, ethnicity, and religion was difficult for 96 percent of students to understand, there weren't enough learning resources available, and 97 percent of students thought the learning materials were boring and needed more interactive learning materials. The observed learning completion rate was 26.92 percent. Due to issues with accessibility, appeal, modernity, effectiveness, efficiency, and the media's incapacity to effectively portray learning content, 73.08 percent of students had not passed the Minimum Completeness Criteria.

Pakunden 1 Public Elementary School in Blitar City is where this study was conducted. Observations of the fourth-grade teacher at the elementary school revealed that she had issues using learning resources, particularly when it came to topics like social diversity, economics, culture, and religion. The issue is that employing modern learning medium demands highly involved planning due to their complexity. Additionally, the effectiveness of the outcomes is much diminished when using traditional learning media. During field observations, it was discovered that the teacher only used pictures to communicate what the class needed to know, which made the students less enthusiastic and required more explanation from the teacher. Some of the students also appeared disinterested, which reduced the learning value (below the criteria for learning) Minimum Social Sciences Mastery, which is 70.

The high degree of difficulty and the students' lack of interest were the reasons the researcher selected the Kersosmi Bunisa material. Because studying social sciences begins with students who are close to them initially, then far away, researchers chose Java and Bali as the study's locations. There are numerous forms of diversity in close proximity to students in Blitar Regency and Blitar City, such as Keris Saidi, who is well-known there. This is a long way from Bali's students. The choice of Java and Bali in this material is also a result of the stark cultural divide in terms of religion. Islam is the predominant religion in Java, where the combined populations of its three provinces (West, Central, and East) account for 55.53 percent of Indonesia's overall population (Hasbullah, 2012). Hinduism is the predominant religion in Bali, however (Priskila & Widiyasavitri, 2020). so that pupils at least have the chance to acquire tolerance in the context of religion while they are learning.

Additionally, learning media can be used to convey material in front of a group of students, according to Sumiharsono & Hasanah (2017), making it simpler to accomplish learning objectives. Nurdyansyah (2019) claims that learning media are all tools utilized to transmit messages from professors to pupils that will facilitate the learning process. Purwono (2014) asserts that learning is crucial to sustaining the effectiveness of the teaching and learning process. In addition to images, there are other media such as smartphones that can be used to introduce students (Setyowati, 2021). The availability of learning resources that can assist students in grasping abstract content during the concrete operational phase is one of the determining variables in fostering an enjoyable learning environment (Batubara, 2017). Therefore, the learning media in this study is a tool utilized by the teacher to transmit messages, concepts, or ideas to the recipient.

Makkih et al. (2020) who earlier study on using media with Android facilities to teach social sciences in grade 4 elementary school reveal that the results of the assessment of material experts were 90 percent positive and that of media experts were 98 percent positive, indicating that the method was very feasible. Gal (2019) also looks at students' satisfaction with their M-Learning experiences and how they see the world beyond the confines of the classroom. According to (Lok & Hamzah, 2021), students can learn abstract concepts more concretely and effectively through

M-Learning. According to Ismail et al. (2022), instructors in secondary schools in Malaysia employ M-Learning because they can organize different teaching tactics using mobile technology devices without being constrained by space, time, or even static resources.

There are two ways to look at the novelty of the media that the researchers created. First, the content is more comprehensive in this learning medium because earlier studies only looked at race and culture. Second, it has four benefits in terms of media, specifically: (a) Social, Economic, Cultural, Ethnic, and Religious Diversity Media (Kersosmi Bunisa) makes use of the standard PowerPoint application, which is very frequently utilized by teachers in the teaching and learning process. The pptx data is then transformed into HTML5, and an APK is created, (b) The Social, Economic, Cultural, Ethnic, and Religious Diversity media (Kersosmi Bunisa) has more moving images, animated feedback (the animation can directly provide an overview and answers to the practice questions), learning perception videos, and the materials have illustrations in contrast to previous research using Adobe Flash, Adobe Illustrator, and Adobe Animate applications which are rarely used by teachers, (c) Teachers' jobs are made simpler by the use of moving visuals in learning feedback in Social, Economic, Cultural, Ethnic, and Religious Diversity (Kersosmi Bunisa) media because they no longer need to provide feedback when students are completing practice questions, (d) Social, Economic, Diversity Media, Culture, Ethnicity, and Religion (Kersosmi Bunisa) with the Discovery Learning learning approach must be in conformity with the learning requirements in the 2013 Curriculum, (e) The case technique is used in the teaching material to help students identify difficult students, and (f) The application may be used on Android devices running the Jelly Bean operating system, allowing older smartphone models to continue to be used.

The media that can be accessed using this Android application's use of interactive, adventurous, or seductive learning media (blended learning). Additionally comprehensive and accurate, the available materials also include instructional videos. The Android learning materials in this application also include interactive lesson plans. The interactive portion of the lesson consists of feedback in the form of an animated figure labeled "true" or "false" and evaluation of the student's performance relative to the lesson's objectives. The educational media in this package includes animated or graphical learning materials as well as instructional videos that can be used by students to learn privately. This interactive learning media is based on interactive multimedia. Kurniawan et al. (2019) have previously discussed multimedia in physical practice-related material and have produced highly significant results. Additionally, Budiarto et al. (2021) assert that the use of interactive multimedia that was developed by TIK can increase learning focus and learning results.

Media for learning is very helpful for making it easier for teachers to explain concepts and for making it easier for students to receive lessons. According to Karo-Karo & Rohani (2018), there are benefits to using educational media, including (a) the ability to dissect material, (b) efficient use of time, (c) a more interactive learning process, (d) an increase in learning outcomes, (e) the ability to conduct learning activities whenever and wherever, (f) the development of positive student-teacher relationships with the subject matter, and (g) a shift in the teacher's attitude toward productivity and positivity. In line with this assertion, Untari (2017) asserts that one strategy for raising educational standards is to utilize all media, giving teachers the confidence to use classroom media to present material.

Teachers can also offer asynchronous learning using this instructional material. Students can learn at anytime and anyplace using asynchronous learning, which is more flexible and is not restricted by set class times (Lapke & Lapke, 2022). For students, the purpose of this medium (M-Learning) is to motivate them to pay attention, find it relevant, feel confident, and experience a high level of satisfaction (Chiang et al., 2014). In the meanwhile, digital medium helps teachers combine their educational skills with mobile devices to suit students' requirements (Baran, 2014). The contribution of this study is to develop an android application interactive learning media on diversity forms for students' learning support in public elementary school. Therefore, the goal of this research is to create an android application for interactive learning that is practical for students and legitimate according to teachers, media experts, and material experts for diversity concepts in elementary school.

METHOD

This section discusses (a) research design, (b) research data, and (c) research data analysis. Here is the explanation.

Research Design

Figure 1 illustrates the research methodology adopted, which is the research and development technique (R&D) by Borg and Gall (Sugiyono, 2013).

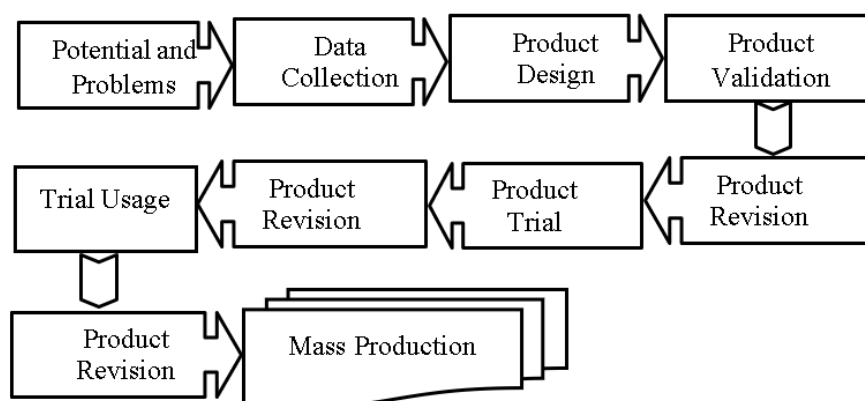


Figure 1. Steps to use research and development (R&D) methods

Source: Sugiyono (2013)

Design validation, now known as product validation so that it is in line with the product design, is the fourth step of the R&D methodology.

Potential and Problems

The potential identified in this study is the underutilized potential of information technology and internet networks. The problem identified is a lack of variety in learning media, which can be supported by smartphones that can be used to support the usage of Android applications for interactive learning media. According to Zaheer et al. (2018), connectivity, portability, flexibility, and new kinds of communication and engagement are these innovations in the usage of cellphones. Consequently, this work will result in the creation of an Android application with interactive learning material.

Data Collection

The information was gathered by looking at the grade IV sub-theme of diversity's Core Competencies and Basic Competencies. Basic Competencies 3.2 and 4.2 are employed by researchers.

Product Design

The process of creating interactive learning media includes (a) finding evaluation question resources to use while creating the media; (b) creating validation tools for instructors, media professionals, and subject matter experts; (c) downloading website-based animation resources and templates and creating goods using the Microsoft PowerPoint 2016 program with help from iSpring Suite 10 add-ins, which are then exported to HTML5 format; (d) using the Pinterest or Canva platforms; and (e) converting HTML5 files to APK using Web 2 APK Builder.

Product Validation

After the product was complete, validation was performed. The product would then be consulted, and three persons would test its reliability.

Product Revision

For the advancement of interactive learning media for Android applications, product updates were carried out based on comments, critiques, and ideas from material experts, media specialists, and teachers. The initial learning media were improved using the validation results. The modified medium could then be utilized in the field.

Product Trial

The android app was seen as a viable alternative to interactive learning media by material experts, media professionals, and educators. A small-scale trial was then carried out. Six fourth graders from SDN Pakunden 2 in Blitar City, each with a different level of ability, participated in a product trial to see how they would react to it and gauge its quality.

Product Revision

If there were flaws and shortcomings following a small-scale product trial, product adjustments were made based on input and ideas from the trial's findings as well.

Trial Usage

After the media product was changed and produced on a wider scale, usage experiments were conducted. 26 fourth-grade students from Pakunden 1 Public Elementary School in Blitar City were the focus of this stage. If there were shortcomings or challenges, changes must be made subsequently.

Product Revision

A product revision was carried out in response to student feedback and the use trial. After the revision stage was over, the process moved on to the mass manufacturing stage.

Mass Production

If the tested product was deemed feasible for mass manufacturing, mass production was undertaken. It was produced in bulk by sending it through the *itch.io* website, after which it was delivered to instructors and students in the fourth grade.

Research Data

Qualitative and quantitative data. Quantitative information was derived from the percentage scores for completing surveys for teachers, media experts, material experts, and students as well as questionnaires for student response. Qualitative information was gathered through interviews, questionnaire responses that analyzed the needs of the students, and suggestions and feedback from media specialists, material experts, teachers, and students.

Interviews, observations, and questionnaires can all be used to collect data. On October 14, 2021, interviews with teachers of the fourth grade at SDN Pakunden 1 were conducted in order to examine the potential and issues that exist in social studies teaching, particularly with regard to the Diversity Forms material. On October 14, 2021, research observations were conducted in SDN Pakunden 1's grade IV. The following were noted: (1) the process of learning about Social, Economic, Ethnic, and Religious Diversity material; (2) media use; (3) interest in learning the material; and (4) the type of diversity in fourth grade children' learning characteristics, in line with (Febriana, 2017).

Research Data Analysis

Both quantitative and qualitative data analysis were performed in this study. The quantitative data analysis was done by employing quantitative analysis tools to evaluate the reliability and usefulness of the product. While this was going on, qualitative analytic approaches were used to analyze the validation data from material experts, media experts, teachers, and students that had been created in the form of criticism, comments, and suggestions. The validation of subject matter experts, media experts, and teachers utilized a Likert scale, according to Sugiyono (2013).

The Guttman scale was employed in this study to analyze questionnaire responses and student needs. The level of viability of interactive learning media items for Android applications was assessed using a student response survey. The Guttman scale, which is a checklist with two checkboxes labeled "no" and "yes," was used to examine the data. Indicators of student needs include: the difficulty of the Kersosmi Bunisa material, the inadequate availability of learning media for studying the Kersosmi Bunisa material, the teacher's use of only picture media during instruction, the lack of interest in the learning media, and student use of Android smartphones, with the interactive learning media android application as a learning medium, there must be an image or animation, and there must be an evaluation question at the conclusion of the media to determine how much the students comprehend about the subject that has been provided, the program is accessible from anywhere, autonomous, adaptable, communicative (easy to comprehend or understand), clear in writing, simple to install, adds variety of media, photos and videos are understandable, reduces boredom, and language is understandable. Answers do not

have a value of 0 and yes answers have a value of 1. Then the results of the questionnaire are analyzed using the formula of Akbar (2013).

RESULTS

The approach and outcomes of creating interactive learning media products for Android applications based on the content for grade IV Diversity at SDN Pakunden 1 Blitar City are described in this part. The steps of the Research and Development (R & D) approach proposed by Borg & Gall (Sugiyono, 2013) are followed in the development process as follows.

Potential & Problem

According to the findings of the observations made on October 14, 2021, there were issues. In particular, the learning process for the Kersosmi Bunisa material in social studies did not go well since most of the students still had a low level of understanding and the teacher solely employed visual aids. Additionally, there was a chance that the students may be familiar with using Android smartphones and enjoy learning through media. In order to support learning, the researchers used Android applications with interactive learning material.

Data Collection

The data were collected based on the results of the analysis of potential and problems as well as the identification of learning media used in teaching and learning activities in grade IV SDN Pakunden 1 Blitar City. Problems in the media could be overcome by using interactive learning media android applications. This is based on the potential of students who can operate Android smartphone devices. Identification was carried out to see the suitability of KI and KD being researched and developed. KI (3 & 4) and KD (3.2 & 4.2) in the thematic books are in accordance with KI and KD from Permendikbud Number 24 of 2016 (Permendikbud, 2016).

Product Design

Designing Android Application Interactive Learning Media Products

In order to create interactive learning media for Android applications, we analyzed the KI and KD on the Kersosmi Bunisa material, created indicators and learning objectives, looked for material appropriate to a topic, and found references for evaluation questions. The first step in creating interactive learning media for Android devices was gathering the main page, main menu, usage directions, learning objectives, and creators' biographies.

The next step was to use Microsoft PowerPoint 2016 to design the application's home page and main menu, compiled materials using Microsoft Word 2016, downloaded images and animations from Pinterest or Canva, and then used PowerPoint 2016 to compile materials and practice questions. Finally, we used iSpring Suite 10 to convert the materials into HTML5 format, then used Web 2 Apk Builder to convert HTML5 files to APK format. The supervisor was consulted about and changes were made to the final product design.

Designing Research Instruments

Finding a grid of research instruments, choosing criteria for three validators (material experts, media experts, and teachers), and choosing validators were the first steps in designing research instruments. After consulting the supervisor, it was amended. we then went on to the product validation phase after the revision finished.

Product Validation

Four people validated the product: Prof. Dr. H. M. Zainuddin, M.Pd, an expert in materials; Mr. Ferril Irham Muzaki, M.Pd, an expert in media; Mrs. Tatik Yuani, a grade IV teacher at SDN Pakunden 1 Blitar City; and Mr. Fitra Prasetyo Wibowo, a grade IV teacher at SDN Pakunden 2 Blitar City. An interactive learning media product for Android was subjected to product validation using approved Kersosmi Bunisa grade IV SDN Pakunden 1 Blitar City material. The outcomes of the validation of interactive learning media items for Android applications are explained in the paragraphs that follow.

Material Expert Validation Data

The data from the expert validation of the Android application interactive learning media material is presented in Table 1. Using the data in Table 1 from Akbar (2013) 's formula for analysis, it can be inferred from the calculations of interactive learning media for Android

applications that they are highly valid and may be utilized without revision, with an average validation of 93.75 percent. The validator's comments and suggestions, namely the request to incorporate the case method in the content, provide qualitative data that supports the aforementioned findings.

Table 1. Data from the validation of material experts and teachers

No.	Assessment Aspect	Total score		Validation Value Average	Criteria & Recommendation
		Material Expert	Theacher		
1.	Conformity of material with basic competence	4.0	4.0	93.75%	Very valid & usable, without revision
	Percentage	100%	100%		
	Category	Very valid	Very valid		
2.	Language	3.0	3.5		
	Percentage	75%	87,5%		
	Categori	Valid	Very Valid		
3.	Material presentation techniques	4.0	4.0		
	Percentage	100%	100%		
	Categori	Very valid	Very valid		
	Validation value	91.7%	95.8%		
	Criteria	Very valid	Very valid		

Media Expert Validation Result Data

The data from media expert validation are presented in [Table 2](#).

Table 2. Data from the validation of material experts and teachers

No.	Assessment Aspect	Total Score		Validation Value Average	Criteria & Recommendation
		Material Expert	Teacher		
1.	Size fit	4.0	3.5	89.1%	Very valid & usable, without revision
	Percentage	100%	87,5%		
	Categori	Very Valid	Very Valid		
2.	Cover design	3.0	3.5		
	Percentage	75%	87.5%		
	Categori	Valid	Very Valid		
3.	Media content design	3.0	3.5		
	Percentage	75%	87.5%		
	Categori	Valid	Very Valid		
4.	Presentation equipment	4.0	4.0		
	Percentage	100%	100%		
	Categori	Very Valid	Very Valid		
	Validatioan value	87.5%	90.6%		
	Criteria	Very Valid	Very Valid		

[Table 2](#) was then used to examine it using Akbar's, (2013) 's formula. One can draw the conclusion that the media is highly valid and can be utilized without revision based on the average validation rate of 89.1 percent derived from the calculation of interactive learning media for Android applications. The comments and suggestions from the validator's qualitative data, which show that the background color of the search text is brighter and lessens the swivel impact rather than the fade in effect, complement the aforementioned results.

Product Revision

The Diversity Forms interactive learning media products were revised by modifying and upgrading the product in accordance with expert validation results. The section titled "Material" contains expert revisions. [Figure 2](#) displays the outcomes of the product revision.



Figure 2. Product revision before (a) and after validation (b)

Figure 2(a). is the content before revision, and Figure 2(b) is after revision. Researchers made changes to the product in response to criticism and recommendations from material specialists, specifically to incorporate the case approach into the material.

Product Trial

Six fourth-grade SDN Pakunden 2 Blitar City offline students were the target audience for the product trial. Trials of new products were conducted to gather information about their viability and reduce any flaws that may have emerged beforehand.

The effectiveness of interactive learning media goods for Android applications was evaluated using the product trial data. According to the results of the questionnaire, the average Yes response rate was 100 percent, which means that it was not 0 percent. A very practical category is indicated by this proportion. As a result, it can be said that the Android application interactive learning media product on the Diversity Forms content is very useful and can be utilized during instruction without needing to be revised.

Additionally, the outcomes of answering the learning assessment questions that were offered on the learning media were used to gauge the students' level of knowledge after utilizing the media. It may be deduced that the interactive learning media Android application has a sizable impact on students' understanding because the results of the learning evaluation questions during small-scale product trials reached 96.67 percent.

Product Revision

Defects were discovered during the testing of interactive learning media goods for Android applications on the Diversity Form content. The section titled "questions" had been revised. Figure 3 displays the outcomes of the product revision. According to Figure 3, the image represents (a) the background color of the text prior to revision, (b) the background color of the text following revision, (c) the *swivel* effect prior to revision, and (d) the *fade in* effect following revision. The researcher changed the backdrop color of the search text to a brighter one and reduced the *Swivel* effect rather than the *Fade in* effect response to complaints and suggestions. 26 fourth-grade SDN Pakunden 1 students in Blitar City were the target audience for the experimental use. According to the results of the student response survey, the average value of the "Yes" response rate is 94.2 percent, and the "No" response rate is 5.8 percent. This percentage means that the category doesn't need to be revised. As a result, it can be said that the Android application interactive learning media product on the Diversity Forms content is very useful and can be utilized during instruction without needing to be revised.

Additionally, it is based on the learning outcomes provided in the learning media to determine the amount of knowledge of students after utilizing the media. It can be deduced that the KERSOSMI BUNISA learning medium had a considerable impact on students' understanding because the results of filling out the learning assessment questions during the large-scale use experiment reached 97.69 percent.

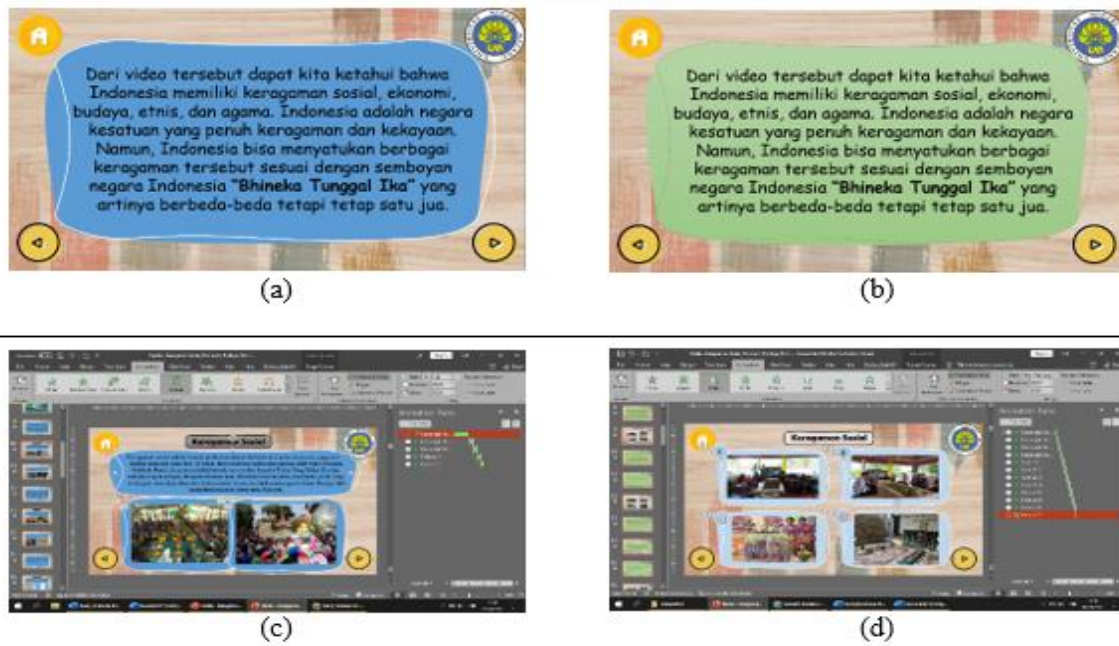


Figure 3. Product revision before (a), (c) and after product trial (b), (d)

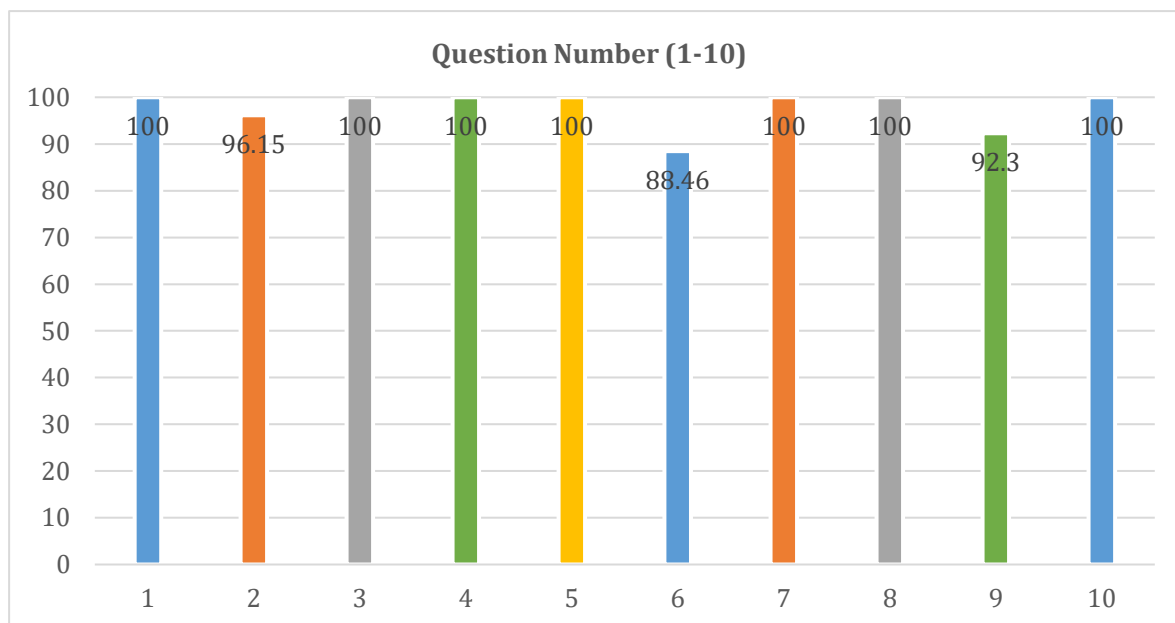


Figure 4. Learning outcomes in the usage trial



Figure 5. Product revision before (a) and after (b) trial usage

Trial Usage

After the media product was changed and produced on a wider scale, usage experiments were conducted (see [Figure 4](#)). Twenty six students from SDN Pakunden 1 in Blitar City were the subject of this stage. If there are shortcomings or challenges, changes must be made subsequently.

Product Revision

Students can use interactive learning media and comprehend the subject well, according to the usage trial findings and student reaction surveys. However, a minor portion of the question paper had errors. so that the font size can be changed or replaced. Figure 4 displays the updated product. [Figures 5\(a\)](#). shows the font size before the change and [Figure 5\(b\)](#). after the revision. Based on the feedback and ideas, the researcher made changes to the product, including changing the font size.

Mass Production

The process of mass production involves sending interactive learning media materials to fourth grade teachers at SDN Pakunden 1 and 2 City of Blitar and fourth grade students at SDN Pakunden 1 and 2 in Blitar City via the Whatsapp Group application or by uploading them to the itch.io website with the link: <https://kersosmibunisa.itch.io/kersosmi-bunisa-um>, so that it is simple to download and use for instructors and students from other schools that want to use this Android application interactive learning media.

DISCUSSION

Students in the educational system do have a wide range of learning preferences. According to research by Shamsuddin & Kaur ([2020](#)), there are four different types of learning methods: accommodator, assimilator, convergent, and divergent. This study looks for media that can address the wide range of student learning styles. Based on study done with fourth graders at SDN Pakunden 1 Blitar City, it was discovered that teachers had difficulties employing learning media, particularly when it came to material on Social, Economic, Cultural, Ethnic, and Religious Diversity (Kersosmi Bunisa). Based on the foregoing context, a study with the working title "Development of Interactive Learning Media Kersosmi Bunisa social sciences grade IV Elementary School" was carried out to address the issues with learning. M-Learning-based modern learning resources are regarded as being less useful and more challenging to use. Conventional learning methods, on the other hand, use less time and resources while being less effective. The learning value diminishes (below the IPS KKM) because learning enthusiasm is decreased and the function of the learning media is not optimal because the teacher mainly uses picture media in class.

Teachers, media professionals, and subject matter specialists all endorsed this media development. Using three assessment facets—Content Feasibility (the material's fit with Basic Competencies and language) and Material Presentation—material expert validation is used to meet research and development objectives (material presentation techniques). On January 31, 2022, the validity rate was 91.7 percent. The case approach has been inserted into the material, which is a modest improvement compared to the critiques and recommendations made by the material specialists. Researchers modified Damayanti et al., ([2020](#)) validation's questionnaire by creating a grid of validator assessment instruments. Then, it was determined that the developed media had KD suitability, language suitability, and attractiveness of presentation techniques because the feasibility aspect of the content (KD) received a score of 4, the feasibility aspect of the content (language) received a score of 3, and the feasibility aspect of the presentation of the material received a score of 4 for the theory.

The graphical feasibility (suitability of size, cover design, and media content design) and presentation feasibility components of this media development have also been evaluated by media professionals (completeness of presentation). On February 3, 2022, the verification rate was 87.5 percent. Therefore, using the Akbar, ([2013](#)) formula, it can be said that the Android application interactive learning media is very valid and may be utilized without revision. Media professionals' criticisms and recommendations, such as reducing the font size. The researcher changed Damayanti et al., ([2020](#)) validation's questionnaire by creating a grid of validator assessment instruments. The assessment of the graphic's feasibility (fitness of size) received a

score of 4, the assessment of the graphic's feasibility (cover design) received a score of 3, and the assessment of the presentation's feasibility (completeness of the presentation) received a score of 4. For this medium, the phase of teacher validation is also finished. The entire process of validation is covered, including presentation feasibility, graphical feasibility, material presentation (suitability of size, cover design, and media content design), and content feasibility (suitability of material with basic competencies and language) as well as completeness of presentation.

Teachers at SDN Pakunden 2 Blitar City examined the Kersosmi Bunisa android application for validity; 85.7 percent of them found it to be reliable, compared to 100 percent at SDN Pakunden 1 Blitar City. The percentage of 92.8 percent that was discovered after utilizing quantitative analysis techniques has a very valid category and may be used without modification. Regarding the backdrop color of the search text, which is brighter and lessens the Swivel effect while increasing the Fade effect, the SDN Pakunden 2 Blitar teacher has made criticisms and suggestions.

The two teachers' content's feasibility aspect (KD suitability) received a score of 4, the content's feasibility aspect (language suitability), a score of 3.5, and the feasibility aspect of the material presentation, a score of 4, indicating that the media developed had the KD suitability, suitability language, and the attractiveness of material presentation techniques. The two teachers assigned a score of 3.5 to their evaluation of the graphic feasibility component (suitability of size, cover design, and media content design). Teacher suggestions and comments included brightening the background color of the search text and decreasing the Swivel effect in favor of a Fade in effect. The two teachers gave the presentation feasibility (completeness of presentation) aspect a score of 4, meaning that the media created matched the characteristics of the students. According to the findings of the evaluation by Material Experts, Media Experts, and Teachers, the media is consistent with the author's intention to offer learning solutions.

Comparing the Kersosmi Bunisa learning media to other academics' Android-based learning media reveals a number of advances and enhancements. Makkiah et al. (2020) also conducted research on the same media in the Social Sciences folder with the same content, but it still has a number of flaws, such as the fact that the published material only addresses ethnic and cultural diversity, that the media lacks feedback, and that the evaluation findings do not include a grade. Prasetyo (2017) studied media with various fundamental components, but the APK's end outcome was the same. The media made by researchers employs Pptx, which can be used on Windows OS, which is frequently used by teachers, as opposed to media created using the DVM basis, which can only be produced using Linux OS and is therefore challenging to use.

For primary school fifth grade fractions instruction, Annisa & Masniladevi (2020) also created a comparable medium. To prevent pupils from being exposed to actual examples from daily life, this medium solely includes images of spatial shapes and queries. Comparatively speaking, the Kersosmi Bunisa media has employed the case technique. The same product utilized for grade IV elementary school thematic material was also developed by Ulfa (2020), such that it, like student worksheets, has a lot of content but lacks complexity and effective learning environments. Unlike Kersosmi Bunisa, which emphasizes materials related to social, economic, cultural, ethnic, and religious diversity and has more sophisticated application facilities. Hamidiyah & Yermiandhoko (2020) also created the same media with the similar content, but the material only includes traditional homes, learning is centered around remembering (C1), the case technique was not used, and there is no scoring tool. so that researchers might use these flaws as evaluation material. The content is more complicated, uses the case technique, uses HOTS questions (C4-C5), and already has an evaluation instrument that generates scores in developed media.

The following are some benefits of the researchers' interactive learning media products for Android applications: (a) the presentation includes text, images, and sounds; (b) product files in APK format can be installed by students using android smartphones; (c) feedback or feedback in the form of motion animation is present; (d) this media can later assist teachers in visualizing the Diversity Forms material; and (e) learning activities can become student-centered (Trimansyah, 2021). The interactive learning media product that the researcher created for Android has two

weaknesses: (a) it depends on an Android smartphone and the application's system requirements to use a minimal Android version with Jelly Bean OS, and (b) it only emphasizes the diversity of social studies content.

In order to create a media that can become an Android-based learning tool that can be used independently or with teacher assistance, is multimedia, universal, has feedback, is able to visualize learning content, is more interesting, is able to draw in students' active participation, and makes learning simpler, this study's goal is to create a variety of media. understand the course material, particularly the social diversity, economics, culture, ethnicity, and religion lessons in social studies. Material specialists, media experts, and educators have all deemed the device feasible. Additionally, students use the product in practice.

CONCLUSION

The study's findings indicate that students' responses during small-scale product trials, which obtained a percentage of 100 percent, and large-scale use trials, which obtained a percentage of 94.2 percent, respectively, demonstrate the practicality element. This demonstrates how useful interactive learning media for Android applications are. The product can be utilized without alteration based on the percentage attained. The interactive learning media product for Android is also very communicative, making it simple to understand the content of the diversity forms material, according to the student response questionnaire, and it can be used to learn anywhere, at any time. Interactive learning media goods for Android applications on the material for grade IV diversity are the result of this research and development. According to material experts, media experts, and teachers, these products are very valid and practical for students. In order to make the product acceptable for educational use, the only versions of KD used were 3.2 and 4.2, Android smartphones are required, development was only done for grade IV students, and trials were only done at the level of grade IV. These are the limitations of the development of interactive learning media for Kersosmi Bunisa IPS grade IV. The study makes recommendations for using this media in education, creating interactive media for Android applications for various materials and grade levels, and conducting larger-scale trials for further study.

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