

DEVELOPMENT OF STUDENT GUIDEBOOKS FOR PHYSICAL EDUCATION LEARNING USING THE FLIPPED CLASSROOM MODEL

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Abstract

This study aims to develop and determine the validity level of the student guidebook for Physical Education learning with the flipped classroom model of volleyball overhead pass material class XI MAN 1 Malang. The type of research used is research and development by adapting the ADDIE development model by Branch, which consists of 5 stages of development include Analysis, Design, Development, Implementation, and Evaluation. The data analysis technique used in this research is descriptive quantitative with data collection instruments using questionnaires. The research subjects were 48 students and 2 physical education teachers at MAN 1 Malang. The Student Handbook has been validated by media experts, learning experts, and material experts. The results of the large group trial showed a percentage value of 93%. This student guidebook product can be concluded to be valid and suitable for use in physical education learning at MAN 1 Malang. With this student guidebook, it is hoped that it can provide convenience for grade XI students at MAN 1 Malang in carrying out learning volleyball overhead passing using the flipped classroom model.

Keywords: *Flipped Classroom; Handbook; volleyball*

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INTRODUCTION

The use of information and communication technology (ICT) in general has become part of the basic needs for people's lives. Specifically in the field of education, the entry of information and communication technology can be seen in the learning process which is increasingly varied and innovative, both from the learning model used by teachers and the way students learn that has been implemented with technology. In this regard (Hinojo Lucena et al., 2019) suggests that information and communication technology in general has become a fundamental tool in the teaching and learning process that is being developed and the creation of new spaces aimed at developing innovative learning experiences. All of this is inseparable from the search for quality education in the digital era.

The use of technology in education is very important because it is an effort to keep up with the changing and developing times. The implementation of technology in education is needed so that the teaching model carried out by teachers can adapt to the current times and can adapt to the needs of today's students. Seeing the importance of ICT implementation in education, Flipped Classroom can be an alternative for teachers to adapt the learning process to the current times.

Flipped classroom is a learning model where the process of delivering material that is generally carried out during teaching and learning activities in the classroom / field is shifted outside the hours before the lesson is held. Jonathan Bergmann and Aaron Sams (2012) define flipped classroom as a learning model where traditional models are usually carried out in class can now be done at home, and what is traditionally used as home assignments can be done in class by involving a lot of collaboration and communication between students. This makes the teacher has a role as a facilitator who facilitates students when discussing the problems they encounter.

In the Flipped Classroom-based learning process, teachers develop audio-visual materials by adjusting the material to be taught, then the material is uploaded to a digital platform. With all the technological advances that exist, this will make it easier for educators to implement the flipped classroom model (Susanti & Hamama Pitra, 2019). Students who take part in learning activities in the class can access teaching materials that have been prepared by the teacher without any time and place restrictions. Previous research conducted by (Mok, 2014) states that in the implementation of learning activities with the flipped classroom model, teachers deliver material before class in the form of pre-recorded videos, and spend time in class by involving students in collaborative and interactive learning activities. Tucker (2012) explains that teachers do not have to create their own videos to be used in learning, but they can use relevant learning videos from various platforms such as YouTube. Thus, passive learning activities are replaced with interactive learning activities in the classroom. This is inversely proportional to traditional classroom learning activities where the teacher is the center of instruction. Such learning process is able to provide flexibility to students so that they are able to adjust their learning abilities (Wallace, 2014).

Several previous studies have shown results where learning with the flipped classroom model effectively improves several aspects, including students' intrinsic motivation to learn (Botella et al., 2021; Østerlie, 2018), interaction

between students and students and student-teacher interaction (Hinojo Lucena et al., 2019), the level of student activeness in the discussion process (Berić-Stojšić et al., 2020; R. Kurniawan et al., 2022), as well as the level of student attendance and assignment submission (Smallhorn, 2017). In Indonesia itself, there have been many studies that implement the flipped classroom in learning, where research by (Afrilyasanti et al., 2017) suggests results where the flipped classroom model is able to have a positive influence on the learning process with a note that the teacher must provide teaching materials in the form of interesting video shows that are not discussed again when learning activities are carried out in class. Meanwhile, in the realm of physical education, there are several studies that have been conducted where research from (Nopiyanto et al., 2021; Nurfadillah et al., 2020) states that the flipped classroom can improve students' critical thinking skills and physical education learning outcomes. In addition, this model is also considered to be able to increase the level of student motivation in participating in learning activities, taking into account several components such as the teaching module used, student knowledge, student learning preferences, the context of educational approaches, and evaluation of learning outcomes must be considered (Xiao et al., 2021).

By using the flipped classroom model, students will automatically become the center of learning and teachers serve as facilitators who guide the course of learning activities in the classroom. The new problem that arises is that the use of a new learning model that has never been done before by students will make them confused to follow learning activities. So the use of guidebooks is needed by students in participating in learning activities. However, research related to the use of student guidebooks for Physical Education (PE) learning volleyball overhead passing material with a flipped classroom model has never been done before, so research and development of student guidebooks is very important to do.

Although research on the use of student guidebooks in learning PE upper passing material with a flipped classroom learning model has never been done before, in several other subjects there have actually been studies on the use of student guidebooks. several studies on the use of student guidebooks in learning show a positive effect on student learning outcomes, such as research by (Murti et al., 2022) showing results where the use of guidebooks can make the learning process more directed and not boring. The use of guidebooks can also make it easier for students to learn because the content contained therein is organized systematically and interestingly, making it easier for students to participate in learning (Astuti & Nugrahanta, 2021). The use of guidebooks can be used as a

reference for planning activities to be carried out so that teachers can consider elements that can maximize students in learning (Adhe et al., 2020).

Research on the effectiveness test of using guidebooks in the process of implementing learning activities also shows that there is a significant increase between learning outcomes in small groups and large groups (Hartati, 2018). The use of guidebooks in the form of e-modules in learning is also more effective when compared to the use of printout modules (Astalini et al., 2019). Research by (Lestarinigrum et al., 2023; Murti et al., 2022) also shows that using guidebooks in the learning process can significantly affect the acquisition of learning outcomes in the pretest and posttest.

The results of observations that have been made at MAN 1 Malang show that the PE learning process carried out in class XI for volleyball overhead pass material is still teacher-centric so that students are less actively involved in the learning process such as discussion and practice directly in the field. The time used to carry out PE learning is also relatively short so it will be more effective if students already have provisions by studying the material and knowing about the stages of learning that will be carried out. The results of the initial needs analysis that has been carried out by distributing questionnaires through google form filled in by 4 PE teachers at MAN 1 Malang, obtained the results that 75% of PE teachers at the school are still unfamiliar with the term flipped classroom. As many as 75% of teachers also experience obstacles in implementing PE learning for volleyball overhead pass material. As many as 75% of teachers do not provide theoretical material outside the hours of implementing learning activities for volleyball overhead pass material, so 100% of PE teachers at MAN 1 Malang agree if research and development of student guidebooks with a flipped classroom model for learning PE volleyball overhead pass material grade XI.

METHOD

Research Methods

This research and development aims to develop a flipped classroom model in physical education learning. The final result of this research is a learning guidebook for class XI students at MAN 1 Malang in carrying out physical education learning activities on volleyball overhead pass material. This research uses the ADDIE development model, where the model has the initial needs analysis stage, the product design stage, the product development stage which includes expert validation testing, the implementation stage, and the stage of evaluating the product before it becomes the final product. The ADDIE model is

considered more appropriate for use in this study because it has stages that are arranged coherently and in accordance with the needs of researchers.

Research Model

The model used in this research and development is the ADDIE model by Branch (2009) whose stages include analysis (Analysis), design (Design), development (Develop), Implementation (Implement), and evaluation (Evaluate).

The first stage of this ADDIE model is analysis. This stage aims to collect data that will be used as the basis of product research and development. The activities carried out in this stage are identifying problems to get information related to problems that are happening in the field. In this stage, curriculum analysis, concept analysis, and also analysis of teaching materials are carried out. In the design stage, the design process is carried out for the product to be developed in the form of a Student Handbook and the design of the media to be used. In the development stage, product assessment is carried out by 3 validator lecturers including media experts, learning experts, and material experts. The results of the assessment by the three experts were used as a reference related to the feasibility of the product before being tested. The application stage is carried out by referring to the provisions (Gall et al., 2003) where the product is tested on class XI MAN 1 Malang students consisting of a small group of 12 students and a large group of 36 students. The evaluation stage aims to evaluate the feasibility of the product based on the assessment and notes of suggestions that have been given by the validator for further revision of the product.

In this study, suggestions and input from validators are qualitative data. The instrument in the form of a questionnaire is given to each validator lecturer to assess and provide input suggestions related to the product being developed. Meanwhile, questionnaires for small and large group trials were given to students and teachers after a series of learning processes with the aim that students and teachers could provide an assessment after using the product that had been developed.

RESULT AND DISCUSSION

Analysis Stage (Analyze)

At the analysis stage, a study is carried out to obtain data used as a basis in the process of developing student guidebook products for learning overhead pass. What is done in this stage is curriculum analysis, concept analysis, and teaching material analysis. The three stages are described as follows:

Curriculum Analysis

At the stage of curriculum analysis in this study, it is based on the application of the curriculum used in class XI MAN 1 Malang. This stage of curriculum analysis is used to analyze the Learning Outcomes in phase F students in accordance with the independent curriculum used in PE subjects. From the results of this analysis, the following results were obtained:

Table 1 Curriculum Analysis

No	School	Phase	Learning Outcomes
1	SMA/MA	F	At the end of phase F, learners are able to demonstrate the ability of various physical activities and sports as a result of the evaluation of correct knowledge, evaluate and practice physical fitness related health and physical fitness related skills, demonstrate behavior in leading small groups to make positive changes, and can also evaluate attitudes and habits as healthy and active individuals.

Concept Analysis

This stage is used to analyze the concept of learning outcomes in phase f class XI MAN 1 Malang which will be used to compile the material. The framework of the material concept will later be used as a foundation in compiling the content in the student guidebook to be developed. The results of the concept analysis are as follows:

Table 2 Concept Analysis

No	Concept/Material	Content
1	<i>Flipped Classroom</i>	<ul style="list-style-type: none">• Definition of <i>Flipped Classroom</i>• Structure of <i>Flipped Classroom</i>
2	Volleyball Upper Passing	<ul style="list-style-type: none">• Start attitude in basic volleyball upper passing technique• The attitude of contact with the ball in the basic technique of volleyball overhead pass• Final stance in basic volleyball overhead pass technique• Movement errors in basic volleyball overhead pass techniques

Teaching Material Analysis

The teaching material analysis stage aims to collect various references that are available and can be used for the preparation of material in the student

guidebook development product later. As for some learning resources that are used as references in the development of this product include:

Table 3 Teaching Material Analysis

No	Learning Resources	Description
1	Curriculum Guidelines	SK Kepala BSKAP No. 8 Tahun 2022 tentang Capaian Pembelajaran PAUD Dikdasmen pada Kurikulum Merdeka Link: https://kurikulum.kemdikbud.go.id/wp-content/unduh/CP_2022.pdf
2	Volleyball	<ul style="list-style-type: none">• M. E. Winarno, Taufik, D. S. Y, and N. R. Fadhli, <i>Pembelajaran Bola Voli Berbasis Penelitian (Blended Learning)</i>. Malang: Universitas Negeri Malang (UM PRESS), 2017.• D. N. Pratama, <i>Pembelajaran Berbasis Blended Learning Bola Voli</i>. Malang: Wineka Media, 2021.• Roesdiyanto, <i>Pelatihan Bola Voli</i>, 1st ed. Malang: Universitas Negeri Malang, 2014.• S. D. Frasher, <i>Strategies For Competitive Volleyball</i>, 1st ed. Leisure Press, 1988.• N. Ahmadi, <i>Panduan Olahraga Bola Voli</i>. Surakarta: Era Pustaka Utama, 2007.• American Volleyball Coaches Association, <i>The Volley Ball Drill Book</i>. Human Kinetics, 2012.• M. E. Winarno, A. Tomi, I. Sugiono, and D. Shandy, <i>Teknik Dasar dan Taktik Bermain Bola Voli</i>, I. Malang: Universitas Negeri Malang, 2015.• M. Dunphy and R. Wilde, <i>Volleyball Today</i>. West Publishing Company, 1991.
3	Student	<ul style="list-style-type: none">• Sumaryoto, & Nopembri, S. (2017). Pendidikan Jasmani Olahraga dan Kesehatan (2nd ed.). Pusat Kurikulum dan Perbukuan, Balitbang, Kemendikbud.
4	Teacher	<ul style="list-style-type: none">• Sumaryoto, & Nopembri, S. (2017). Buku Guru Pendidikan Jasmani, Olahraga, dan Kesehatan (2nd ed.). Pusat Kurikulum dan Perbukuan, Balitbang, Kemendikbud.

Design Stage (Design)

This stage is used to draft research and development products in the form of a student guidebook for implementing class XI volleyball overhead pass learning using the flipped classroom model at MAN 1 Malang. At this stage, 2 design stages are carried out, namely the first to design a product in the form of a student guidebook for learning volleyball with upper passing material for grade XI students with a flipped classroom learning model at MAN 1 Malang. The second

is designing media to be used later in delivering material to students in the form of Google Classroom.

Student Handbook Design

The design stage of the student guidebook for learning upper passing volleyball class XI with a flipped classroom model at MAN 1 Malang is used to compile a design related to the content that will be contained in the development product. The design stage of this student guidebook produces the following product design:

Table 4 Student Handbook Design

No	Module Components	
1.	Cover	: Contains a cover that provides an overview of the contents of the book
2.	Identity of the author	: Contains the identity of the author
3.	Foreword	: A preface sheet that contains gratitude and thanks from the compiler
4.	Table of contents and list of images	: Contains a list of titles in each chapter and a list of images in the book accompanied by a description of the page number to facilitate the reader
5.	Introductions for using the book	: Contains instructions on how to access links contained in the book and how to scan the QR code
6.	Flipped Classroom concept	: Contains the concept of flipped classroom in general to provide an overview and insight into the concept
7.	Teaching module for Physical Education Phase F class XI	: Contains the PE Phase F teaching module for class XI which will be used as a guide in implementing learning
8.	Learning Implementation Instructions	: Contains learning instructions that students will do for three phases, namely before class, during class, and after class
9.	Appendix Materials	: Contains links that can be used to access volleyball upper passing learning materials for students
10.	Cognitive Assessment Appendix	: Contains affective, cognitive, and skill assessment instruments for students
11.	Appendix Grids of Upper Passing Assessment Instrument	: Contains the format for assessing students' upper passing learning outcomes
12.	Bibliography	: Contains information used as a reference in the preparation of the student handbook

Learning Media Design

This stage is used to determine and develop the media that will be used in the learning process. Flipped classroom is basically a learning model that utilizes technology as a connecting medium between teachers and students. Through this media, teachers can provide instructions related to lesson plans for two face-to-face meetings and as a means to deliver teaching materials. This research uses Google Classroom media. The use of Google Classroom media was chosen because it is in accordance with the research needs, where the media has several features that can support the technology-implemented learning process such as linking learning material links and including soft files with pdf and word formats.

Development Stage (Develop)

The development stage consists of several development stages which include making a student guidebook design, expert validation stage, and product revision stage. The explanation of some of these stages is as follows:

Student Handbook Design

In this stage, the development process is carried out by designing a student guidebook. This development stage includes cover design, color pallet selection to maintain consistency in appearance, and overall book design. This stage resulted in the design of the student guidebook design as follows:

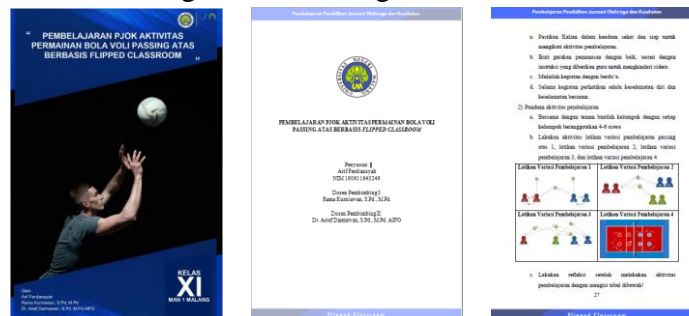


Figure 1 Draft of Student Handbook

Expert Validation Test

This stage is used to measure the feasibility level of the product before it is tested. This stage includes validation by 3 expert lecturers including 1 media expert lecturer, 1 learning expert lecturer, and 1 material expert lecturer. The assessment process is carried out by giving a questionnaire to each of these experts which contains an assessment of the aspects of suitability, convenience, attractiveness, and accuracy of the student guidebook product. The following is a description of the assessment results that have been given by the validators:

Media Expert Validation Results

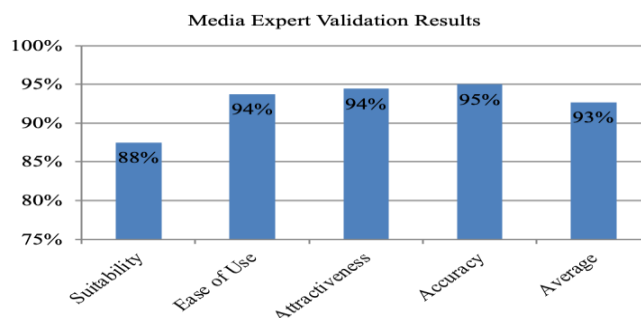


Figure 2 Chart of Media Expert Validation Results

In the validation process for media experts, the instrument used was adapted from the 2016 BSNP assessment instrument. The number of instruments validated was 33 questions with the aspects assessed including aspects of clarity of material coverage and learning content, aspects of ease of use of the product, aspects of material attractiveness and learning content design, and aspects of material accuracy and learning content. From the four aspects assessed, the results obtained a percentage of 88% (very valid) for the suitability aspect, a percentage of 94% (very valid) for the convenience aspect, a percentage of 94% (very valid) for the attractiveness aspect, and a percentage of 95% (very valid) for the accuracy aspect. Overall, the media expert validation process received an average score of 93% (very valid) with several suggestions given by media experts such as: (1) Correcting errors in the image list, (2) Changing the size of the book according to UNESCO provisions with a width of 15.5 cm and a length of 23 cm.

Learning Expert Validation Results

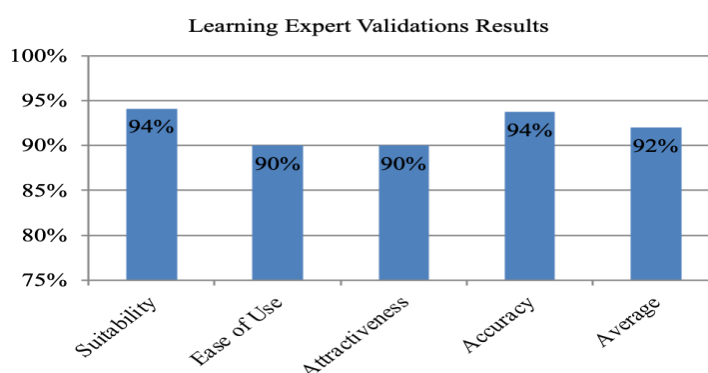


Figure 3 Chart of Learning Expert Validations Results

In the learning expert validation process, the instruments validated were 31 questions with the aspects assessed including aspects of clarity of material coverage and learning content, aspects of ease of use of the product, aspects of the

attractiveness of the material and learning content design, and aspects of the accuracy of the material and learning content. From the validation process on these four aspects, the results obtained a percentage of 94% (very valid) for the suitability aspect, a percentage of 90% (very valid) for the convenience aspect, a percentage of 90% (very valid) for the attractiveness aspect, and a percentage of 94% (very valid) for the accuracy aspect. Overall, the validation process by learning experts received an average score of 92% (very valid) with several suggestions obtained such as: (1) Provide school identity information on the cover, (2) Provide brief text in the learning video instructions, (3) Revise the 4th variation of upper passing learning, and (4) eliminate the separator cover in each chapter.

Material Expert Validation Results

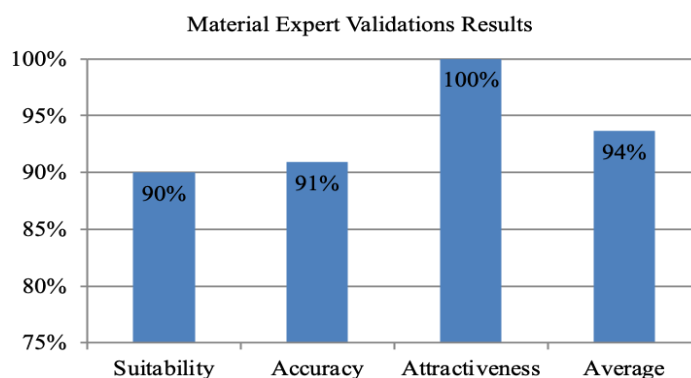


Figure 4 Chart of Material Expert Validations Results

In the material expert validation process, the validated instruments were 27 questions with aspects assessed including aspects of clarity of material coverage and learning content, aspects of material accuracy and learning content, and aspects of material attractiveness and learning content design. From the validation process on these four aspects, the results obtained a percentage of 90% (very valid) for the suitability aspect, a percentage of 91% (very valid) for the accuracy aspect, and a percentage of 100% (very valid) for the attractiveness aspect. Overall, from the validation process by material experts, an average score of 94% (very valid) was obtained with several suggestions obtained such as: (1) Adding depth to the material related to mechanical aspects of motion, (2) Changing the variation of learning 1 basic upper passing techniques with the principle from easy to difficult, (3) Learning variation 2 can be started from a short distance then the distance can be increased, (4) Learning variation 4 can use a non-standard field, (5) Revising cognitive assessment by adding types of HOTS (Higher Order

Thinking Skill) questions, and (6) Changing the upper passing skill assessment instrument with a standardized instrument according to AAHPERD.

Implementation Stage (Implement)

The revised product was then tested on the XI grade students of MAN 1 Malang. The trial was conducted to obtain data on the feasibility of the product in learning volleyball overhead pass class XI at MAN 1 Malang. After the trial, the teacher assesses the product by providing criticism and suggestions on the questionnaire instrument that has been prepared. The questionnaire assessment instrument is in the form of questions that will be assessed using a Likert scale. The following is a discussion of the results of the small group and large group trials:

Small Group Trial Results

The small group trial was conducted on students of class XI-C MAN 1 Malang involving 12 students. In addition to students, the product was also tested on teachers by providing an assessment through an assessment instrument in the form of a questionnaire containing statements that can be rated according to the predetermined Likert scale score. The results of the small group trial were as follows:

The results of data analysis of small group trials conducted on students and teachers in accordance with each assessment criterion obtained an average value of 96% for student trials with a very valid category, and an average value of 93% from teacher trials with a very valid category. For indicators on the clarity aspect, it is only found in the student trials, while the usability aspect is only found in the teacher trials. The purpose of the small group trial is to determine the level of feasibility and deficiencies of the product before it is tested on a large group.

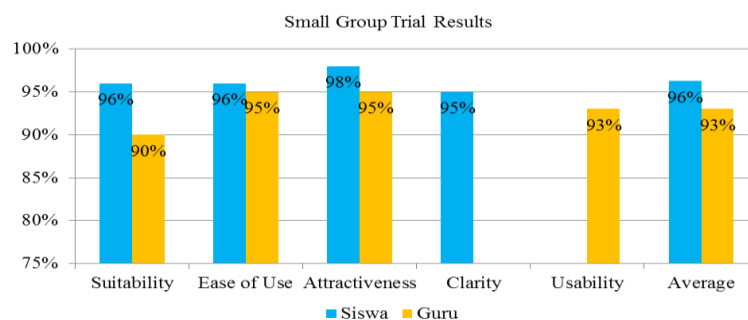


Figure 5 Chart of Small Group Trial Results

Large Group Trial Results

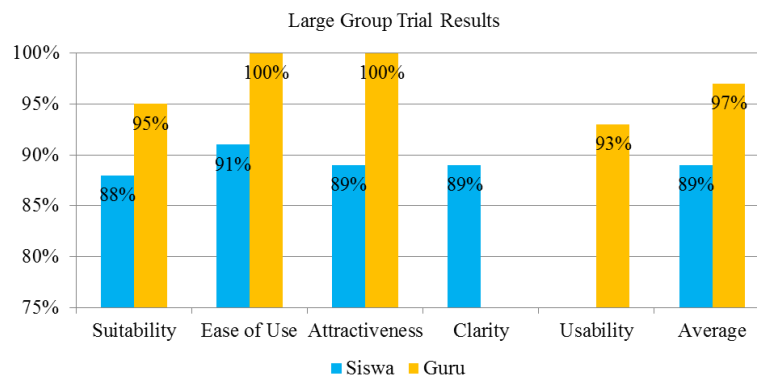


Figure 6 Chart of Large Group Trial Results

The large group trial was conducted with 36 students of class XI-A MAN 1 Malang. In addition to students, the product was also tested on teachers by providing an assessment through an assessment instrument in the form of a questionnaire containing statements that can be rated according to the predetermined Likert scale score. The large group trials obtained the following results:

Data analysis from the results of large group trials conducted on students and teachers in accordance with each assessment criterion obtained an average of 89% by students with a very valid category, as well as an average of 97% by teachers and can be categorized as very valid. Indicators on the clarity aspect are only found in student trials, while the usability aspect is only found in teacher trials. A series of trial stages that have been carried out have the aim of obtaining information related to the advantages and disadvantages of the products compiled. Each stage is carried out to create a teacher's manual product that can be used as a guide in conducting upper passing learning with a flipped classroom model for class XI at MAN 1 Malang. After the trial, a comprehensive revision will be made according to the criticisms and suggestions that have been given, both by expert lecturers, students, and teachers before becoming the final product.

Evaluation Stage (Evaluate)

At this stage, a comprehensive evaluation of the product is carried out. Evaluation is carried out by considering every suggestion and input obtained from the validation stage by expert lecturers and through a series of product trial processes.

Discussion

In general, a learning model is a form of learning that is described from start to finish that has been specially prepared by the teacher (Helmiati, 2012).

The learning model is a wrapper that contains the application of an approach, strategy, method, and learning technique. In the digital era like today, it is undeniable that teachers are required to be able to adapt to all existing developments and be able to create learning situations that can trigger student learning motivation. Kurniawan (R. Kurniawan et al., 2022) stated that the selection of appropriate learning strategies also needs to be done to create an effective and efficient learning process. One option that can be chosen by teachers to adapt to the times is to use the flipped classroom learning model.

Based on the results of the analysis of validation data from expert validators that have been presented in figures 3.2, 3.3, and 3.4, it shows that the guidebook products developed are valid. This can be seen in the assessment results on several aspects that are very valid criteria. The aspects assessed include aspects of suitability, aspects of convenience, aspects of attractiveness, and aspects of accuracy. The results of data analysis from validation conducted by teachers in figures 3.5 and 3.6 also show that the products developed are valid. Based on this data, it can be seen that the material in the student guidebook product is in accordance with the learning outcomes for phase F, the practice questions contained in the development product can help measure the level of student development, and this development product can help students achieve learning objectives. This is in line with research by (Murti et al., 2022) which explains that the use of guidebooks in learning can have a positive impact on learning outcomes. Research by (Ramdani et al., 2022) also shows that guidebooks are very important because they can be used as a guide when students experience difficulties in learning.

The results of testing on students through small group trials and large group trials showed very good results. This is exposed in the data analysis of the results of the large group trial which obtained a validity value of 89%. The aspects assessed by students include aspects of suitability, aspects of convenience, aspects of attractiveness, and aspects of clarity. The results of the large group student trials on several aspects, including the convenience aspect with very valid criteria, show that students can easily understand every explanation conveyed by the teacher. Students can also easily access any learning materials and links submitted by the teacher before class through Google Classroom. The results of the trial on the clarity aspect were also very valid. This shows that every explanation which includes learning instructions at meeting 1 and meeting 2, descriptions of learning materials for volleyball overhead pass, pictures of learning variations, pictures of instructions for implementing skill tests, and explanations of assessment

guidelines on development products are clear. The results of the trial on the attractiveness aspect were also in the very valid assessment criteria. From these results, it can be seen that every picture and video of learning to pass over that is in the development product is interesting for students. The use of learning videos is believed to be a more effective and efficient tool in a learning activity (A. W. Kurniawan, 2019). Providing material in the form of learning videos before class helps students in providing a stimulus in solving problems or connecting a problem given by the teacher. In line with this (Bodie et al., 2006) explains that when students get a certain stimulus, their memory will connect previously acquired experiences related to the stimulus so that students are better prepared to take part in learning.

From a series of guidebook trials on students, it was found that when participating in learning activities in the field, students became more prepared and able to carry out every instruction that had been given by the teacher through google classroom. The google classroom platform was chosen as a medium to deliver the material because it is one of the website resources that provides learning management system (LMS) services for free and can be accessed easily by every user. By using the platform, students can access learning easily, manage time independently for learning, and also students can work according to their own pace (Gupta & Pathania, 2021). Student learning outcomes in the learning process assessed through cognitive assessments also get scores above the Learning Objective Achievement Criteria, where (Hartati, 2018) states that the use of guidebooks in the learning process can provide a significant increase in student learning outcomes because before carrying out learning they have carried out the learning process independently through the material provided by the teacher. This is in accordance with research (Lestaringrum et al., 2023; Murti et al., 2022) which shows that the use of student guidebooks in learning can have an influence on improving student learning outcomes. The use of student guidebooks can also be used as a reference by teachers in the process of preparing materials because teachers can consider including several elements that can maximize students in learning (Adhe et al., 2020).

Through observations made during face-to-face learning, it was also found that the level of student activeness in participating in learning increased. Students are more often involved in discussions between students and students who have above-average abilities have the initiative to help other students who have difficulty in practicing in the field. This is because the student guidebook contains a series of materials to be studied, so that by using the guidebook students already

know every activity that will be carried out. Learning using guidebooks can also make it easier for students to carry out learning activities because each content contained in it has been arranged systematically, interestingly, and in accordance with learning outcomes so that it makes it easier for students to take part in learning (Astuti & Nugrahanta, 2021). In addition, the implementation of learning in the classroom becomes more effective because the time that is usually used by teachers to convey material in class can now be used to increase student time in direct practice. This will make students gain direct learning experience in a longer time so that students' ability to absorb material is more optimal.

CONCLUSION

The PE student guidebook on volleyball overhead pass material with a flipped classroom model for class XI students at MAN 1 Malang has been successfully developed and obtained results that are very valid and feasible to use in a learning process. However, this research still has limitations where the trial stage is only carried out on the product practicality test and has not yet reached the effectiveness test. In addition, the scope of the material contained in it is still not complex, which is only about the basic techniques of volleyball overhead pass for class XI. With these limitations, in the future it is hoped that other researchers can conduct effectiveness tests of the products developed and be able to develop PE student guidebooks with more complex material studies.

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