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Analysis of Feasibility and Effectiveness Organizational Behaviour 3D Realist Teaching Material Based on Project Learning

Lenti Susanna Saragih[1]*, Jufri Dharma[2], Sabda Dian Nurani Siahaan[3]
Medan State University
Corresponding Author: Lenti Susanna Saragih lenti@unimed.ac.id

A R T I C L E I N F O

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A B S T R A C T

Realist 3D videos are teaching materials that can make it easier for students to understand the context of learning material to make it easier to apply it in a project. This study aims to determine the level of feasibility, practicality and analyze the impact of using teaching materials on student learning outcomes. The study was carried out for 1 year. The method used in this study is the R&D Method using the ADDIE model. The study population is 6th semester Business Education Study Program students. Data collection techniques use observation and questionnaires. Data is processed using descriptive analysis. Based on the results of the study, it can be concluded that teaching materials for Organizational Behavior with 3D Realist videos Based on Project Based Learning are feasible and practical to use. Based on the effectiveness test, it is known that there are differences in learning outcomes before and after treatment using teaching materials.

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INTRODUCTION

In the world of education, teaching materials are needed that are used as guidelines in achieving learning objectives (Wahyudi, 2022). Teaching materials are one of the means that can increase the effectiveness of the learning process. Innovation in the use of various teaching materials is very important to increase the insight of students. An educator is required to be creative to be able to compile teaching materials that are innovative, varied, interesting, contextual, and in accordance with the level of student needs. Therefore, according to Farhana et al (2020) teaching materials made by educators must be more interactive, interesting, easy to understand, involve students and not monotonous, not only with books, text books but also with interesting videos that can facilitate the process of mastering the material.

In accordance with the achievement of unimed goals, namely by optimizing Higher Orde Thinking Skills-based learning using the MBKM Curriculum, students are given independence in learning by providing convenience in accessing all existing teaching materials. The MBKM curriculum focuses on students to master lecture material with project-based learning and problame-based learning which requires students to complete 6 types of tasks, namely Routine Tasks (both group and individual), *Critical Book Review (CBR), Critical Journal Review (CJR), Mini Research (MR), Mini Project (MP),* and Idea Engineering (RI). Interesting teaching materials are expected to be adequate facilities for students to understand the material appropriately so that students are able to provide creative ideas and innovations in compiling and implementing projects. One of the method strategies that can be used is the use of 3D animation in teaching materials so that students are expected to be able to understand the material taught more easily and on target. In addition, learning with media provides benefits to motivate, arouse interest, increase understanding, present data interestingly and reliably and facilitate data interpretation in obtaining information (Minarni, 2019)

The quality of students can be improved through efforts made by lecturers by developing the teaching materials used. The use of technology in learning is needed to provide convenience to students in mastering the material taught. This design to improve the quality of learning is an effort to increase the quality of students which ultimately improves the quality of education in Indonesia. In line with this, it is necessary to develop Organizational Behavior Teaching Materials that provide skills in designing and conducting a project that can be useful for increasing innovation and creativity of students. The goal is to improve the quality of learning which ultimately improves the quality of graduates in the field of Organization and mental maturity which is very beneficial both for students as future educators and as entrepreneurs. The objectives set in this study are: To determine the level of practicality of Organizational Behavior Teaching Materials with *Project-Based* Learning Realist 3D Videos in improving Student Learning Outcomes

THEORETICAL REVIEW

Teaching Materials with Realist 3D Videos

In preparing the right learning materials, an educator can compile teaching materials that are in accordance with the curriculum and are able to meet the needs of students. Prastowo (2015: 17) revealed that teaching materials are all materials (both information, tools, and texts) that are arranged systematically, which display a complete figure of the competencies mastered by students and used in the learning process with the aim of planning and reviewing learning implementation. Thus, the selection of teaching materials must consider several principles including the principle of relevance, the principle of consistency and the principle of adequacy (Prastowo, 2015: 227). The continuous development of teaching materials by involving collaboration between students and educators is very important to produce teaching materials that are in accordance with student needs so as to increase learning effectiveness, can enrich the content and quality of teaching materials (Putnik and Alves, 2019: 218).

One software that can be used in creating creative learning with the use of teaching materials based on three dimesi (3D) is PageFlipe Professional. According to Salsabila (2013: 12) 3D PageFlip Professional software is one type of software that can create animated displays that are able to create interactive learning media for students. Furthermore, Saefullah (2016: 1) suggests that PageFlip Professional 3D-based digital book is a publication consisting of text, images, video, or sound, and can be published in digital form that can be read through a computer or other electronic device. Electronic books can be read through computers, laptops, and devices. 3D PageFlip Professional can present teaching materials in electronic format which is able to display interactive simulations by combining text, images, video, audio, animation, and navigation so that learning can take place more interesting, fun, make students more interested in following learning and can be used anytime and anywhere. Permana and TS (2016) suggest that 3D PageFlip Professional is a display that can be accessed and used through a computer and can be downloaded on Google.

Development of Project-Based Learning Based Teaching Materials

The change in learning paradigm, from teacher-centered learning to student-centered learning strategies is one of the important efforts to optimize the learning process that grows students to be more active in learning (Perbawa, 2020)

One of the learning models related to student activeness and critical thinking is the *Project Based Learning (PBL) Model.* The project-based learning model provides conditions to improve critical thinking and analysis skills and solve complex problems in real life so that it will cause a culture of thinking in students, the *project-based* learning process requires students to play an active role in learning activities that are not only *teacher-centered* so that they can improve student learning outcomes on the subject matter delivered.

According to Nurhayati and Haryati (2020: 5) *Project-based learning* can be carried out if the following conditions are met: a) educators must be skilled in identifying basic competencies that emphasize more aspects of skills or knowledge at the level of application, analysis, synthesis, and evaluation; b)

educators are able to choose materials or topics that will be used as project themes so that they become interesting; c) educators must be skilled in cultivating learners' motivation in working on projects; d) the existence of adequate facilities and learning resources; e) Educators should see the suitability of project time with the academic calendar so that project activities are possible to be carried out.

According to Daryanto (2014) The steps for learning peoject-based learning include start with essential questions, design a plan for the project, create a schedule, monitor a student and the progress of the project, assess the outcome, evaluate the experience.

This research is supported by previous relevant studies. Asih, et al (2022) conducted a research entitled Professional Pageflip 3D Assisted Exposition Text Teaching Materials for High School using the ADDIE development model. The results revealed that Professional Pageflip 3D media is very feasible to be used in the learning process. Furthermore, Fitri, et al (2021) conducted a research entitled Development of E-Modules Using Professional 3D Pageflip on Momentum and Impulse Materials. The research model used is the development model of Borg and Gall. This research uses research instruments, questionnaires, expert validation and media validation as well as student perception questionnaires. The results showed that the E-module was developed using the 3D Pageflip Professional application with the final format of the exe program and the module framework consisting of module covers, module position maps, learning activities per sub-chapter with examples and practice questions and final formative tests, containing material, videos, animations, simulations. The advantages of this e-module are that it can be run immediately, the video displayed is three-dimensional, can be used for distance learning, and contains a final formative test as a measure of student ability. Furthermore, Firnanda (2022) has also conducted research entitled Development of Visual-Based Teaching Materials Containing Problam Based Learning to Foster Student Learning Motivation in Computer Organization and Architecture Courses. This research uses the ADDIE development model with stages, namely (1) analyze, analyze problems that occur through interviews, (2) design process of teaching material product design, (3) development of teaching material products, (4) implement the implementation of developed teaching steel products, and (5) evaluation, evaluate teaching materials and obtain feedback from respondents. The data obtained shows that learners are motivated in learning by using 3D-based teaching materials. Laili (2019) conducted research on the development of e-module teaching materials, where the research i succeeded in developing a *project based learning* e-module on the subject of Electric Motor Installation. The test results show that the module is effective in improving student learning outcomes based on the cognitive and psychomotor learning outcomes of students, this can be seen from the range of differences in pree test and post test scores obtained by students.

METHODOLOGY

This research was carried out for 1 year in the Business Education Study Program in Economic Fakulty-UNIMED. This research model is a research and

development model by developing existing ones, both in terms of form and function (Sumarni 2019). The research and development (R&D) model in this study refers to the ADDIE model. The ADDIE model proposed by Dick and Carry in 1996 (Mulyatiningsih 2016). This ADDIE model has a development cycle consisting of 5 stages of development, namely, analysis, design, development, implementation and evaluation. The stages in the development of the ADDIE R&D model carried out consist of:

1. Analysis.
   The initial stage of development with the ADDIE method is to analyze the feasibility and requirements of product development which can be started with an analysis of problems in existing products that are less relevant to current needs, not in accordance with the technology used and so on. This stage is also known as the needs analysis stage. The stages of analysis referred to in this research include determining basic problems in the learning process, so that the development of learning materials is needed, as well as alternative relevant tools to achieve the final goals stated in the curriculum. The stages of analysis used include:
   a. Curriculum Analysis is in the form of the type of curriculum applied in the Business Education Study Program
   b. Instructional Analysis is in the form of an analysis of instructional learning objectives that contain the competencies needed, the final objectives of lectures, graduate profiles, and learning design.
   c. Student Analysis is through analysis of student character and knowledge which aims to determine the level of student understanding of the material presented.

2. Design.
   This stage aims to produce a design of teaching materials. The result of the draft is referred to as the initial draft which includes:
   a. Media selection. Media selection to determine the right media in presenting material in accordance with the learning model used.
   b. Format selection. This stage is the selection of a format for designing content, selection of learning strategies, and learning resources that are in accordance with the principles, characteristics, and steps must be in accordance with the learning model used
   c. Preliminary design. The initial design of teaching materials includes contract, Lecture Contracts and the preparation of materials in accordance with basic competencies and competency indicators

3. Development
   Stage realizes the product design produced at the design stage into a real product, until it produces a product that has been validated by experts. The stages in this point include: Product creation and expert validation

4. Implementation
   The application of products in this model is intended to obtain feedback on the products created/developed. Initial feedback (initial evaluation) can be obtained by asking questions related to product development goals. Application is carried out referring to the product design that has been made. The stages in this point include: Development trials
5. Evaluation.
   The evaluation stage aims to provide feedback to product users, so that revisions are made in accordance with the evaluation results or needs that have not been met by the product. The ultimate goal of evaluation is to measure the achievement of development goals. In this study, trials for evaluation were carried out on students of the Business Education Study Program Semester 6 Class A and B.

The population of this research study is students in the VI semester of the Unimed Business Education study program consisting of class A (33 students) and B totaling 29 students. The sample selected in this study was class A consisting of 33 students. The data collection techniques used are observation and questionnaires withinstruments in the form of validation sheets from material experts, observation sheets and questionnaires. Material validation sheets are used to find out how complete and deep the material is used while student response questionnaires are used to find out student responses to the teaching materials developed. The data were analyzed by descriptive statistical tests.

Validity Test

The design of the developed product is assessed by validators using validation sheets. The results of the assessment of all aspects are measured with the *Likert Scale*. To see the weight of each validator response by calculating its average score with the following formula: Ismail (2019)

$$\text{Avarage Totat Score} = \frac{Total\ Score}{Number\ of\ validation} \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

The validity category is measured based on the criteria proposed by Arikunto (2019), with the following formula

$$\textbf{Result} = \frac{Avarage\ Score}{Maximum\ Score} \text{ X } 100\% \quad \ldots\ldots\ldots\ldots\ldots\ldots (2)$$

The following factors form the basis for validity categories:

Tabel 1. ***The Validity Category***

Persentasi	Validity Category	Skor
0-21	In valid	1
21-40	Not Valid	2
41-60	Quite Valid	3
61-80	Valid	4
81-100	Very Valid	5

Source: Arikunto 2019

Practicality Test

Practicality test in this study using practicality test instruments according to students as users of teaching materials. The practicality test tests in terms of learnability, efficiency and effectiveness of time. The range of total values from the resulting Likert scale is converted to a value criterion determined by the level of practicality of using the teaching material. The formula used in the practicality test in this study is:

$$\mathbf{Vp} = \frac{TSEp}{S-max} \text{ X } 100\% \qquad \text{..... (3)}$$

Information:
Vp = Validity of Practicality
TSEp = Total Empirical Score of Practicality
S-max = Maximum expected score

After knowing the value of practicality, to describe the results of practicality can be seen from the following criteria:

Tabel 2. Practicality Criteria

Information	Category	Information
75,01% - 100%	Very Practical	Can be used without revision
50,01% - 75,00%	Practical	Can be used with minor revisions
25,01% - 50,00%	Less Practical	It is recommended not to use
00,00% - 25,00%	Impractical	Cannot be used

Source: Arikunto 2019

Effectiveness

To test the effectiveness of teaching materials Organizational Behavior with 3D Realist Based Project Based Learning, a trial was carried out on a limited small group with *a before-after (one to one)* experimental design using paired sample t test. The trial of the effectiveness of learning media was carried out on a small sample of 33 students who had completed learning on the material presented. This before after experiment design tests the effectiveness of teaching materials on learning outcomes before and after treatment using teaching materials. With the criteria of accepting Ho, if the Sig value > 0.05 and reject Ho, if the Sig value < 0.05 (Kadir, 2015) This test uses paired sample t test with the hypothesis:

Ho: There is no difference in learning outcomes before and after treatment using Organizational Behavior teaching materials with 3D Realist Based Project Based Learning.

Ha: There are differences in learning outcomes before and after treatment using teaching materials Organizational Behavior with 3D Realist Based Project Based Learning.

RESULTS

Analysis

a. Curriculum Analysis

At this stage of curriculum analysis, an analysis was carried out on the type of curriculum used at Medan State University, especially those that are being applied to the Business Education study program. UNIMED collaborates with the KKNI curriculum and the Merdeka Belajar Curriculum into a complementary whole. State University of Medan applies 6 forms of tasks, namely Routine Tasks (TR), Critical Book Report (CBR), Critical Journal Review (CJR), Mini Research (MR), Team Project (TP), and Idea Engineering (RI). Through Team Project assignments, students are required to produce certain products that are in accordance with the course. Through the Mini Research assignment, students are required to enter the world of work to make observations, and compare theories obtained on campus with facts and actualization in the field. The implementation of the curriculum will be more perfect if learning integrates with case-based (Case Method), Problem Based Learning and Project Based Learning.

b. Analisis Instruksional

In this stage, an analysis of graduate profiles, concept maps and competency maps in the Business Education study program is carried out. The profiles of graduates of the Business Education Study Program, Faculty of Economics, Medan Sate University:

Tabel 3. Profile of Business Education Study Program Graduates

No	Profile	Description
1	Educators	Master of Business Management Marketing and Entrepreneurship Expertise Program at SMK Business Management
2	Training instructors	Creative, innovative and able to develop teaching materials , plan, implement andevaluate learning.
3	Self-employed	Able to compete with other entrepreneurs creatively and innovatively, so as to be able to prosper themselves and others.
4	MSME Consultant	Able to apply managerial skills in business and have initiative and integrity inwork.
5	Researchers	Able to develop knowledge and apply abilities according to their fields creatively and innovatively according to the development of science.

Based on the competency standards contained in the Business Education study program, several competency standards are set in the Organizational Behavior course, including;

1. Able to analyze in depth about individual differences, organizational learning, emotional intelligence, feelings, attitudes, and values
2. Able to analyze and apply group formation and group interaction
3. Able to analyze power and politics, communication and leadership in organizations
4. Able to analyze diversity, culture, design and organizational development

c. Student Analysis

Student analysis was conducted by open interviews with students who were the subjects of research, namely students of the Business Education study program semester 6 class A. Based on the results of the interview, it is known that students really need teaching materials that are more interactive, innovative and not boring. Students need teaching materials that are easy to carry anywhere and can be used easily. Students need more concrete assignments and produce tangible outcomes, where these outputs can be used in future career development. Project-based assignments are considered more challenging than having to answer long and theoretical questions alone. Working on tasks in groups is considered very effective in terms of ideas, creativity and funds.

Design

In the design stage, it is carried out in two stages, namely designing the concept of a physical book consisting of designing a concept map of courses, teaching materials and also RPS design and also designing 3D-based materials by choosing one of the materials used in research trials. Before designing 3D teaching materials, researchers first design RPS, Assignments, Case Studies and printed book materials. The material in the printed book consists of 13 chapters, namely: Chapter 1 Individuals and Their Differences, Chapter 2 Perception, Decision Making and Job Satisfaction, Chapter 3 Motivation, Chapter 4 Basics of Group Behavior, Chapter 5 Work Teams, Chapter 6 Conflict and Negotiation, Chapter 7 Power and Politics, Chapter 8 Communication in Organizations, Chapter 9 Leadership in Organizations, Chapter 10 Diversity and Organizational Culture, Chapter 11 Organizational Design, Chapter 12 Organizational, Change and Chapter 13 Organizational Change. In the design of 3D realist teaching materials, researchers chose one of the study topics, namely "Perception and Decision Making. To design 3D teaching materials, researchers use Professional 3D Pageflip software. The choice of this application is because besides being easier to use, there is also software in free form and tutorials on using the application are also widely available on YouTube.

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Development

a) **Development of Teaching Materials (Books) Organizational Behavior Based on Project Learning**

The material is developed with stages, Introduction, Material Description, Case Study, KKNI Task consisting of Routine Tasks and Project Tasks. Each chapter is accompanied by cases relevant to the topic covered. The project carried out in this

course is the implementation of a seminar at the end of the semester. To facilitate the assessment, researchers make project achievements every week that must be done by students. This schedule is a parameter for the achievement of student projects. Teaching materials in the form of physical books are then equipped with videos that can make it easier for students to follow learning. The video was then upload to YouTube. Here's what the learning video looks like.

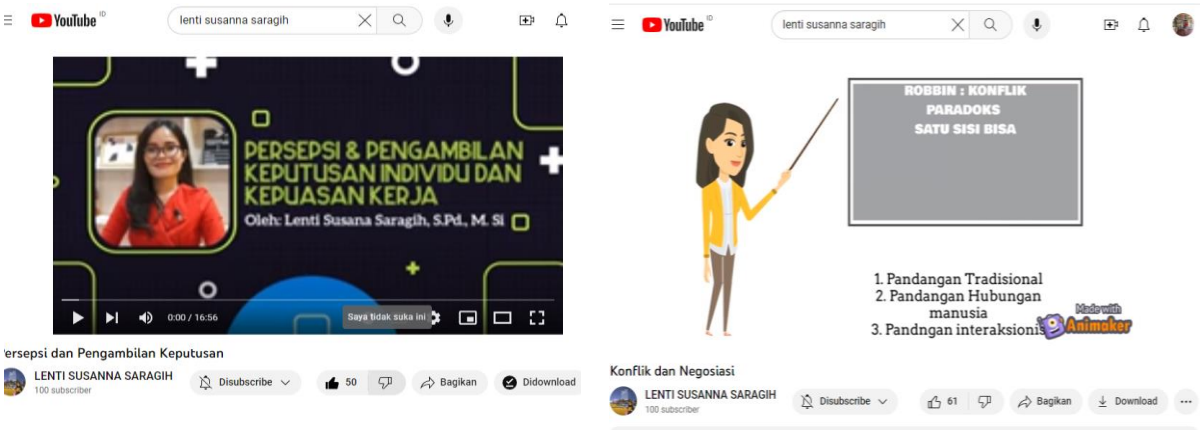

Figure 1. Youtube Page

b) Development of 3D Realist Teaching Materials

Book and video teaching materials are then developed into 3D teaching materials. The development of these teaching materials is used by utilizing Professional 3D Pageflip software. Teaching materials printed materials, teaching materials learning videos are included in 3D teaching materials. In addition, researchers also include instrumental music so that students do not get bored when deepening the material. Here are some views of 3D teaching materials designed.

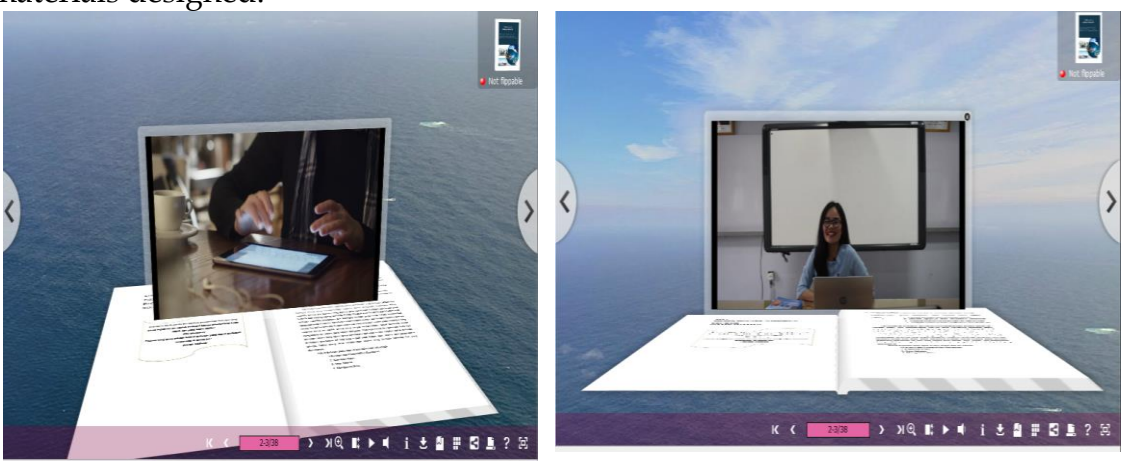

Figure 2. Outcome 3D Realist Teaching Materials

Implementation

a. Feasibility Test

The feasibility test in this research involved 3 expert validators, namely senior lecturers at the Faculty of Economics. These three validators assess 2 categories, namely material experts assessed by 2 lecturers and media experts assessed by 1 lecturer. The aspects assessed in validation by the expert validator

team are aspects of the feasibility of book content, aspects of presentation and aspects of language. The results of the validation test of each indicator on the assessment aspect carried out by three expert validators can be seen in the table below:

Tabel 4 Validator Assesment Data

No	Validator	Aspect			Avarege	Criteria
		Material	Display	Language		
1	Validator 1 (Media experts)	87%	89%	83%	86%	Very Valid
2	Validator 2 (Material experts)	85%	91%	85%	87%	Very Valid
3	Validator 3 (Material experts)	86%	93%	92%	90%	Very Valid
	Avarage	**86%**	**91%**	**87%**	**88%**	Very Valid

Based on the data in the table above, it is known that the three validators, both media validators and material validators, obtained an average value range in the range of 86%-91%, this states that Organizational Behavior Teaching Materials with Project Based Learning 3D Realist vedio are very feasible to use.

However, there are several inputs from validators for improvements to this Organizational Behavior teaching material 3D Realist, including:

1. Include all book materials in 3D
2. In addition to videos to include youtube links in 3D teaching materials
3. Include quizzes in 3D materials

Based on input from validators, researchers make improvements and revisions to existing teaching materials. Some of the revisions that have been made include:

Figur 3. Outcome 3D Realist Teaching Materials Before and After Revision

b. Practicality Test

The practicality test of this book was assessed by students who aimed to test the readability of the book on a predetermined sample. The practicality test tests in terms of learnability, efficiency and effectiveness of time. After the questionnaire was distributed, student responses were obtained as in the table below

Tabel 5. Student Respond's Tabulation to the Practicality Test

Aspect	Nb	Responden																																	Total Score (TSEp)	S-Maks	Vp = $\frac{TSEp}{S-max}$ X 100%
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33			
Learnability	1	5	5	4	4	5	4	5	5	5	5	5	5	5	4	5	5	4	4	4	5	5	3	4	4	5	5	4	5	5	5	5	5	5	153	165	92,73
	2	5	5	5	5	5	4	5	5	5	4	5	5	5	5	5	5	5	5	5	4	4	4	4	4	5	5	5	5	5	4	5	5	4	156	165	94,55
	3	5	4	5	4	5	4	5	4	5	4	5	5	5	5	5	5	4	3	4	5	4	4	5	4	5	5	5	5	5	4	5	4	4	150	165	90,91
	4	4	5	5	5	4	4	5	5	3	4	4	4	4	4	4	4	4	4	4	5	5	4	5	4	4	3	5	4	5	5	4	5	4	142	165	86,06
	5	5	5	5	4	5	4	4	5	4	4	4	5	5	4	4	4	5	5	4	5	5	4	5	4	4	4	4	4	4	4	5	5	5	147	165	89,09
																																			748	825	90,67
Efficiency	6	5	5	5	4	5	4	5	4	5	4	5	5	5	5	5	4	5	5	4	5	4	4	4	4	5	4	4	5	4	5	5	5	5	152	165	92,12
	7	5	5	5	4	5	4	5	5	5	4	4	5	5	4	4	4	4	5	5	5	4	4	4	4	4	4	4	5	4	5	4	5	5	148	165	89,70
	8	5	5	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5	5	5	5	5	4	4	4	5	4	4	5	5	5	5	4	4	155	165	93,94
																																			455	165	91,92
Effectifinesss of time	9	5	5	5	4	5	3	5	5	5	4	5	5	5	4	5	5	5	4	5	4	4	4	4	3	5	5	5	5	4	5	4	4	5	150	165	90,91
	10	5	5	5	5	5	3	5	5	5	4	5	5	5	4	5	4	5	5	5	4	4	4	4	3	5	4	5	4	4	5	4	4	5	149	165	90,30
	11	4	5	5	5	4	3	5	5	4	4	4	4	4	3	4	4	5	4	5	5	5	4	4	3	4	4	4	4	4	4	4	5	4	139	165	84,24
	12	5	4	5	5	5	4	5	5	5	5	5	5	5	4	5	5	5	4	4	5	5	4	4	4	5	4	5	5	4	4	5	5	4	153	165	92,73
																																			591		89,55

Based on the data in the tabulation, a practicality test was carried out with the following results:

Tabel 6. Test Results of Practicality of Teaching Materials

Nb	Indicator	Total Score (TSEp)	Score Maksimal (S-Maks)	Vp = $\frac{TSEp}{S-max}$ x 100%	Categori
1	*Efficiensi*	748	165	90,67	Very Practical
2	*Learnability*	455	165	91,92	Very Practical
3	*Effectiveness of Time*	591	165	89,55	Very Practical

Based on the data in the table above, it can be seen that in terms of usefulness to obtain a practical validity *value (efficiency)* of 90, 67% is included in the very practical category. This means that teaching materials for Organizational Behavior with Project-based 3D Realists can be used to explain the material, help students to be active in the learning process, case studies presented can increase student argumentation skills, exercises used can increase student involvement in learning and projects designed to increase student skills.

In terms of ease for users *(learnability)* obtained a practicality validity value of 91, 92% is included in the very practical category. This means that the instructions for using teaching materials are clear, the letters presented are easy to read, and the tools in the teaching material media are easy to use. While viewed in terms of time effectiveness, it is known that the value of practicality validity obtained is 89.55% included in the very practical category. This means

that the presentation of videos in teaching materials facilitates understanding of the material, teaching materials are easy to use anywhere, quizzes can help evaluate and teaching materials are considered fun by students.

Based on the results of the analysis above, it can be concluded that judging from the three aspects above, namely usability, convenience for users and time effectiveness, teaching materials for Organizational Behavior with 3D Realist Based Based Project Learning is very practical to use. This is in line with the results of research presented by Fitri (2021) which said that the E-module was developed using the 3D Pageflip Professional application with the final format of the exe program and the module framework consisting of a module cover, module position map, learning activities per sub-chapter with examples and practice questions and final formative tests, containing material, videos, animations, practical simulations used by students.

b. Effectiviness Test

To determine the level of effectiveness of teaching materials, a Pired Sample T Test was carried out using SPSS 26. The Pired Sample T Test shows whether the paired sample undergoes a significant change where the test result is determined by its significance value. The significance value (2-Tailed) < 0.05 indicates a significant difference between the initial variable and the final variable, and vice versa the significance value (2-Tailed > 0.05 indicates no difference between the initial variable and the final variable. The requirement for this pired sample t test is if the data is normally distributed. So the initial stage carried out in the effectiveness test in this study is to conduct a data normality test and the second stage is to do a t test.

Normality Test

The normality test is an absolute requirement for the paired sample test where the main requirement is that the research data used must be normally distributed. The normality test results obtained are as follows:

Tabel 7. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pree Test	.127	33	.196	.957	33	.219
Post Test	.133	33	.148	.971	33	.500

a. Lilliefors Significance Correction

Based on the Test of Normality output table above. In the Shapiro-wilk section, it is known that the Sig value for the pree test value is 0.219 and the Sig value for the post test is 0.5. Because the value is greater than 0.05, it can be concluded that the pree test and posttest value data are distributed normally. Therefore, the requirements or assumptions of normality in this study have been met.

Effectiveness Test

The effectiveness test in this study was carried out by Pired Sample Test analysis using SPSS 26 as shown below,

Tabel 8. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pree Test	84.5758	33	3.25029	.56580
	Post Test	88.3636	33	2.88117	.50155

Based on the results of the pired sample test in the table above, it is known that the mean value for the pree test is 84.57 and the mean for the post test is 88.36. Because the average score of the psot test is > than the pree test, it means that descriptively there is a difference in the average learning outcomes of the pree test with the post test. To find out the difference is significant or not can be seen in the pired sample correlations table below.

Tabel 9. Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pree Test & Post Test	33	.948	.000

Based on the table above, it is known that the value of the correlation coefficient in this study is 0.948 with a significance of 0.000. Because the significance value is 0.000<0.05, it can be said that there is a strong and significant influence between the pree test value and the post test value.

Tabel 10. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pree Test - Post Test	-3.78788	1.05349	.18339	-4.16143	-3.41433	-20.655	32	.000

Reason of decision making Paired Sample T-Test based on Arikunto, 2019: If the Sig. value (2-tailed) < Research Alpha (0, 05), then H_0 is rejected and H_a is accepted. If the Sig. value (2-tailed) > Research Alpha (0, 05), then H_0 accepted and H_a rejected. Based on the table of data analysis results above, it can be seen that the sig value obtained in this study is 0,000<0, 05, it means Ha is accepted and Ho rejected. In other words, there are differences in learning outcomes before and after treatment using teaching materials Organizational Behavior with 3D Realist Based Project Based Learning. In addition, in the pired sample test table, the mean value is known to be -3.78. This value shows the average difference

between pree test and posttest learning outcomes where the difference is between -4.16 to -3.41.

Evaluation

At this stage, the use of sentences and language in teaching materials is considered and corrected if you find errors in typing. The language that is voiced is a language that is easily understood by students. Thus produced a product that has been declared suitable for use, practical to use and has high effectiveness.

DISCUSSION

Based on the results of the research above, the discussion in this study is

1. Video 3D Realist teaching materials for Project Based Learning Organizational Behavior

The teaching materials produced are in the form of teaching materials with 3D where in the teaching materials there are materials, videos, pictures, quiz questions and also project assignments. Teaching materials are designed using Professional 3D Pagefliper software. Teaching materials are designed with student project assignments where at each meeting project targets are determined to be achieved. In addition to project assignments, teaching materials also contain KKNI tasks such as Critical Book Review, Critical Journal Review, Mini Research, Casus Studies, Engineering Ideas, and Routine Tasks. The development of this teaching material is in accordance with the results of research presented by Widura, et al (2021) who said that the Problem Based Learning and Project Based Learning Learning Models can improve student learning outcomes.

2. Feasibility level of Organizational Behavior Teaching Materials with *Project Based Learning* Realist 3D Videos

Based on the data from the study, it is known that the assessment of the three validators, both media validators and material validators, obtained an average value range in the range of 86%-91%, this states that Organizational Behavior Teaching Materials with Project Based Learning 3D Realist vedio in terms of content, presentation and language are very feasible to use. The same thing was also stated by Fitri, et al (2021) also stated that the development of the Professional Pageflip 3D e-module is worthy of being used to increase students' understanding in learning.

Based on the data from the results of practicality testing, it can be seen that in terms of usefulness to obtain a practicality *validity value (efficiency)* of 90, 67% is in the very practical category. In terms of ease for users *(learnability)* obtained a practicality validity value of 91, 92% is included in the very practical category. While viewed in terms of time effectiveness, it is known that the value of practicality validity obtained is 89.55% included in the very practical category. This means that the presentation of videos in teaching materials facilitates understanding of the material, teaching materials are easy to use anywhere, quizzes can help evaluate and teaching materials are considered fun by students. This is in accordance with the results of Firnanda's research (2022) also found that the use of visual-based teaching media can increase student learning

motivation, which has an impact on improving student learning outcomes. The same thing was also stated by Fitri (2021) who said that the E-module was developed using the 3D Pageflip Professional application with the final format of the exe program and the module framework consisting of module covers, module position maps, learning activities per sub-chapter with examples and practice questions and final formative tests, containing material, videos, animations, practical simulations used by students.

3. The Impact of Using Organizational Behavior Teaching Materials with *Project Based* Learning Realist 3D Videos in improving Student Learning Outcomes.

Based on the results of data analysis in this study, it can be seen that there are differences in learning outcomes before and after treatment using teaching materials Organizational Behavior with 3D Realist Based Project Based Learning. In addition, in the pired sample test table, the mean value is known to be -3.78. This value shows the average difference between pree test and post test learning outcomes where the difference is between -4.16 to -3.41. This is like the results of research conducted by Widura (2021) which says that problem-based learning models can improve learning outcomes. The same thing is also the opinion of Faqiroh (2020) who found that the use of project-based learning and problem-based learning is highly desired by students in improving their competence, so that educators are expected to be able to provide innovation in their learning. In addition, Asih (2022) also stated in her research that Professional Pageflip-assisted 3D Teaching Materials are able to improve student learning outcomes.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research and discussion, the following conclusions can be drawn:

1. Teaching material products for the Organizational Behavior course with 3D Realist Based on Project Based Learning were developed using the ADDIE development model, namely: (1) Analysis, (2) Design, (3) Development, (4) Implementation consisting of 13 Chapters, namely: (1) Individuals and Their Differences; (2) Perception, Decision Making and Job Satisfaction; (3) Motivation; (4) the basics of group behavior; (5) Work Team; (6) Conflict and Negotiation; (7) Power and Politics; (8) Communication within the Organization; (9) Leadership in the Organization; (10) Diversity, Organizational Culture; 11) Organization Design; 12) Organizational Change; 13) Organizational Development.
2. Feasibility and Practicality the teaching material products for the Organizational Behavior course with 3D Realist Based on Project Based Learning developed have been declared feasible and practical to use in learning.

3. Product Effectiveness the teaching materials for the Organizational Behavior course with 3D Realist Based on Project Based Learning developed have been declared effective in learning.

FURTHER STUDY

The research conducted is inseparable from limitations, so because the use of teaching materials with Project-Based Learning-based 3D videos can improve student learning outcomes, it is recommended that in the next stage research is carried out on the development of teaching materials using Augmented Reality (AR) technology. This is a positive response from the world of education to the rapid development of technology.

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