

DEVELOPMENT OF EDUCAPLAY-BASED LEARNING MEDIA IN THE ELEMENTS OF HUMAN RESOURCE MANAGEMENT CLASS XI OFFICE MANAGEMENT OF VOCATIONAL SCHOOL

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ABSTRACT

Phenomenon/Issue: *There is a need to develop engaging and effective learning media for teaching Human Resource Management in class XI Office Management at Vocational School 4 Surabaya.*

Purpose: *This study aims to determine the development process, feasibility, student responses, and effectiveness of Educaplay-based learning media in supporting Human Resource Management learning.*

Novelty: *The study introduces the use of Educaplay-based learning media, an innovative approach combining interactive tools tailored to enhance student learning experiences in vocational education settings.*

Research Methods: *The study employs the ADDIE development model, which includes five stages: Analysis, Design, Development, Implementation, and Evaluation. Research instruments consist of validation sheets (from material and media experts), student response questionnaires, and pre-test and post-test sheets to measure effectiveness.*

Results: *The validation results show that Educaplay-based learning media is highly feasible, receiving scores of 91% from material experts, 96.66% from media experts, and 92.33% from student responses. The effectiveness test using the *n-gain* score yielded 70%, categorized as "quite effective." These results indicate that the media is suitable and effective for use in the learning process.*

Research Contributions: *This study contributes by providing a validated, feasible, and moderately effective Educaplay-based learning media tailored for Human Resource Management learning. It offers a practical and engaging tool to improve vocational education outcomes, specifically for Office Management students at Vocational School 4 Surabaya.*

INTRODUCTION

Education is an effort that each individual consciously makes to develop their knowledge, skills, and potential. The existence of this education will certainly affect human growth and development. Therefore, humans will be able to grow and develop better, especially in terms of their intellect, so this education is critical. Education is the most critical factor in a nation's development because it improves human quality, dignity, and abilities (Moto, 2019). Education is closely related to the teaching and learning process or learning process. Learning is an interaction process between students and educators

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and learning resources in a learning environment (Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System). The role of an educator or teacher in providing an understanding and direction of learning is essential in the learning activity or process (Sadani & Rosy, 2021).

The learning process has several essential components that must be present in it, namely the teacher as an educator, students, learning objectives, learning methods, materials taught, learning media/tools used, and learning evaluation (Fahrudin, 2022). One of the components that is no less important in increasing the success of the learning process is learning media. Learning media is a tool used in the learning process to clarify the delivery of information, simplify the learning process, and improve student learning outcomes (Nurbaetina & Roviati, 2021). Put, learning media is a tool that is an intermediary for educators to convey material to students. There are various types of learning media, including print media, audio, print audio, motion audio-visual, physical objects, visual projection and silent audio-visual, and computer/electronic (Rosy et al., 2018).

This learning media is vital because using learning media, both in the form of images/visuals, videos, audiovisuals, and other media, can make it easier for an educator or teacher to convey the material to be taught. Learning media is physical or technical in the learning process that can help teachers make it easier to deliver learning materials to students and make it easier to achieve the learning goals that have been set (Nurfadhillah et al., 2021). On the other hand, so that students can also more easily understand the material delivered by the teacher, the learning media used should be exciting and interactive.

Interactive learning media can be interpreted as a delivery of material using images, videos, animations, films, and audio with the help of computers that students actively respond to so that there is an interaction between both parties, both teachers and students and students and students (Adeo & Manane, 2022). Interactive learning media can be used as a fun and educational learning medium. Therefore, interactive learning media contains integrated visual/image and audio/sound elements to make it attractive (Rahma & Nurhayati, 2021). The most important characteristic of this interactive learning media is that students interact during the learning process so that students do not only pay attention to the presentation of material or objects (Harsiwi & Arini, 2020). The existence of this engaging, interactive learning media makes students more enthusiastic about learning and makes it easier to understand the material (Valentina et al., 2023).

Interactive learning media can be made as enjoyable as possible by utilizing technology. Along with the development of technology that is increasing daily, various web-based online platforms and applications have emerged that are useful in the field of education and can be used as interactive learning media. One of the exciting and interactive learning media is educational game-based learning. Educational game-based learning can minimize student boredom. Educational games are used in the learning process with educational elements or values (Rahma & Nurhayati, 2021). This is similar to the statement that educational games are games made to stimulate students' thinking so that they can solve problems while increasing their concentration (Widyastuti & Puspita, 2020). Games that were initially only considered entertainment can now be more beneficial to improve students' knowledge and skills.

Vocational School 4 Surabaya is one of the favorite vocational high schools in Surabaya, and it has implemented an independent curriculum for two years. This independent curriculum focuses more on the freedom to innovate, think critically, create, and learn independently for students (Rohmatika, 2023). Based on observations made by researchers at Vocational School 4 Surabaya, it was found that there is no availability of technology-based interactive learning media, which can be accessed quickly and flexibly by students through their devices such as mobile phones. In addition, Vocational School 4 Surabaya has uneven learning support facilities, as evidenced by several classes that do not have LCD projectors and classes that have LCD projectors but are not in good condition or damaged.

In addition, during the learning period, many students were bored and sleepy and talked to themselves with their friends. It is because one of them is when learning takes place, especially in the elements of human resource management; educators use learning media in the form of whiteboards and power points in which they only present material in the form of writing or text so that it seems monotonous and uninteresting. Supported by the results of a preliminary study conducted by the researcher through interviews with students, information was obtained that the use of PowerPoint media is less attractive, tends to be monotonous, passive, boring, and makes you sleepy because there is no interactivity so that the enthusiasm or interest of students to follow or listen to the material is very minimal.

From these problems, the researcher provides a solution by developing technology-based interactive learning media easily accessible to students anywhere and anytime through their devices, such as mobile phones. Students can access media independently, so learning is more active and participatory. Learning media is developed using the educaplay platform. This online learning platform provides games and other interactive activities to help students learn more effectively, efficiently, and fun (Utami et al., 2023). Teachers can choose several games offered by the educaplay platform according to their learning needs so that the learning atmosphere in the classroom can be more lively, fun, and interactive.

Some games on the educaplay platform include froggy jumps, memory games, matching pairs, word search puzzles, and many others. Various kinds of games available on the educaplay platform can be accessed by students online using a good and stable internet network. Some games or activities in this educaplay platform support multimedia in the form of images, videos, and audio, which can help present material in a more exciting and easy-to-understand way. The material can also be more accessible to absorb or understand through presentation in games or educational games because it gives an impression and an exciting learning experience while playing simultaneously.

Based on the above presentation, the researcher is interested in conducting research entitled "Development of educaplay-based learning media in the elements of human resource management class XI office management of Vocational School 4 Surabaya".

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Study

According to the Great Dictionary of the Indonesian Language or KBBI, learning means trying to acquire knowledge or intelligence, practicing, and changing behavior or responses caused by experience. Learning is a process that can produce behavioral changes in students that are formed from the experiences they feel (Rahma & Nurhayati, 2021). Learning is also a process of changing student behavior due to exercises that strengthen experiences and are relatively fixed (Sutiah, 2020). According to Djamaluddin and Wardana (2019), learning is an individual's effort to experience behavioral changes, including knowledge, skills, attitudes, and positive values from the material studied. Based on some of these opinions, the definition of learning is a process carried out by an individual to obtain new knowledge, understanding, and skills obtained from experience so that there is a behavior change.

Learning

Law Number 20 of 2003 concerning the National Education System states that learning is an interaction process between students and educators and learning resources in a learning environment. According to Indah Wati and Nugraha (2021), learning is a process of interaction between educators and students that involves all learning resources, which are adjusted to the learning plan to achieve the desired goals. In addition, learning can also mean a process of interaction carried out by educators and students in a learning environment to create a learning experience for students (Ramadhani & Rosy, 2023). Based on some of these opinions, learning is an activity that involves educators or, teachers, students, and learning resources to provide experience and knowledge for students in a learning environment. Learning aims to provide students with an understanding of knowledge, skills, and experience to improve their cognitive, affective, and psychomotor abilities.

Learning media

Anything that can be used to convey information or messages in the teaching and learning process so that it can stimulate students' interest and attention in learning is called learning media (Arsyad, 2017). Learning media can be interpreted as a means for delivering learning materials to motivate thinking, willingness, interest, and feelings and make it easier for students to master the material so that learning activities take place fun and learning goals can be achieved. Learning media can also be stated as a tool educators use as intermediaries or introductions so that the material learned by students can be conveyed easily (Situmeang et al., 2022). Based on these opinions, learning media is a tool to support learning activities used by educators to convey information or subject matter taught to their students so that learning objectives can be achieved optimally.

Interactive learning media

The concept of interactive learning is closely related to computer-based media, so it can be defined that interactive learning media is a computer-based learning media that can convey and process information or messages tailored to individual learning needs and abilities and encourage active participation of students during the learning process (Arsyad, 2017). Interactive learning media is also stated as an instrument based on mixed media to clarify information from educators to students so that there is a process of interaction between students and the media (Novyanti et al., 2022). Interactive learning media consists of images, audio, text, video, animation, and graphics that are integrated with the help of computers or other devices so that learning goals can be achieved and users can actively interact in them (Abdurrahman et al., 2020). Thus, interactive learning media is a form of media that allows two-way interaction, namely between students and learning media. So that students not only receive information but are also actively involved in the learning process through the participation and interaction of students with learning media.

Educational games

Educational games provide insights into how the learning process can be carried out as interestingly as possible (Rahma & Nurhayati, 2021). Learning media that can motivate students to think creatively and play educational games are called educational games (Nurhikmah et al., 2023). In addition, an educational game is defined as a game with several educational components components so that students can learn and play simultaneously (Hendrawan & Marlina, 2022). Thus, educational games can be interpreted as games that give a fun impression because students can learn while playing simultaneously so that students' knowledge and thinking can be adequately honed.

Educaplay

Educaplay is an online platform with various games to help students learn effectively and fun (Utami et al., 2023). Meanwhile, according to W & Sison (2021), eduplay is a free online tool or platform allowing educators to design games with creative and professional results. Educaplay is also defined as one of the collaborative tools that are available for free and allow users to do fun activities to interact between educators and learners (Páez-Quinde et al., 2022). Based on some of the opinions above, it can be concluded that eduplay is one of the web-based educational game platforms that allows teachers or educators to create and share games online through links easily. This Educaplay can only be accessed when connected to an active internet network. Later, students can access the game on their cellphones and laptops via the shared link or the code/pin listed. Educaplay can be used as an interactive learning medium because it can make learning more fun, and students can be actively involved in it by learning and playing at the same time on various kinds of games offered.

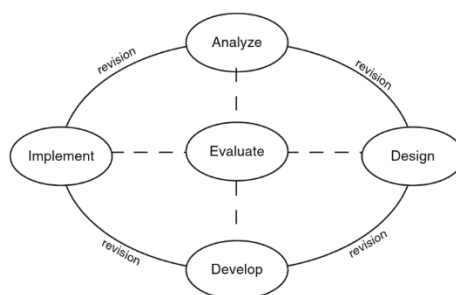
Element of human resource management

Human resource management or management is a process related to handling problems within the scope of employees to support organizational activities to achieve predetermined goals. This HR management includes employee planning and preparation systems, employee career development and management, performance evaluation and compensation, and suitable employment relations (Sinambela, 2016). Human resource management is one of the elements that students in grades XI and XII must learn in the concentration of office management expertise. The material taught is related to employee

management, from employee planning to employee dismissal. In addition, it will discuss labor regulations based on current regulations.

METHOD

This research is a type of development research or Research and Development (R&D), which can be defined as one of the methods to design, research, produce, and test the validity of products that have been developed or produced (Sugiyono, 2020). The development model in this study uses the ADDIE model developed by Branch in 2009. This development model consists of five stages: analysis, design, development, implementation, and evaluation. ADDIE's research model tends to be more systematic and practical for designing and developing learning activities (Harahap & Siregar, 2020), in line with the opinion that the ADDIE development model is one of the development models that pays attention to procedures or stages with a media development design that is practical and easy to understand (Purnamasari, 2019).



Source: (Branch, 2009)

Figure 1. Stages of the ADDIE Development Model Procedure

In this study, the test subjects consisted of material experts, media experts, and students. Material experts and media experts are validators who test the feasibility of the developed media, namely educaplay media. Meanwhile, a limited trial was carried out on students in class XI MP 3 Vocational School 4 Surabaya to find out how students responded to the media developed, namely educaplay media. The data collection instrument uses a questionnaire to validate material experts, media experts, and response questionnaires for students. Then, there is a test sheet consisting of a pre-test sheet to determine the initial ability before the media is tested and a post-test to determine the final ability after the media is tested. Observations were made during the learning process, and interviews were carried out with teachers teaching elements of human resource management and several students of class XI office management of Vocational School 4 Surabaya.

The data analysis technique used qualitative and quantitative data analysis, which consisted of validation questionnaire analysis, response questionnaires, test question items, and media effectiveness analysis. The validation questionnaire was analyzed using the following formula:

$$\text{Eligibility percentage} = \frac{\sum \text{score of all validators}}{\sum \text{highest score}} \times 100\%$$

Based on the results of the analysis of the calculation, data will be obtained in the form of percentages that are interpreted according to the following interpretation criteria:

Table 1.
INTERPRETATION CRITERIA FOR THE VALIDATION EXPERTS

Validation	Interpretation
81% - 100%	Very feasible
61% - 80%	Feasible
41% - 60%	Pretty feasible
21% - 40 %	Less feasible
0% - 20%	Not feasible

Source: (Riduwan, 2015)

The analysis of the response questionnaire uses the following formula:

$$\text{Eligibility percentage} = \frac{\sum \text{score of all student responses}}{\sum \text{highest score}} \times 100\%$$

Based on the results of the analysis of the calculation, data will be obtained in the form of percentages that are interpreted according to the following interpretation criteria:

Table 2.
CRITERIA FOR INTERPRETING STUDENT RESPONSE QUESTIONNAIRES

Validation	Interpretation
81% - 100%	Very good
61% - 80%	Good
41% - 60%	Pretty good
21% - 40 %	Less good
0% - 20%	Not good

Source: (Riduwan, 2015)

Before the test instrument is used in the research, it is first carried out to test the validity, reliability, difficulty level of the question, and the ability to differentiate the question to produce a decent one. The test instrument will be tested with the help of IBM SPSS Statistics 24 software. Meanwhile, to analyze the effectiveness of the media using the n-gain score test. The n-gain formula used to test the effectiveness of learning media is as follows:

$$G = \frac{Sf - Si}{\text{Score ideal} - Si}$$

Keterangan:

G = N-Gain Score

Sf = Score final (*post-test*)

Si = Score initial (*pre-test*)

Table 3.
CATEGORIES OF N-GAIN SCORE EFFECTIVENESS

N-Gain Score	Category
$G > 0,7$	High
$0,3 < G < 0,7$	Medium
$G < 0,3$	Low

Source: Hake (in Marjan et al., 2021)

Table 4.
CATEGORIES OF INTERPRETATION OF N-GAIN EFFECTIVENESS

Percentage (%)	Tafsiran
≤ 40	Ineffective
41 – 55	Less effective
56 – 75	Quite effective
≥ 76	Effective

Source: Hake (in Marjan et al., 2021)

RESULTS AND DISCUSSIONS

The results of this development research are in the form of educaplay-based learning media in the elements of human resource management class XI office management of Vocational School 4 Surabaya. This research is a type of Research and Development (R&D) research using the ADDIE development model, which consists of five stages: analysis, design, development, implementation, and evaluation. The researcher analyzes problems, needs, and competencies in the first analysis stage. Problem analysis was obtained from the results of observations that had been made and information was obtained that in the human resource management learning process, there is no technology-based interactive learning media that students can access quickly and flexibly through mobile phones. Interactive learning media here is intended as a medium for delivering material that involves students participating or interacting with learning media so that there is a two-way interaction; students receive the material passively and actively participate in learning. In addition, learning support facilities such as LCD projectors are also not available evenly in each classroom; some are damaged, and some are absent. It is not uncommon for educators to only use whiteboard media because of the unavailability of LCD projectors in the classroom. The use of learning media makes the learning atmosphere monotonous. Hence, students are interested in something other than listening to learning materials delivered through a one-way method, namely teacher lectures (Islamy & Saputra, 2022).

During the learning period, it was also found that many students experienced boredom and drowsiness and talked to themselves with their friends. It is supported by the results of interviews with students who feel bored because the learning media used is in the form of power points that only contain writing or text. Students only look at slides containing text and listen to explanations from educators. As a result, learning occurs passively, and students cannot actively interact, so their understanding of the material taught needs improvement. The use of learning media that has been used is less attractive, so students' interest and attention in learning are relatively low. As stated, using learning media can increase motivation and give rise to new interests and desires of students in learning. In addition, learning media can also help present material attractively, facilitate the interpretation of material, and improve students' understanding of the material (Arsyad, 2017).

The material presented in the form of text in the PowerPoint media is also less interactive, making students not actively involved or actively participating in learning. The lack of interaction of the media used makes the learning process monotonous and less fun. As explained by Arsyad (2017), the media functions as the purpose of instruction, where the material contained in the media must involve students in the form of actual activities so that it can provide a pleasant experience. In line with the opinion that presenting material using powerpoint media shown through LCD projectors does not attract students' attention. Hence, it makes students less active during learning, many students get bored faster and relatively do other more exciting activities, such as playing games (Inawati & Puspasari, 2021). In addition, educators using powerpoint learning media can make students tend to be bored, bored, lack focus when the material is delivered, less interactive, and a lot of silence when educators ask questions (Oktavia & Susarno, 2023). The same thing is supported by observations and student interviews, which show that PowerPoint media makes students feel bored, passive, and sleepy.

Based on these problems, the solution provided is to develop a technology-based interactive learning media easily accessible by students flexibly through their devices such as mobile phones. Interactive learning media allows two-way interaction between users (students) and content (media) and is designed to improve student engagement, material understanding, and experience as users (Utami et al.,

2023). The media developed by the researcher uses the educaplay platform, which provides various features of educational games and other activities that allow students to be actively involved and participatory in the learning process. It is similarly stated that educaplay is one platform that presents interesting and interactive learning media through various available features, such as froggy jumps, unscramble letters games, and memory games (Batitusta & Hardinata, 2024). The educaplay platform allows the delivery of material through games accompanied by images, videos, and audio that can help students understand the concept of human resource management theory more efficiently and thoroughly.

In addition, the selection of the educaplay platform as an interactive learning medium is also based on the characteristics of students who prefer to play games through on their mobile devices. The game or games are significantly played by individuals aged 15-18, 19-24, 25-29 (Marjan et al., 2021). This is by the average age of students, namely 16-17 years old, who are interested in something that smells of games or games. Quizwhizzer educational game-based media effectively improves students' ability to understand concepts (Faijah et al., 2022). Using technology in the form of educational games is effective as an alternative learning medium to increase students' understanding and interest in learning material (Marcheta & Kareem, 2023). The educaplay platform has various educational game features that can be used for learning. With the existence of educational game-based learning media, educaplay can meet students' needs to learn while playing simultaneously. Game-based interactive media is effectively used in learning because it makes students enjoy learning more enjoyable, so when students are happy to participate, their understanding of the material will be much more profound (Santoso et al., 2023).

The competency analysis includes an analysis related to learning outcomes and learning objectives from the elements of human resource management used by the researcher to determine the material to be used. In this study, the learning objectives are to understand the scope of employee recruitment and implement administrative procedures. As a guideline or reference, this is adjusted to the flow of learning objectives (ATP) for the concentration of office management expertise phase F at Vocational School 4 Surabaya.

In the design stage, the researcher prepares the material based on predetermined learning objectives, namely understanding the scope of employee recruitment and implementing employee recruitment administrative procedures. The material prepared includes the definition of recruitment/employee recruitment, recruitment principles, recruitment sources, recruitment methods, recruitment evaluations, recruitment barriers, and employee recruitment procedures ranging from planning to the placement and, furthermore, making an initial design of the media before it is later realized at the development stage. The initial design of the media will be to design the layout, fonts, colors, images, and icons/symbols used through Canva. There is a main page, an opening/cover, and a menu page. The main page includes the element title, the material title, and the user goal. Then, the menu page includes a menu of user instructions, learning materials, games, quizzes/practice questions, learning videos, and developer profiles at the end of the page as a closing. The material will be packaged through the Educaplay platform so that when the hyperlink is clicked/tapped, it will switch and connect directly to the Educaplay media. . The following are the results of the media products made by the researchers:



Source: Data processed by researchers (2024)

Figure 2. Home



Source: Data processed by researchers (2024)

Figure 3. Games educaplay

After the learning media product is made, validation is carried out to determine the feasibility of the product. Validation is carried out to determine the feasibility of the media that has been developed so that it can be used as a medium in the learning process (Rohmah & Bukhori, 2020). The validation was carried out by validators who were material experts, namely Lecturers of Office Administration Education at the State University of Surabaya and teachers of human resource management elements at Vocational School 4 Surabaya. The validation of the material assessed in terms of the quality of the content and objectives includes criteria for accuracy, completeness, interest or attention, and suitability to the student's condition. Meanwhile, regarding instructional quality, including the criteria for assisting with learning, the quality of tests and assessments, and technical quality, including readability criteria. Based on the three indicators, namely the quality of content and objectives, instructional quality, and technical quality, the interpretation category is very feasible. Judging from the suitability of the material presented with the set learning objectives, the material helps increase students' knowledge, and the material is delivered clearly and easily understandable.

The validator who became a media expert was a multimedia teacher at Vocational School 4 Surabaya. The validation of media assessed in terms of instructional quality includes the criteria of providing learning opportunities, providing assistance for learning, motivating quality, and instructional flexibility, and can impact students, educators, and learning. Meanwhile, technical quality includes criteria for readability, ease of use, and quality of impressions or displays. Based on the three indicators, namely the quality of content and objectives, instructional quality, and technical quality, the interpretation category is very feasible. Judging from the media developed, it helps students understand the material more efficiently, provides an attractive and fun display, and facilitates media access. The following are the results of the recapitulation of the validation of material experts and media experts:

Table 5.

RECAPITULATION OF MATERIAL VALIDATION RESULTS

No.	Indicator	Score Total	Percentage	Interpretation
1.	Quality of content and purpose	53	88,33%	Very feasible
2.	Instructional quality	20	100%	Very feasible
3.	Technical quality	18	90%	Very feasible
	Average	91	91%	Very feasible

Source: Data processed by researchers (2024)

Table 6.
 Recapitulation of media validation results

No.	Indicator	Score Total	Percentage	Interpretation
1.	Instructional quality	28	93,33%	Very feasible
2.	Technical quality	30	100%	Very feasible
	Average	58	96,66%	Very feasible

Source: Data processed by researchers (2024)

Based on the results of the recapitulation of the validation of the subject matter experts in table 5, an overall score of 91 out of the total highest score of 100 was obtained, so a percentage of 91% was obtained. If analyzed according to the interpretation criteria from Riduwan (2015), the percentage value is included in the "very feasible" interpretation, which is in the 81% - 100% range. As for the results of the recapitulation of media experts in Table 6, an overall score of 58 out of the total highest score of 60 was obtained, so a percentage of 96.66% was obtained. If analyzed according to the interpretation criteria from Riduwan (2015), the percentage value is included in the "very feasible" interpretation, which is in the 81% - 100% range. It is supported by research from Sari & Puspasari (2019), which received material validation of 90% and media validation of 85.56%, meaning "very strong". In addition, it is also in line with the research of Situmeang et al. (2022), which received material validation of 96% and media validation of 91%, which means "very good."

The validator-approved media was tested on 20 children in class XI MP 3 Vocational School 4 Surabaya at the implementation stage. The limited trial was held on May 16 and 22, 2024, to get responses from students related to the media developed (educaplay). This trial began with an introduction and presentation of the purpose and procedures for using media. Then, the researcher sends a media link to be accessed independently by the students and begins to try to use it. After students use the media, they are given a questionnaire that students, as media users, must fill out to find out how they respond to the media. The following are the results of the recapitulation of the questionnaire of students' responses to the media:

Table 7.
RECAPITULATION OF THE RESULTS OF THE STUDENT RESPONSE QUESTIONNAIRE

No.	Indicator	Score Total	Percentage	Interpretation
1.	Quality of content and purpose	78	97,5%	Very good
2.	Instructional quality	91	91%	Very good
3.	Technical quality	108	90%	Very good
	Average	277	92,33%	Very good

Source: Data processed by researchers (2024)

Assessment in terms of the quality of content and objectives includes criteria of interest, completeness, interest or attention, and suitability to the student's condition. Meanwhile, instructional quality includes criteria for providing learning opportunities, providing assistance for learning, motivating quality, and can impact students. Regarding technical quality, it includes the criteria of readability, ease of use, and quality of the show or display. Based on the results of the recapitulation of the student response questionnaire in Table 7, 277 "yes" answers were obtained out of the total highest score of 300, so a percentage of 92.33% was obtained. The percentage value, if analyzed according to the interpretation criteria from Riduwan (2015), is included in the "very good" interpretation, which is 81% - 100%. When

the educaplay media is used in the learning process, many students state that the media is fun, engaging, exciting, and good-looking so that learning becomes enthusiastic and not dull.

However, students also provide input and suggestions for the developed educaplay media. The input suggestions given include that errors sometimes occur when the game is played, such as values that do not appear, images that do not appear, and continuous loading, so there is a need to improve the quality of the product. An unstable network can cause it, an inadequate device system, and the browser used. In addition, there are many advertisements because the website is accessible. The existence of this input suggestion will be used as evaluation material to make the developed product even better. It is supported by the research of Utami et al. (2023), which states that educational media provides fun and meaningful learning nuances and no longer makes learning look monotonous and boring. In addition, educaplay is also one platform that provides exciting features so that the learning process can take place interactively (Batitusta & Hardinata, 2024). Judging from the researcher's observation, when the media is used, students respond with enthusiasm. Students like the appearance of exciting and fun media so that when the learning process takes place, it seems exciting, and students are enthusiastic about learning.

The researcher evaluated by looking at the results of test scores (pre-test and post-test) for the experimental class and control class to measure the effectiveness of the media that has been developed, whether the media is effective or not to be used as a medium in the learning process of human resource management elements. Learning media can be effective if the experimental class's test results are superior or experience a higher increase compared to the control class. The following are the results of the n-gain score test conducted:

Table 8.
RESULT IN N-GAIN SCORE TEST

	N-Gain Score (%)	
	Experimental Classes	Control Classes
Mean	70,0184	51,8176
Min	47,17	27,27
Max	100,00	74,04

Source: Data processed by researchers (2024)

Based on the output data of the n-gain score test, it can be seen that the mean value for the experimental class is 70.0184 (70%), which is included in the category of "quite effective" effectiveness with a minimum value of 47.17 and a maximum of 100.00. Meanwhile, the mean value for the control class was 51.8176 (52%), which was included in the category of "ineffective" effectiveness with a minimum score of 27.27 and a maximum value of 74.04. The average difference in n-gain values between the experimental and control classes was 18%. It means that the average score of the experimental class is 18% superior to that of the control class, in line with the research of Situmeang et al. (2022), which obtained an n-gain score (%) of 63%, which belongs to the category of "quite effective" interpretation. In addition, it is also in line with the research of Kurniawan et al. (2019), who obtained an n-gain score (%) of 70%, which belongs to the category of "quite effective" interpretation.

CONCLUSION

Based on the results of the research and discussion that have been described, it can be concluded that the process of developing educaplay-based learning media in the element of human resource management class XI office management of Vocational School 4 Surabaya refers to the ADDIE development model, which starts from the analysis, design, development, implementation, and evaluation stages. The feasibility of the media received a percentage of 91% of the validation results of material experts and 96,66% of the validation results of media experts. Based on the interpretation criteria, both are included in the feasibility interpretation of "very feasible" to say that educaplay learning media is feasible and can be used in the learning process. In addition, students' response to educaplay-based learning media in the human resource management element is very good, as evidenced by the questionnaire results, which got a percentage of 92,33%. The effectiveness of educaplay-based

learning media in the elements of human resource management class XI office management of Vocational School 4 Surabaya was obtained with an n-gain score (%) of 70% in the experimental class with the category of "quite effective" and 52% in the control class with the category of "not effective" so that it can be said that educaplay learning media is more effectively used in the learning process.

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