

# French Language Learning Media Based on Project-Based Learning Assisted by the Pear Deck Application

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## ABSTRACT

The purpose of this research is to determine (1) the feasibility of learning media assisted by the Pear Deck application based on project-based learning (PjBL). (2) determine the effectiveness of PjBL-based learning media. The research method is R&D using the Borg and Gall development models. This research was conducted in class XI SMAN 1 Lubuk Pakam, totaling 28 students. The research subjects are material experts, media experts, and design experts. The research results show that: (1) the learning material expert test criteria are very good (94%); (2) the learning media expert test criteria are very good (93%); and (3) the learning design expert test criteria are very good (94%). The results of submitting a hypothesis can prove that: (1) learning media assisted by the PjBL-based Pear Deck application is suitable for use (2) The learning media assisted by the PjBL-based Pear Deck application is effective to use. The average effectiveness of students' French learning outcomes in using the PjBL-based Pear Deck Application in the experiment class was 86.42%, and the average effectiveness of the average effectiveness of students who used picture and book learning media in the control class was 49.5%. The posttest results obtained a value of  $T_{count} = 7.08$  at a significant level of  $\alpha = 0.05$ , with  $dk = 27$  obtaining  $T_{table} = 1.674$ , so that  $T_{count} > T_{table}$ , namely  $7.08 > 1.674$ . The use of learning media assisted by the PjBL-based Pear Deck application is very feasible and effective..

## KEYWORDS

Instructional media; French; project based learning; Pear Deck Application.

## INTRODUCTION

Education is one of several important aspects of human life. A good and well-implemented education system is the key to producing the nation's next generation, who are intelligent, have character, and have quality. Education also continues to change with the times. This forces education to continue to strive for improvement by integrating technology. Thus, through education, a higher and more advanced civilization can be born in society. As time goes by, technology instructs various aspects of life, including the field of education.

According to Budiman (2017: 76) the needs of the world mean that education must keep changing and using new technology to make learning better. This includes adjusting how information and communication technology is used in education, especially during the learning process.

One way of implementing technology in learning is by using media. Lestari (2018: 97) conveyed a similar thing. Examples of implementation in education are: (1) learning media; (2) administrative tools; and (3) learning resources. The implementation of

technology in learning can be carried out in all subjects, from the lowest level to the highest level, one of which is French. According to the Ministry of National Education (2003: 1), the function of learning French in schools is as a tool for students' self-development in the fields of communication, science, technology, and arts and culture. French is a foreign language that is widely used after English. Therefore, in Indonesia, French has become an additional subject that helps students face the era of globalization.

In Indonesia, French is taught in many high schools, vocational schools, Islamic schools, and universities. In the Merdeka Learning program, French is taught in eleventh grade, which is the same as level A1. French language classes in Indonesia should help students grow and improve themselves because of today's global changes. Therefore, the way these classes are organized needs to be carefully thought out. The teacher plays a big part in helping students learn. Teachers and teacher education programs are continuously under pressure to improve teaching qualities, which in turn will result in the improved student learning (Tuli and Orjila, 2020). So, a teacher needs to know a good amount of information and be able to use different helpful teaching methods in the classroom.

Learning Foreign Languages in school has always been productive as it not imparts linguistic skills but enables the students to explore and learn about related cultures and lifestyles (Botamo et al., 2024). To learn French, students must also have and master four language skills that are related to each other. According to Tarigan (2005 :1), in school, language skills usually include four parts: listening, speaking, reading, and writing. These are the skills that students will learn in class and are expected to master.

Of the four language skills above, the one that is very weak for students to learn and master in school is speaking skills. According to Simbolon (2014: 226), although it is interesting on one side, many admit that speaking lessons are difficult to put into practice. Speaking lessons are related to other skills, such as reading, writing, and listening. Speaking skills are very important to train and develop so that students can communicate well, not just focus on writing skills by only prioritizing sentence and text structure in learning written French. According to Tarigan (2005: 86), One important part of language that students need to learn is speaking. Speaking skills help with other skills like listening, understanding what they read, and writing. Students who have good speaking skills will easily be understood by listeners.

The weak speaking skills of students at this school can be seen from the students' learning outcomes. Based on the results of interviews with students conducted by researchers at SMAN 1 Lubuk Pakam, it is known that there are two foreign languages studied at the school, namely English and French. In fact, students think that French is more difficult to learn than English. This is caused by several factors, including: (1) English is an international language; (2) English is one of the subjects that must be studied in schools, both elementary, middle, and high school; and (3) French is a local content subject. or extracurricular. (3) English is studied at an early age; that is, it has been studied since elementary school and even at the kindergarten level, while French begins to be studied at senior high school (SMA). (4) The way to read French is very different from how to write it. (5) English is a subject included in the National Examination (UN), so it is given priority over other foreign languages.

Warinangin et al., (2020: 45) said many teachers still focus on just giving information to students. Conventional learning is a common way of teaching where teachers give lectures, ask questions, and assign homework. Because of this idea, teachers often use the same lecture methods, exercises, and assignments. This makes learning boring, doesn't help kids grow, and makes it hard for them to feel motivated to do their best. As a result, students don't learn as well as they could.

Speaking skills are the second skill after listening. Students can speak French well if students are able to listen to or pay attention to conversations, whether in speech sounds, pronunciation, or the clear pronunciation of words or sentences in French. According to Purba and Situmorang (2015), speaking skills are an individual's ability to convey ideas, feelings, and messages orally. To be able to speak well requires mastery of pronunciation, language structure, vocabulary, and the speaker's mentality.

According to Purba and Situmorang (2015: 20–21), the objectives of learning speaking skills are: (1) For the beginner level, the objectives of learning speaking skills can be formulated so that students can: Pronounce language sounds; submit information; express agreement or disagreement; explain personal identity; retell the results of listening or reading; express expressions of respect; role play; (2) For the intermediate level, the objectives for learning speaking skills can be formulated so that students can: Convey information; participate in conversations; explain self-identity; retell the results of listening or reading; conduct interviews; role play; convey ideas in discussions or speeches. (3) For the highest level, the objectives of learning speaking skills can be formulated so that students can: convey information; participate in conversations; explain self-identity; recount the results of listening or reading; participate in interviews; role play; convey ideas in discussions, speeches, or debates.

To make learning French more fun and interesting for students, we still need to find new ways to teach and provide better schools and resources. A teacher needs to find new ways to help students learn French better. One way to do this is by using fun and engaging tools in lessons, which can motivate students to learn more effectively. Teachers need to understand the subjects they teach well and know how to teach them effectively. One way is by using interactive learning media.

Gagne and Briggs (Arsyad, 2016: 4) say that learning media are tools used to share teaching materials. These tools include things like books, tape recorders, cassettes, videos, cameras, video recorders, films, slides (which are picture frames), photos, drawings, graphics, televisions, and computers. Kustandi (2020: 6) explains that learning media is a tool that helps with teaching and learning. It makes the messages clearer, so that learning goals are achieved more effectively. Using media for learning has many advantages. Azhar Arsyad says there are four main benefits of using learning tools in education: (a) Learning tools help make messages and information clearer, which makes learning easier; (b) They can grab students' attention and motivate them to learn, helping them interact more with the world around them; (c) Learning tools allow students to share experiences about their surroundings and interact directly with teachers and others; (d) They help students overcome limits related to what they can see, where they are, and when they can learn.

According to Gita et al. (2019: 174), "one of the media that can support the language learning process is computer-based media." From this statement, we can conclude that computer-based media can support the English language learning process; this can, of course, be used for learning other languages. One of them is French. The interactive media that is currently developing is very diverse and varied. One of them is Pear Deck. According to Wikipedia, Pear Deck is a company that makes online tools for schools and teachers. Pear Deck was started in December 2014 in Iowa City.

Fakhriah et al. (2022: 16) Pear Deck is a platform that is integrated with Google and Microsoft Documents to add interactive activities or other online learning tools. Pear Deck Interactive Media is a highly interactive web-based application. This web application is a web application that can be used no matter how far the distance between the teacher and the student is. The Pear Deck application is equipped with attractive templates, symbols, images, and colors so that it attracts students' interest in learning. Pear Deck is included in

the interactive learning media section because Pear Deck is a web-based application that, when used, students can answer directly on their cellphones or laptops.

Pear Deck is an ICT-based software that can be accessed anywhere via cell phone or other devices. Pear Deck offers features that can help support the interactive learning process between teachers and students online. The same thing was conveyed by Fakhriah, Ading, and Mila (Sa'adah and Rodliyah, 2022: 168). The addition of Pear Deck to the presentation used in the learning process allows for two-way interaction between educators and students because one of the advantages of Pear Deck is its interactive features. There are two ways available to access the Pear Deck application, including students using the join a session feature and teachers using the teacher login feature. When accessing this application, teachers need to create an account to be able to join.

One way to use interactive learning tools is through a teaching method called project-based learning (PjBL). Pratama et al. (2022: 318) said the same thing: "To create good learning materials, we need to use teaching methods that grab students' attention, one of which is the PjBL learning model."

According to Rusman (2017: 395), Project-based learning is a way of learning that includes working on a project. Students can work on projects by themselves or in groups. They will work together for a while to create something, and then show or present what they have made. The project is done together in a creative way, focusing on solving issues that students face in their daily lives.

Al-Tabany (2014: 42), which states that Project-based learning is a way for teachers to teach by having students work on projects. These projects involve difficult tasks that require students to think about tough questions and problems. Students need to come up with their own ideas, find solutions, make choices, do research, and have the chance to work on their own.

The quality of learning is a determining factor in making education better. Pratama et al. (2022: 319) says that project-based learning is a way of teaching where students create products and are actively involved in the process. This learning connects to real life and focuses on the students, which helps them learn better. So, to improve education, we need to pay close attention to how we improve learning quality.

According to Rusman (2017: 400), The project-based learning model has these features: (1) students choose a topic to work on; (2) they are given problems or challenges to solve; (3) students create a plan to find solutions to these problems; (4) they work together to gather and manage information; (5) their work is evaluated all the time; (6) students think about what they've done regularly; (7) the final result of their project is judged based on quality; and (8) the learning process allows for mistakes and changes.

The way the problem is described in this research is: (1) Is the learning media assisted by the PjBL-based Pear Deck Application suitable for use in French language subjects?; and (2) Is the learning media assisted by the PjBL-based Pear Deck Application effective in French language subjects?

## **RESEARCH METHODS**

This research follows a method called research and development (R&D), which involves creating and testing educational products, as explained by Borg & Gall (2003). This research will be carried out at SMAN 1 Lubuk Pakam, which is located at Jalan Dr. Wahidin No. 1, Lubuk Pakam District, Deli Serdang Regency, North Sumatra. This research was conducted at the class XI level for the 2023–2024 academic year.

Borg & Gall (2003) proposed ten research stages, including (1) research and information gathering; (2) planning; (3) development of preliminary product forms; (4)

preliminary trials; (5) major product revisions; (6) field trials; (7) revision of operational products; (8) operational trials; (9) final product revision; (10) dissemination and implementation. These ten stages are steps that are commonly followed by R&D researchers to produce educational product prototypes that can be accounted for and operated in schools.

In this study, the research steps only reached the fifth of ten steps, namely: (1) introduction; (2) creating a learning design; (3) gathering materials; (4) creating and implementing a learning model; and (5) reviewing or conducting a field test is when you try out a product in real-life situations to see how well it works. This helps improve the product based on feedback and evaluations. Formative evaluation happens during the whole development process. It starts with looking at what needs to be done, planning, creating, and putting things into action. This continues until the results match the goals set earlier. Finally, the effectiveness is tested of the product.

Product Trial Phase, including: Trial Design; The learning model trial design consists of several stages, namely: material expert validation, technology, and instructional design; individual trials; small group trials; and large group/field trials.

Topic of study Research subjects, or respondents, are people who are chosen to participate in a study. Research subjects talk about the features of the subjects used in studies. For creating learning models in this type of research, the subjects are chosen based on the trials that are being conducted. The individual sample had 3 students, the small group had 6 students, and the main trial included 30 students.

**Table 1.** Research instrument grid for learning material experts

Assessment indicators	Assessment items
Material Aspects	1. Conformity of material with Core Competencies (KI) and Basic Competencies (KD) 2. Conformity with the curriculum 3. Conceptual Truth 4. Update of Material 5. Order of Presentation of Material 6. Suitability of the examples given
Learning Aspects	1. Learning Objectives 2. Motivation 3. Summary 4. Clarity of Learning Indicators 5. Training Provider 6. Suitability of images, videos provided to clarify the material
Linguistic Aspect	1. Suitability of language to students' level of thinking 2. Language Clarity 3. Terms of Term 4. Grammar and spelling provisions 5. Ability to arouse students' curiosity

(Source: Arifah and Hasruddin, 2022: 7)

**Table 2.** Instrument Grid for Learning Design Experts

Assessment Aspects	Research Indicators	Assessment Items
Content Eligibility	Quality of Learning Design	1. Suitability of material with learning indicator objectives 2. Appropriateness in providing training 3. Test provisions with learning indicators

Assessment	Research Indicators	Assessment Items
Presentation	Quality of information design	4. Providing Motivation 5. Clarity of material description 6. Clarity of the example questions given 7. Use of new information 8. Feedback on student test results 9. Fragmentation/suitability of the sequence of learning materials 10. Maximizing time in the learning process
	Quality of Interaction	11. Use of terms for study instructions 12. Ease of explanation of material terms 13. Feedback on student responses 14. Use of different texts to mark important parts
Graphics	Presentation Quality	15. Color suitability 16. Use of Graphics 17. Selection of font type and size 18. Image and animation quality
	Quality of information design	19. Ease of use for the learning process

**Table 3.** Research Instrument Grid for Learning Media Experts

Assessment Aspects	Research Indicators	Assessment Items
Content Eligibility	Quality of Learning Materials	1. Clarity of the title 2. Clarity of presentation of learning instructions 3. Sequence of material presentation
	Learning Delivery System	4. Ease of understanding the material 5. Material can be repeated at any time to improve memory 6. There are test questions 7. Preliminary Quality
Graphics	Quality of Learning Strategy	8. Suitability of material to student needs 9. Usefulness of learning materials 10. Factualization of material content 11. Suitability of images in explaining the material 12. Ease of use of "Pear Deck" 13. Ease of studying the material
	Presentation Quality	14. Selection of size and font type 15. Readability of text and writing 16. Clarity of color selection
	Display Quality in the Pear Deck Application	17. Display Quality 18. The attractiveness of the image display 19. Appropriateness of color portions

(Source: Putri, 2022: 164)

**Table 4.** Research Instrument Grid for Students

No	Rated aspect
1	Ease of accessing the Pear Deck application
2	Attractions of the Pear Deck application
3	Media ability to display French language material with the theme "la vi quotidienne"
4	User ability to explore and develop the Pear Deck application
5	Usefulness of media

6	Level of creativity and innovativeness of media content
7	User understanding of the website under study
8	Pear Deck Media is something new in learning so it is easy to understand
9	languages used in the Pear Deck application
10	ability to access this application from PC or smartphone

**Table 5.** French Language Learning Outcomes Test Instrument Grid for Students

Basic competencies	Subject matter	Indicator
11.9. Using speech acts to express and ask about daily activities (parler de ses activités quotidiennes)	Everyday vocabulary and simple sentences about daily activities (parler de ses activités quotidiennes) Sentences that are presented slowly and clearly.	The use of verbs used in explaining "la vie quotidienne" Exemplify the speech act of stating and asking about actions/events carried out at the moment or habits up to now (raconter un événement actuel ou des habitudes) of course Please provide the text you would like me to rewrite in simpler words.
		Composing speech acts stating and asking about actions/events carried out at the moment or habits up to now (raconter un événement actuel ou des habitudes) by focusing on how people use language in different situations, how texts are organized, and the words and grammar used in spoken and written communication based on the context.

**Table 6.** Criteria for assessing students' French speaking abilities

Rated aspect	Criteria	Score
<i>Pronunciation</i>	- Very good pronunciation close to native speakers	5
	- Pronunciation is good and can be understood even with a different accent	4
	- The pronunciation is quite good, but sometimes there are misunderstandings in the meaning of the pronunciation	3
	- Poor pronunciation so it is difficult to understand and has to be repeated	2
	- Pronunciation is so bad that pronunciation cannot be understood	1
<i>Grammaire (Grammar)</i>	- Very good grammar, very few grammatical errors	5
	- Grammar is good, but there are some errors that do not obscure the meaning	4
	- Grammar is quite good, but often makes grammatical errors that can obscure the meaning	3
	- Grammar is not good, making it difficult for listeners to understand	2
	- Grammatical errors are so bad that conversation is unintelligible	1
<i>Vocabulaire (Vocabulary)</i>	- Use of almost the same vocabulary and expressions as native speakers	5
	- Use of vocabulary is sometimes inappropriate due to lexical incompatibility	4
	- Use of limited vocabulary and often using incorrect terms but still understandable	3
	- The use of vocabulary is very poor and very limited but difficult to understand	2
	- vocabulary limitations are so great that it is very difficult to make conversation	1

Rated aspect	Criteria	Score
<i>Aisance (Smoothness)</i>	- Speak very fluently like a native speaker	5
	- Speaks fluently, but is slightly affected by language errors	4
	- Speaks quite fluently, but is easily affected by language errors	3
	- Speaks hesitantly and sometimes stops because of difficulty speaking	2
	- Speaking haltingly and disjointedly so that it cannot be understood	1
<i>Comprehension (Understanding)</i>	- Conversations can be easily understood without any significant difficulties	5
	- Conversations can be understood under normal conditions even though there are still things that need to be repeated	4
	- Most conversations can be understood if delivered clearly and slowly	3
	- Conversation can be understood only if it is delivered very slowly and repeated often	2
	- Conversation is completely unintelligible even slowly	1

### **Trial of Learning Outcome Test Instruments**

Before the learning outcomes test is used to gather information. First, it is checked to see if it is valid, reliable, has the right level of difficulty, and can tell apart different abilities.

#### **Test Validity Test**

The validity of test items shows the accuracy of a test item to measure what it wants to measure. This can be determined by correlating the scores obtained from the test items with the total score. Using the product moment correlation formula with basic numbers suggested by Pearson, as follows:

$$r_{xy} = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{(N\sum x^2 - (\sum x)^2)(N\sum y^2 - (\sum y)^2)}}$$

Information:

- $r_{xy}$  = Test validity coefficient
- N = Number of all students
- X = Item score
- Y = Total item score

The validity test was carried out to compare the results of the rcount calculation with rtable using a significance level of 5%. If rtable > rcount then the question item is said to be invalid, conversely if rtable < rcount then the question item is said to be valid.

#### **Test Reliability Test**

Test reliability shows the consistent level of a test when used on the same subject at different times. This means that a test will give relatively the same results. The reliability of learning outcomes tests using learning media assisted by the Pear Deck application will be calculated using the Cronbach Alpha formula, which is as follows:

$$r_{11} = \left( \frac{n}{n-1} \right) \left( 1 - \frac{\sum \sigma_i^2}{\sigma^2} \right)$$

Information:

- $r_i$  : overall test reliability
- k : number of items



$\sigma_i^2$  : total variance  
 $\sum \sigma_b^2$  : total item variance

The test reliability index obtained is consulted with the correlation index, as follows:

**Table 7. Question Item Reliability Criteria**

Correlation Figures	Information
0,80 - 1,00	Very High
0,60 - 0,79	High
0,40 - 0,59	Medium
0,20 - 0,39	Low
0,00 - 0,19	Very Low

(Source: Arikunto, 2008)

### Data Analysis Technique

The information gathered from the testing and checking processes includes both numbers and descriptions. Numbers and information collected from people's answers and comments. This information helps us when making changes to the product we are working on. The numbers from the survey are looked at using basic statistics to find the average score, and then this information is changed into descriptive data so that the quality of the media product being developed is known.

Interpretation of the suitability of the material, interactive learning media, and learning design is carried out through descriptive statistical calculations. We collected information by giving out questionnaires to experts in materials, media, and design. This was done to evaluate how practical the interactive media being created is.

**Table 8. Likert Scale Categories**

No	Category	Value Score
1.	Very Worth	4
2.	Decent	3
3.	Inadequate	2
4.	Not Eligible	1

(Source: Sugiyono, 2020)

Data processing is carried out using the following formula:

$$P = \frac{X}{Xi} \times 100\%$$

Information:

- P : Percentage
- X : Respondent's answer in one item
- Xi : Ideal value in one item

Formula for processing data for all items

$$P = \frac{\text{Number of Scores Obtained}}{\text{Sum of Ideal Scores for All Items}} \times 100\%$$

To see the rules that say the product being made is good for use, see table 4 below:

**Table 9.** Feasibility Percentage Scale

Percentage of Achievement	Criteria
76 – 100 %	Very Eligible
56 – 75 %	Eligible
40 – 55 %	Enough
0 – 39 %	Not Eligible

(Source: Arikunto, Suharsimi, 2008)

To find out whether the distribution of learning outcomes data is normal or not, you can use the normality test. To test the homogeneity of data, the F test can be used. The test criteria are if  $F_{count} < F_{table}$  at a significance of 0.05 then the research data is homogeneous.

### *Hypothesis testing*

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 > \mu_2$$

Information:

$\mu_1$  = Average results of students using learning media assisted by the Pear Deck application

$\mu_2$  = Average student learning outcomes using conventional learning media (books and pictures)

$H_a$  = There is a difference in learning outcomes using the application and those without using learning media assisted by the Pear Deck application

$H_o$  = There is no difference in student learning outcomes between those using learning media assisted by the Pear Deck application and those who do not use learning media assisted by the Pear Deck application

To test the hypothesis, the T independent sample test formula will be used. With a value of  $\alpha = 0.05$  (two tail test):

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2} \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}, \text{ where } S = \sqrt{S^2}$$

Information:

t : calculated price

$\bar{x}_1$  : average score of the experimental class

$\bar{x}_2$  : average score of the control class

$n_1$  : number of experimental class samples

$n_2$  : number of control class samples

$S_1^2$  : experimental class group variance

$S_2^2$  : control group variance

S : Combined variant

The test criteria are  $H_0$  accepted if  $t_{count} < t_{table}$  and  $H_0$  rejected if  $t_{count} > t_{table}$  obtained from the t distribution list with good dk =  $(n_1 + n_2 - 2)$  and  $\alpha$  level = 0.05.

## RESULTS AND DISCUSSION

The product can work well because we have tested it and made some changes. The learning materials helped by the Pear Deck app have been shown to be good. This trial has six steps: checking by material experts, checking by learning design experts, checking by media experts, individual tests, small group tests, and real-world tests.

Based on data from French learning material experts' evaluation of media in French learning, the average score for all aspects was 94%, and we received comments and suggestions to include more questions in the content. The conclusion from the evaluation of comments and suggestions from learning media material experts is that learning media assisted by the Pear Deck application in French lessons is "very good" to be used with revisions.

Based on the evaluation results of learning design experts on learning media assisted by the Pear Deck application in French language learning, the average score for all aspects was 94%. The conclusion from the evaluation of comments and suggestions from learning media experts is that learning media assisted by the Pear Deck application in French lessons is "very appropriate" to use with revisions to the font size of the content and the presence of subtitles as opening information.

The results of the evaluation of the learning media assisted by the Pear Deck application in learning French received comments and suggestions for adding learning videos that were appropriate to the material to be taught. Based on evaluation data from learning media experts, the average score for all aspects is 93%. Conclusions from evaluating comments and suggestions from Pear Deck-assisted learning media experts on French lessons "Very Appropriate" for use with revisions.

The results of individual trials in the form of scores on Pear Deck-assisted learning media as a whole can be seen in Table 10 below:

**Table 10.** Individual Trial Assessment Scores on learning media

No	Rated aspect	Total score	Average	Criteria
1	Ease of accessing the Pear Deck application	11	92%	Very Good
2	Attractions of the Pear Deck application	11	92%	Very Good
3	Media ability to display French language material with the theme "la vie quotidienne"	11	92%	Very Good
4	User ability to explore and develop the Pear Deck application	12	100%	Very Good
5	Usefulness of media	12	100%	Very Good
6	Level of creativity and innovativeness of media content	12	100%	Very Good
7	User understanding of the website under study	11	92%	Very Good
8	Pear Deck Media is something new in learning so it is easy to understand	12	100%	Very Good
9	Languages used in the Pear Deck application	11	92%	Very Good
10	Ability to access this application from PC or smartphone	12	100%	Very Good
<b>Total</b>		<b>115</b>		
<b>Average</b>			<b>96%</b>	<b>Very Good</b>

The level of assessment criteria can be seen in Table 11 below:

**Table 11.** Media Assessment Criteria

Score	Criteria	Percentage (%)
4	Very Good	$80\% \leq X \leq 100$
3	Good	$60\% \leq X \leq 80\%$

2	Poor	$40\% \leq X \leq 60\%$
1	Not Good	$0\% \leq X \leq 40\%$

(Source: Sugiyono, 2016)

The information shows that the average score for each test is 96%, which is considered "very good." The results of the small group trial, including the overall assessment score of the learning media assisted by the Pear Deck Application, can be seen in Table 12..

**Table 12.** Small Group Trial Assessment Scores on Learning Media

No	Rated aspect	Total score	Average	Criteria
1	Ease of accessing the Pear Deck application	31	86%	Very Good
2	Attractions of the Pear Deck application	35	97%	Very Good
3	Media ability to display French language material with the theme "la vie quotidienne"	34	94%	Very Good
4	User ability to explore and develop the Pear Deck application	35	97%	Very Good
5	Usefulness of media	36	100%	Very Good
6	Level of creativity and innovativeness of media content	36	100%	Very Good
7	User understanding of the website under study	33	92%	Very Good
8	Pear Deck Media is something new in learning so it is easy to understand	36	100%	Very Good
9	Languages used in the Pear Deck application	33	92%	Very Good
10	Ability to access this application from PC or smartphone	36	100%	Very Good
<b>Total</b>		<b>345</b>		
<b>Average</b>			<b>96%</b>	<b>Very Good</b>

The results of limited field trials in the form of assessment scores for Pear Deck assisted learning media as a whole can be seen in Table 13.

**Table 13.** Limited Field Trial Assessment Scores

No	Rated aspect	Total score	Average	Criteria
1	Ease of accessing the Pear Deck application	103	92%	Very Good
2	Attractions of the Pear Deck application	109	97%	Very Good
3	Media ability to display French language material with the theme "la vie quotidienne"	100	89%	Very Good
4	User ability to explore and develop the Pear Deck application	110	98%	Very Good
5	Usefulness of media	110	98%	Very Good
6	Level of creativity and innovativeness of media content	110	98%	Very Good
7	User understanding of the website under study	107	95%	Very Good
8	Pear Deck Media is something new in learning so it is easy to understand	112	100%	Very Good
9	Languages used in the Pear Deck application	109	97%	Very Good
10	Ability to access this application from PC or smartphone	107	95%	Very Good
<b>Total</b>		<b>1077</b>		
<b>Average</b>			<b>96%</b>	<b>Very Good</b>

The overall evaluation is done by experts in materials, learning design, and media. They look at results from individual tests, small group tests, and field trials for all parts of the assessment, and these are scored to find the average. The assessment results are looked at to see if the learning tools using the Pear Deck app with project-based learning are good for development or not. Table 14 shows the average scores from different experts,

including material, design, and media experts, as well as individuals, small groups, and field trials.

**Table 14.** Average Percentage of Assessment Results on Learning Media

No	Categorization	Average score percentage	Criteria
1.	Material Expert Validation	94%	Very Worthy
2.	Validation of Learning Design Experts	94%	Very Worthy
3.	Media Expert Validation	93%	Very Worthy
4.	Individual Trial	96%	Very Worthy
5.	Small Group Trials	96%	Very Worthy
6.	Field Trials	96%	Very Worthy
<b>Average</b>		<b>95%</b>	Very Worthy

Pear Deck-assisted learning media based on the project-based learning model from expert validation along with trials shows a percentage of 94% in material validation, 94% in design validation, 93% in media validation, 96% in individual trials, 96% in small group trials, and 96% in field trials. Overall, the average percentage falls into the "Very Appropriate" category, which means that the development of learning media assisted by Pear Deck meets the needs of students.

The normality test was carried out on two groups of samples using the Lilliefors test. Table 15 below shows a summary of how normal the two samples are.

**Table 15.** Summary of Data Normality Test Results

Learning Media	Class	Sample	L_count	L_table	Conclusion
- Learning with Pear Deck assisted learning media	Pretest	28	0,047	0,178	Normal
	Post-test	28	0,097	0,178	Normal
- Learning with picture and book media	Pretest	28	0,041	0,178	Normal
	Post-test	28	0,089	0,178	Normal

Based on Table 15 above, it can be seen that the results of calculating student learning outcomes using learning media assisted by the Pear Deck application with students taught using image media obtained the maximum L\_count. If  $L\_count < L\_table$ , then it is concluded that student learning outcomes data is normally distributed.

After the data is tested for normality, the next step is to check for uniformity. This test looks to see if the population variation is the same or different by using the F test formula. The Fisher's exact test showed that the learning results for students using the Pear Deck app and those using pictures and books are similar. Table 16 below shows how similar the two samples are.

**Table 16.** Summary of Data Homogeneity Test Results

Learning outcomes	Instructional Media	Sample	df	F_count	F_table	Information
- Pretest learning results	Pear Deck Assisted Learning Media	28	27	1,17	1,90	Homogen
	Image media and books	28	27			
- Posttest learning outcomes	Pear Deck Assisted Learning Media	28	27	0,15	1,90	Homogen
	Image media and books	28	27			

The results for students who learned with the Pear Deck app and those who learned with pictures and books obtained  $F\_count < F\_table$  at a significance of 0.05. The data above

shows that the two samples have homogeneous variances, and it can be concluded that  $H_0$  is accepted and both groups of research data meet the requirements for hypothesis testing.

The effectiveness test aims to evaluate whether the use of Pear Deck-assisted learning media can help students learn better. The hypothesis was checked using a one-sided t test, and it showed a significance of 0.03, as shown in the table. We accept the alternative hypothesis when the significance value (sig) is below 0.05, which means we reject the null hypothesis. Using the Pear Deck app for project-based learning works better than using pictures and books for learning. You can see the results of the t test for the post-test data of the control group and the experimental group in Table 17 below.

**Table 17.** t test Post-test data for control class and experimental class

Statistics	Class	
	Experiment	Control
N	28	28
Mean	86,42	34,61
Sd	10,51	19,54
$S^2$	110,46	381,81
T_count	<b>7,08</b>	
T_table	<b>1,674</b>	
Status	<b>Ha accepted</b>	

The results of the t test showed that using the Pear Deck Application with the Project Based Learning method was helpful for learning in use and had its validity tested.

### **Discussion**

The validation and testing results show that the Pear Deck-assisted learning medium based on project-based learning is very suitable for use in learning. This product meets standards for designing and developing media and learning materials.

In the results of the questionnaire submitted to The learning material experts gave a score of 94%. This means that the learning media using the Pear Deck application is good to use because it has the right content and meets the necessary standards. The learning design expert gave a score of 94%, which means that the Pear Deck application-assisted learning media is suitable for use because it has been designed in such a way and meets learning design standards. Learning media experts gave a score of 93%, which means that learning media assisted by the Pear Deck application is suitable for use because it meets the principles and criteria for developing learning media.

The results of this research are relevant to the results of research conducted by Fakhriah et al. (2022) entitled Development of Interactive Media Based on Google Slides Assisted by the Pear Deck Application on Body Defense System Material. Putri (2022), with the title Interactive Indonesian Language Learning Media on the Pear Deck Application. Islamiya (2022) The Influence of the Problem-Based Flipped Classroom Model, assisted by Pear Deck, on Students' Critical Thinking Skills on Global Warming Material. Sa'adah and Rodliyah (2022) in the title Effectiveness of Using the Pear Deck Application in Online Learning for Advanced Abstract Algebra Courses. Nirmala et al. (2023) in the title Application of Pear Deck Media in Guidance and Counseling Activities to Increase Motivation

Referring to the guidelines and assessment criteria of Sugiyono (2016), it can be concluded that the data presented above confirms that the learning media assisted by the

Pear Deck application is very suitable for use by students in class XI French language learning, especially in the La Vie Quotidienne material.

The research shows that students who use the Pear Deck app to help them learn have different results compared to students who use pictures and books. The average score of students who used the Pear Deck app for learning was 86.61, while the average score of students who learned with pictures and books was 49.50. This information shows that using the Pear Deck app helps students get better at speaking French. A good learning tool is one that helps you reach the goals you want to achieve. One way to see if learning tools are working well is to look at how interested students are in learning.

Based on the explanation above, it can be concluded that the use of learning media assisted by the Pear Deck application is effective in improving student learning outcomes in Class XI French language learning, especially in La Vie Quotidienne material. The use of learning media assisted by the Pear Deck application is able to increase students' interest in learning, which has an impact on increasing student learning outcomes.

## CONCLUSION

Based on the research findings and talks about creating learning media assisted by the Pear Deck Application, which was tested on class XI students at MAN 1 Lubuk Pakam, the following conclusions were drawn:

1. Learning media assisted by the Pear Deck application based on the project-based learning model obtained very suitable results for class XI students at SMAN 1 Lubuk Pakam.
2. Learning media assisted by the Pear Deck application based on the project-based learning model obtained effective results for class XI students at SMAN 1 Lubuk Pakam.

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