

Development of Wordwall-Based Gamification on Question Exercises about French Cross-Cultural

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Abstract

This study aims to produce the development of Wordwall-based gamification media supported by Cross-cultural. The method used in this study is the Research and Development method with five phases of the ADDIE model according to Branch (2009), namely (1) Analysis (2) Design (3) Development (4) Implementation (5) Evaluation. The application of wordwall-based gamification development was carried out as many as 4 materials that had an average pre-test score of 60.5% with a grade of "C (good enough)". And for the post test average value of 86.26% with grade "A (very good). While the assessment of the validator is divided into two, namely media assessment and material assessment. The assessment on 12 materials was declared in the Very Good category with an average value of 92.90%. As for the wordwall-based media assessment, the category is very good with an average value of 91.7%. From the application and assessment of the results of this study, it was found that the development of gamification of Wordwall-based French cross-cultural questions was declared effective.

Keywords

Gamification; Cross-cultural;
Wordwall



I. Introduction

The COVID-19 pandemic is not over yet, it has quickly spread to parts of the world including Indonesia and is now back in a new type of virus variant, namely Omicron. Various efforts have been made by the government to stop the spread of this virus, both in accelerating vaccinations and the 5M movement, namely: wearing masks, washing hands, maintaining distance, staying away from crowds, and limiting mobility and interaction. With the application of these rules, one of which is to stay away from crowds and limit mobility and interaction, this has a very big impact on the world of education. All levels of education are transformed to try to implement distance learning by applying various online and offline learning methods.

This makes it a new task for educators to find ideas and solutions in carrying out teaching and learning activities using technological tools without reducing the effectiveness of learning outcomes. With the development of TICE (Technologie de l'Information & de la Communication pour l'Enseignement) or educational information and communication technology so rapidly that it creates many new things that are collaborated by teachers, one of which is the games industry that has been designed for learning. The collaboration of the two is called gamification. According to Takahashi, (2010) Gamification is a process of combining rules in games, namely patterns, designs, and game mechanics which aims to change non-game activities, for example learning or marketing activities to make them much more attractive to users. There are so many benefits and effects provided by gamification, even this has been proven by research by Alshammari (2020) which says that gamification positively improves learning outcomes and motivates student learning. Furthermore, the literature study obtained in the research of Guillermo M.

Chans, et al (2021), shows that gamification can increase student motivation and involvement, improve attitudes, and increase student scores with the results of the pretest score of 57% and post test 79%, thereby increasing the score. 24% and the value is more than the expected 70 km. It can be concluded that gamification has a very positive impact if applied in learning. However, gamification also cannot stand alone without the help of other supporters, such as an application, website, and so on. The media that is considered appropriate to be combined with gamification is Wordwall. Wordwall can be used to see the development of students' abilities. Jamaluddin Siddiq (2021) also said that Wordwall can be defined as a web application that is used to create educational-based games wrapped in interesting quizzes. Wordwall has advantages which include: a) it is easy to understand using a simple and simple design, b) the features and templates vary, ranging from quizzes, word searches so that it consists of many features such as: match up, open the box, random cards, anagram, labelled, categorize, quiz, find the match, matching pairs, missing word, wordsearch, rank order, random wheel, group sort, unjumble, gameshow quiz, maze chase, and airplane. c) there is a multiplayer feature where students can join the same game and simultaneously and be controlled by the teacher. However, wordwall also has drawbacks such as: a) the font size cannot be changed b) the colors are less diverse. With more advantages than Worldwall and there have been studies that have proven such as learning to be interesting and fun, making it easier for teachers to use media creatively and according to the pandemic era, and being able to keep up with technological developments.

Therefore, the researcher considers that the development of gamification using wordwall if it is collaborated with French language lessons, especially Civilization Francais, becomes more interesting. This is because this lesson discusses French culture starting from cultural values, the educational system, French cuisine, the development of geography, the education system and French living habits, tourism, celebrations, and so on. Furthermore, the use of wordwalls with several types has never been used by a French language education study program lecturer in the Civilization Francaise course and should be able to be applied in French language learning. Based on this background, researchers will examine the development of gamification in wordwall-based French cross-cultural practice questions.

II. Review of Literature

Gamification is a vocabulary that comes from English, namely game and ends with ication which means to make or cause something. This is also related to the learning process. Heni Jusuf (2016: 2) says Gamification is a learning approach using elements in games or video games with the aim of motivating students in the learning process and maximizing feelings of pleasure and involvement with the learning process, besides that this media can be used to capture things Thing. -Things that interest students and inspire them to keep learning. Based on the explanation above, the authors conclude that gamification is a way or effort to improve learning that applies the rules in a game to be used as a solution by building the interest of certain individuals or groups.

TICE or Techonlogie de l'Information & de la Communication pour l'Enseignement is "Information and Communication Technology for Education" (ICT) which is popular in Indonesia. In the current era, TICE is growing and there are more and more varieties that can be used when learning in class, whether it be in the form of applications, websites, and so on, all of which will be a support in learning.

Evaluation is an absorption word from English, namely evaluation. Evaluation comes from the root word value which means value. According to the KKBI Evaluation means

commensurate with the assessment which also comes from the English term assessment. Furthermore, according to Blooms, seen from the function that the test has as a measuring tool for student learning development, the test can be divided into six groups, namely: (1) Selection Test, Selection test is often known as "screen test" or "entry exam", (2) Initial test, the initial test is often known as a pre-test. Type tests are carried out with the aim of knowing the extent to which the material or subject matter to be taught has been mastered by students, (3) Final test, Final test is often known as post-test. The final test is carried out with the aim of knowing whether all the subject matter that is classified as important can be mastered as well as possible by the students. (4) Diagnostic Tests, Diagnostic tests are tests that are carried out to determine precisely the types of difficulties faced by students in a particular subject. By knowing the types of difficulties faced by the students, further efforts will be made in the form of appropriate treatment. (5) Formative Test, Formative test is a test of learning outcomes that aims to find out how far students have "formed" (in accordance with predetermined teaching objectives) after they have participated in the learning process within a certain period of time. It should be noted that the term "formative" comes from the word "form" which means "form". (6) Summative Test, Summative test is a test of learning outcomes that is carried out after a set of teaching programs has been given.

According to Jamaluddin Siddiq (2001), Wordwall is a web application that contains interesting educational and interactive quiz-based games. Wordwall has advantages which include: a) it is easy to understand using a simple and simple design, b) the features and templates vary, ranging from quizzes, word searches so that it consists of many features such as: match up, open the box, random cards, anagram, labelled, categorize, quiz (quiziz, quizlet etc.), find the match, matching pairs, missing word, wordsearch, rank order, random wheel, group sort, unjumble, gameshow quiz, maze chase, and airplane. c) there is a multiplayer feature where students can join the same game and simultaneously and be controlled by the teacher. However, wordwall also has drawbacks such as: a) the font size cannot be changed, b) the colors are less diverse.

Civilization Francaise is one of the courses in the French Education Studies Program FBS Unimed. Based on the literature review through the Semester Learning Plan (RPS), Civilization Francaise is a lesson that describes the geographical location of France, the French and Indonesian education systems, French cuisine, holiday celebrations in France, family life in French society, life in pairs in French society, Immigration phenomena in France, and the French political system. The lecture strategy used in this class is Student Centered Learning and Forum Group Discussion.

III. Research Method

This study uses the R&D method. This study uses the ADDIE model development research method by Robert Maribe Branch (2009) which consists of five phases, namely (1) Analysis (2) Design (3) Development (4) Implementation (5) Evaluation. In each of these phases, evaluation and revision will be carried out to ensure the quality of the data in each phase of development. In the needs analysis phase, questionnaires were given to students and lecturers, interviews with students and lecturers, and theoretical analysis related to wordwall development. In the planning phase, a schedule of research activities and the division of work of the research team will be drawn up. In the design phase, a description of how the media will be made will be carried out. In the development phase, wordwall-based gamification media will be developed. The development will be tested and validated by experts to obtain product validity. The trial activity will be observed by

colleagues as evaluation and revision material. The product that has been valid will then be implemented in learning one of the selected courses. Furthermore, an evaluation is carried out until the development of wordwall-based gamification media is declared qualified if it meets the elements of validity, practicality, and effectiveness based on the assessment of three experts.

3.1 Data Collection

To obtain the data as stated in the research variables section, several data collection techniques were carried out, namely observation, interviews, documentation studies, expert validation, and learning outcomes ability tests. The instruments used to collect the data are (1) observation sheets, (2) research journals, (3) interview guidelines, (4) validators, (5) needs analysis, (6) test questions, and (7) researchers (8) student satisfaction questionnaire as a data collection instrument.

3.2 Data Analysis

The data that has been collected will be analyzed based on the type of data. Data from the study of documentation and interviews will be analyzed using narrative techniques. The instrument used to analyze the data is the researcher as an instrument of data analysis. Data from expert validation will be analyzed using the average technique (everage). The instrument to analyze the data is the Excel program. The data on the results of the learning outcomes test will be analyzed using the Product Moment Correlation technique. The instrument to analyze the data is SPSS Software.

a. Data Collection Technique

Data collection using techniques include: Questionnaires, Interviews, Literature Studies, and Tests.

b. Data Analysis Technique

Data analysis was carried out using the following scale:

Table 1. Sugiyono Likert Scale

No	Criteria	Score
1	Very Good (<i>SB</i>),	5
2	<i>Good (B)</i> ,	4
3	<i>Moderate (CB)</i> ,	3
4	<i>Not Good (KB)</i> ,	2
5	<i>Very Not Good (STB)</i> .	1

To calculate the value using the following formula:

$$P = \frac{100}{\text{Number of correct answers}} \times \text{The whole question}$$

Values include:

A	85-100
B	75-84
C	60-74
D	50-59
E	0-49

IV. Results and Discussion

In the analysis phase, researchers collect data and information that can be used to plan products and solve problems in this study. To get the products and problems faced, a needs analysis (questionnaire) was carried out by distributing questionnaires to students in the 6th semester of Regular A 2019 French Language Education FBS-UNIMED who had undergone the lecture process for 1 semester in the Civilization Française course via Google Form. This questionnaire contains closed questions that have available alternative answers and open questions that can be answered by respondents.

Questionnaires submitted to respondents were analyzed descriptively qualitatively, to obtain basic information about problems or descriptions that occurred during learning in the Beginner's Written Reception course, especially on the media used. The student problem for the Civilization Française course is based on the following questionnaire; Students have difficulty learning French online (80%) because they still really need more varied media. All students have technology tools such as (40%) have smartphones, (40%) have laptops, and (20%) have computers. When learning online, CF previously used media such as: Zoom, Google Meet, Google Classroom, Sipda and Books, and youtube.

In addition to needs analysis, we also conducted interviews with lecturers in the Civilization Française course to obtain additional information about the learning process in the classroom and student problems in the course. The results are obtained as follows: (1) Learning is carried out by the method of delivering material/lectures to students, (2) Lectures are carried out by means of Drill (assignment) to students. (3) Implementation using zoom, google meet.

At the design stage, this activity is a systematic process that begins with determining the purpose of the media, material, content, etc., and determining who the media is intended for (teachers and students). The next step is to design the material that will be included in the wordwall media. This design is adjusted to the existing rules, and the questions are adjusted to the HOTS (Higher Order Thinking Skill). The material discussed is about; 1. *L'éducation* (Pendidikan), 2. *Le transport* (Transportasi), 3. *La religion* (Agama), 4. *Les medias* (media) 5. *Les Permis de Conduire et les ammandes* (Surat izin mengemudi dan Denda) 6. *Les fetes traditionnelles* (Pesta tradisional) 7. *Les stereotypes* (stereotip/kebiasaan) 8. *La geographie* (Letak geografi), 9. *La familliale* (Keluarga), 10. *Le culinaire* (Makanan), 11. *Le travail* (pekerjaan). 12. *Les stereotypes tabou* (kebiasaan tabu).

At this stage, the following is an overview of the development stage;

1. The first step is to prepare several templates, designs, or images related to the material using a supporting application, namely Canva. The addition of this section, makes one of the development processes.



Figure 1. Stage 1

2. After the materials and questions have been designed, enter/download the wordwall application, then click the sign in section and enter the email address and password that was previously registered. Then click, log in.



Figure 2. Stage 2

3. After that, we will be faced with a wordwall display which includes; homes, features, community, my activities, my result, and create activity. Choose create activity to start the design process with a very diverse menu display.



Figure 3. Stage 3

4. For example, with the Airplane theme. We can prepare French cross-cultural questions, which fit the theme. Then we can modify the images that we have designed or are available from the wordwall application.
5. For this part of the theme, with the theme of an airplane carrying a load of questions, it can be directed / collided with the answers that have been provided. For the appearance of this theme, we will design with several layer themes such as; jungle, classic, primary, etc.

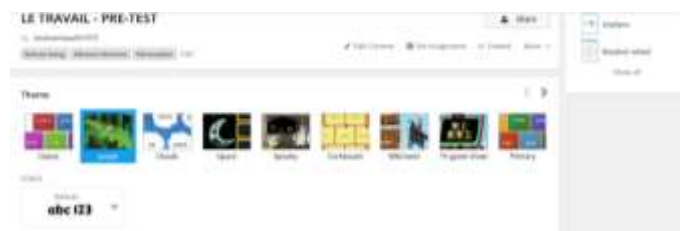


Figure 4. Stage 5

6. Next, we can adjust by paying attention to the type of font, size, design theme according to the discussion.

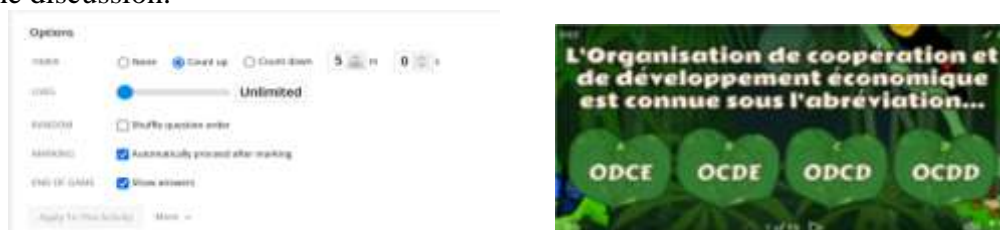


Figure 5. Stage 6

7. After all the themes and materials have been integrated with the wordwall media, we can create a folder in each 1 material containing 3 activities, namely multiple choice questions, true/false questions, matching questions or crossword puzzles.



Figure 6. Stage 7

This segment is the stage of implementing the development of French media and textbooks on French culture. This stage is aimed at students who are undergoing courses, namely Regular B 2020 French Language Education FBS-Unimed by: (1) Distributing Pre-test, (2) Giving Materials to Students (3) Distributing Post-test, and (4) Providing media and material validator assessment sheets (5) Distributing student satisfaction questionnaires.

Pre test and Post have been carried out as many as 4 materials, with each value concluded as follows:

Table 2. Pre test and Post test

Meeting	Pre Test	Post Test
1	62.8	83.35
2	43.375	80,60
3	61,03	88,08
4	74,745	93,035
Average Score	60,48 %	86,26 %

Thus the value for the implementation of wordwall-based media and materials gets an average value of 86.26% with the "very good" category.

Furthermore, the assessment of the validator is divided into two, namely media assessment and material assessment. The assessment on 12 materials was declared in the Very Good category with an average value of 92.90%. As for the wordwall-based media assessment, the category is very good with an average value of 91.7%.

Evaluation is carried out by making improvements based on the suggestions of the validator and post test, which have shown an increase in student scores. Evaluation has also been carried out at the student satisfaction questionnaire stage, as follows:

Table 3. Student satisfaction questionnaire on wordwall materials and media

No	Indicator	Student Satisfaction Questionnaire Results
1	Teaching materials are able to encourage students' curiosity.	45.5% said very good. 54.5% said good.
2	Teaching materials are easily understood by students.	72.7% said very good. 18.2% said good. 9.1% said quite well.
3	Teaching materials are able to encourage the	36.4% said very well.

	creation of critical thinking activities.	45.5% said good. 18.2% said quite well.
4	Teaching materials are able to encourage the development of creativity in learning.	54.5% said very good. 36.4% said good. 9.1% said quite well.
5	Teaching materials are able to encourage the creation of problem-solving activities in learning.	63.6% said very well. 36.4% said good.
6	The question of evaluating learning outcomes in textbooks has met the elements of Higher Order Thinking Skills (HOTS).	45, 5% said very good. 45, 5% said good. 9.1% said quite well.
7	Wordwall media facilitates the smooth learning process	54.5% said very good. 45.5% said good.
8	Media wordwall is easy for students and teachers to operate	63.6% said very well. 36.4% said good.
9	Images, text, and wordwall media types are very diverse and make you interested.	72.7% said very good. 27.3% said good.
10	The concept of wordwall media is in accordance with the learning objectives and is presented sequentially.	63.6% said very well. 36.4% said good.
11	Lecturer's ability in delivering material	72.7% said very good. 18, 2% said good. 9.1% said quite well.
12	Lecturers motivate students to actively participate in lectures	45, 5% said very good. 45, 5% said good. 9.1% said quite well.
13	Lecturers provide opportunities and appreciate students to submit questions and opinions	63.6% said very well. 27.3% said good. 9.1% said quite well.

V. Conclusion

This research has been carried out as much as possible, although there are several obstacles such as the difficulty of meeting in person between fellow researchers and research respondents so that 70% is carried out online. This research produces several outputs such as wordwall-based media that has been set and materials on civilization franchises which consist of 12 materials.

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