Development of *Lectomètre* To Train Students' Abilities In The *Compréhension Écrite Intermédiaire* Course

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Abstract. This study aims to develop Lectomètre learning media as a tool to improve students' reading comprehension skills in the *Compréhension Écrite Intermédiaire* course. The research method used is research and development. The subjects of the study were students of the French Language Education study program who were taking the course. The development process begins with a needs analysis, followed by media design, and development of Lectomètre prototypes in print and digital forms. Validation was carried out by two material experts and two media experts to assess the feasibility of the content, design, and usability of the media. The validation results showed that the Lectomètre media was considered very feasible for use in reading courses. Thus, this media has good potential to improve students' motivation and reading ability.

Keywords: *Lectomètre*, *Compréhension Écrite Intermédiaire*, Reading Ability.

1 Introduction

The *Compréhension Écrite Intermédiaire* course is related to the reading ability and understand texts in French at an intermediate level as one of the basic skills in language learning[9]. In its application, reading ability is very important because it is directly related to the understanding of various texts, which can include various types of texts such as articles, stories, essays, reports, and others[4]. Reading ability not only involves the process of recognizing words or sentences, but also includes a deeper understanding of the content, context, structure, and meaning of the text being read[2].

However, the team encountered obstacles when teaching the *Compréhension Écrite Intermédiaire course*. When students were asked to read the text being studied orally, however, the results of the reading that were spoken deviated very far from the rules of French. In addition to making mistakes in pronouncing sentences, they also tended to stutter and read slowly while thinking about the sound of the text they were reading.

This is due to the lack of oral text reading activities and limited time in class[1]. Students need to be faced with a situation where they are accustomed to hearing French texts from French speakers directly considering the pronunciation rules of French which are very different from the letters in the writing[3].

Based on data from the student self-evaluation document, several problems were found related to students' skills in reading texts, namely difficulties in understanding the rules of genre in French, difficulties in using vocabulary and conjunctions, many accents and pronunciations at the end of words that are not read, obstacles in reading vocabulary that is rarely found and long, and difficulties in reading words with masculine and feminine genres.

In connection with this situation, the research team offers an alternative that students can use to train their ability to read texts with the *Lectomètre* application. The way this application works is by displaying paragraphs/texts that students must bring by clicking the mic button available below the text[5]. After students click the button, their voices will be recorded automatically when students read the text above it. Then, the percentage of student reading accuracy will appear based on the recorded voice. In addition, students can also see the pronunciation analysis, where the student mispronounced[8].

This application is also able to complement students' understanding of text with user features that can add vocabulary, phonetics, gender meaning to each noun in the text, and automatic audio from the application system[10]. In addition to being used in class, students can also use it outside of class whenever they need it. So that with frequent reading practice and listening to the results of the corrections outside the lecture class, students' ability to read texts can increase.

2 Methodology

The product developed in this study is teaching materials for the *Conpréhention Écrite Élémentaire* course. This development research uses the ADDIE model. This model consists of five stages, namely Analyze, Design, Development, Implementation and Evaluation, [7]Santos (2021).

1. Analysis, namely the researcher analyzes the needs of students to find out the problems in learning *Compréhension Écrite Élémentaire*.

2. Design, namely the researcher designs the design of teaching materials according to the needs of the students.

3. Development, namely the design that has been designed will be developed into a product in the form of teaching materials for learning *Compréhension Écrite Élémentaire* using *lectomètre*.

4. Implementation, namely teaching materials that are developed and declared valid by media and material experts. 5) Evaluation, namely conducting an evaluation of *Compréhension Écrite Élémentaire* teaching materials using *lectomètre* based on the results obtained through the implementation stage.

5. Évaluation, carried out to ensure that the evaluation results show that the system is suitable for use with several inputs for improvements that will be used as a basis for further development.

3 Result

This chapter presents the results of the research on the Development of *Compréhension Écrite Élémentaire* teaching materials using *lectomètre*. This media aims to improve writing skills in French. This research is a type of R&D research using 5 stages:

3.1 Analysis

This stage begins with identifying students' needs in the learning process of reading comprehension of vocabulary, sentences, and paragraphs. Based on classroom observations and questionnaires at the beginning, several main problems were found:

a. Students have difficulty reading French correctly and according to the rules.

b. Students have difficulty understanding long and complex French texts.

c. Lack of motivation in independent reading practice.

d. No tools that can measure reading speed and comprehension continuously.

From these findings, it is concluded that learning media are needed that not only present reading exercises, but are also able to visualize students' learning progress and provide direct feedback on their performance.

3.2 Design

At this stage, the *Lectomètre* media structure is designed based on the analysis results. The main components designed include:

a. A module consisting of *Unité* 0-4 which is aligned with the *Tendances* textbook.

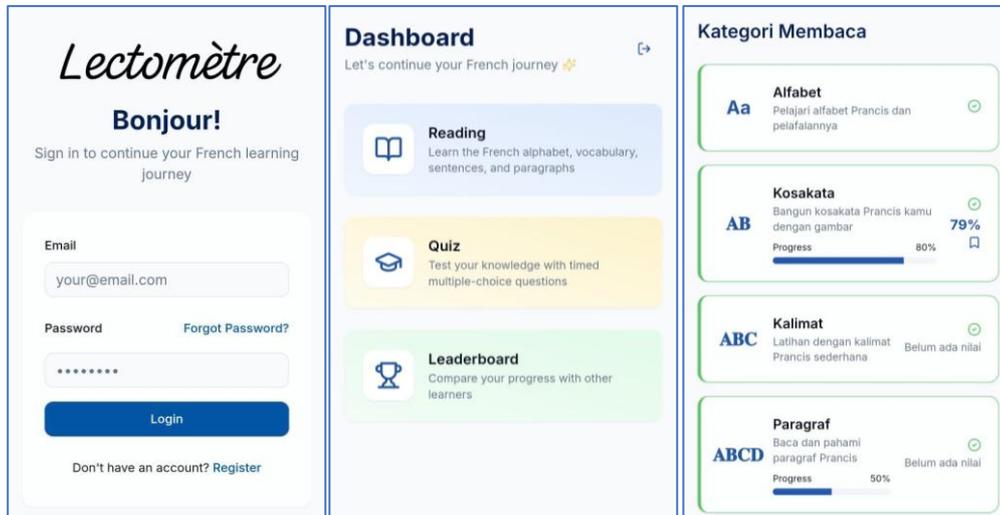b. The *Lectomètre* application consists of several menus, as seen below:
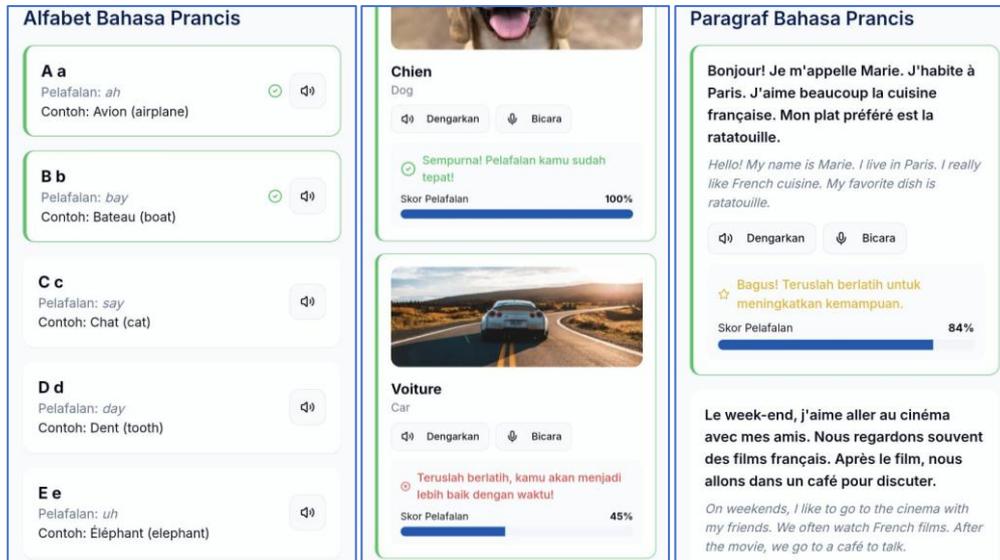
Fig. 1. Main Feature

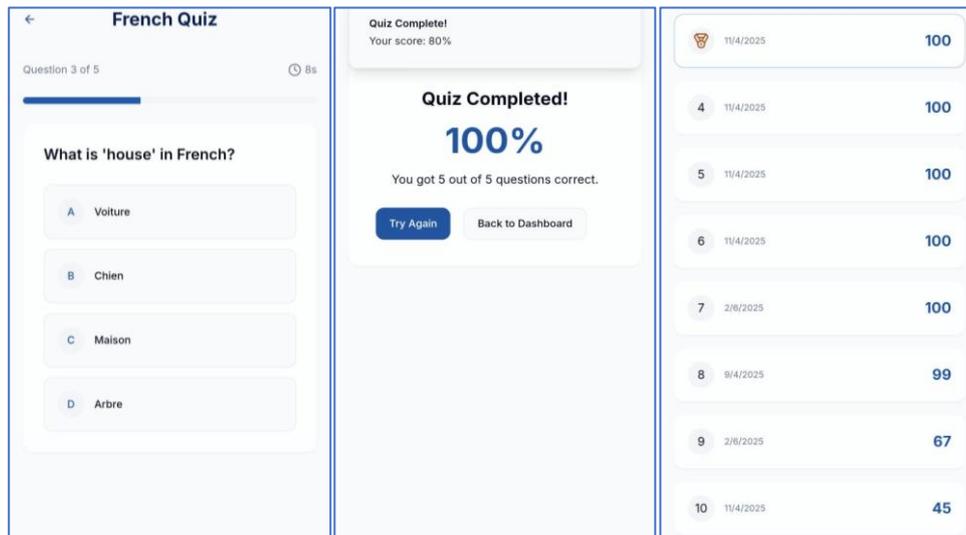**Fig. 2.** Student reading parameters display

Fig. 3. Quiz and ranking view

3.2 Development

At this stage, the researcher validated the *Compréhension Écrite Élémentaire* learning materials and media based on *lectomètre* with the validator. Based on the validation results of material experts and media experts, the Test value obtained was:

Table 1. Validation results from the experts

experts	Percentage	Average
Material 1	91	89,5
Material 2	88	
Media 1	89	88
Media 2	87	

3.4 Implementation

After the Lectomètre media was developed and validated by material and media experts, the implementation stage was carried out in a real learning environment to test its functionality and usefulness. The implementation was carried out in the Compréhension Écrite Intermédiaire course involving 30 fourth-semester students of the French Language Education study program. Students were given direct access to Lectomètre for four meetings, each lasting 90 minutes. Each meeting was designed to train reading speed and comprehension using various French texts that were adjusted to the students' ability level. The lecturer acted as a facilitator who guided students in using the Lectomètre features. This implementation process went smoothly with the active participation of students, and showed that the media could be used well in both independent and group-based learning.

3.5 Evaluation

The evaluation was conducted by comparing the results of the pre-test and post-test of students' reading skills covering aspects of reading speed, content comprehension, and accuracy in answering questions. The results of the analysis showed a significant increase in the average post-test score compared to the pre-test, with an increase of 23.5%. In addition, 87% of students stated that Lectomètre helped them be more focused and motivated when reading French texts. The evaluation also revealed several notes of improvement, such as the need to improve the visual interface and the addition of a more detailed automatic scoring feature.

4 Discussion

The results of the development of Lectomètre media show that this media provides a positive contribution in improving students' ability to understand written texts in French. This media is designed by considering the needs of intermediate students (niveau intermédiaire) to strengthen reading strategies and inferential and literal comprehension.

The use of Lectomètre allows for more structured and interactive learning, with the presentation of graded reading texts and exercises that are tailored to learning outcomes. This is in line with the pedagogical principles in foreign language learning that emphasize the gradual and meaningful processing of authentic input. Students are not only asked to read, but are also directed to develop metacognitive skills in reading, such as controlling reading speed and assessing the level of understanding.

In terms of ease of use, the trial results show that the interface of this media is quite intuitive and supports independent learning activities. This is important considering that 21st-century learning emphasizes independent learning and the use of digital technology in supporting the academic process. However, the challenges that are still faced are the need to increase text variations and automatic feedback features so that users get direct information on the results of their exercises.

Overall, the development of Lectomètre media has fulfilled its main objective of providing an effective and adaptive learning tool to improve compréhension écrite competence. This finding strengthens previous studies showing that interactive digital media can enrich the foreign language learning experience and improve learning outcomes, especially in reading skills.

5 Conclusion

The development of Lectomètre media has gone through systematic stages up to the development stage based on the ADDIE model, and has shown positive results in improving students' abilities in the Compréhension Écrite Intermédiaire course. This media is designed to facilitate learning to read French texts in a gradual and interactive manner, by accommodating various essential reading strategies at the intermediate level.

The results of validation and initial trials show that Lectomètre is effective as a learning medium that supports independent learning, increases learning motivation, and helps students develop their skills in understanding texts comprehensively. The advantages of this media lie in its systematic material structure, ease of access, and suitability to the needs of 21st century learning.

Thus, Lectomètre is worthy of further development as a supporting medium for compréhension écrite learning. Further research is recommended to test its effectiveness more broadly, including in the context of full online learning and the development of interactive features such as automatic feedback and tracking of student learning progress.

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