Developing The Media of Reading Comprehension in French Based on Techno Pedagogical Content Knowledge (Tpack)

Marice¹, Basyaruddin²
¹²Universitas Negeri Medan
mega_pangrib@yahoo.co.id

Abstract
This study is aimed to develop the media of learning French reading comprehension based on Technological Pedagogical and Content Knowledge and to know how the learner competencies in reading comprehension. The developing needs to be done due to the growing use of technology in the world of education in millennial era of the Industrial Revolution 4.0. The KKNI curriculum at Medan State University requires the use of technology in accordance with the concepts and principles of learning, the students were still low in reading, and learning media had not used the latest technology. The Plomp model methodology was used through the investigation phase by collecting the information, design phase, realization phase, and test, evaluation, and revision phases. Data collection was carried out namely the collection of material or material entered into learning media using the applications of Windows Movie Maker, Filmora and Powtoon. Applications are used by teachers to construct content, distribute quizzes, assignments, and manage communication with learners. The results are (a) a learning medium developed with the TPACK framework on learning content in the Reading Comprehension the French Language, (b) the students competencies have increased on reading the simple texts of descriptive and narrative.

Keywords: developing, media, reading comprehension, French language,

Introduction
The presence of digital and web tools in the world of education makes students easier to create tasks, saves time and even adds sources of information as learning resources. This situation makes students more quickly receive and obtain information, especially lecture materials and lessons. A teacher must be sensitive and responsive to the digital era that leads to the Industrial Revolution Era 4.0 and must be able to quickly respond to the situation so that the development and advancement of this technology can be used to assist the learning process. Besides, a teacher must also be able to collaborate on the ability to design and teach (pedagogic), mastery of content (material) with this
technology to create learning that can serve students in the current digital era. In general, in the industrial revolution era 4.0 students have used laptops, iPad, tablets, and smart cell phones in their activities on campus, so learning needs to be designed that can provide access to learning facilities with these tools so that the learning process is more fun and can be done everywhere and at any time. To package learning model like this requires particular expertise for a teacher. It is not enough to only master the content, or the ability to design learning (pedagogical) but must be able to combine both. Not only that, specialized skills are still needed, namely the use of technology in (technological) learning. French as one of the foreign languages taught at Medan State University and requires students who have the French language competence level B2. Therefore, it is essential to provide excellent facilities, one of which is learning media. Learning media in learning French is needed to support the achievement of student competencies to master four language skills. The results of observations on the learning process of reading French have not been used the latest media related to IT. The learning process still tends to lecture using reading texts, photocopies of the document, or watching videos, and listening to audio. Furthermore, interviews were conducted with students who produced conclusions, that the learning process was still monotonous because it was only dealing with text sheets, then given other questions and exercises related to the text. As a result student learning outcomes were included in the low category on average. Only 20% of students get a score of 80-100. Therefore, through the development of reading learning media, it is expected that competence in reading skills can increase. The researcher developed a variety of material in the learning media although it was not easy to transfer long enough text into an application so that it could be used as a medium. Therefore, students understand the book, assisted with the presentation of pictures, videos, or short sentences, to direct students’ understanding. The text will be presented per paragraph or by using hyperlinks.

The concept of Learning Media

Learning press is part of teaching material, which is useful as a support for learning material. Tomlinson (1998: 9) states that the development of teaching materials is everything that is used in learning, in the form of textbooks, textbooks, exercise books, cassettes, CD ROMs, videos, handouts, etc., which of course contain information about the content of learning. The term reading is referred to as a process of combining information from a text and background of students' knowledge to build meaning. In building this meaning, students need reading skills that are a skill possessed by students in them so that they can apply it in action as an implementation of the language's knowledge and cognitive abilities. Dalman (2011: 2) stated that reading is a cognitive activity or process that attempts to find the various information contained in writing. The primary purpose in the text is to find and obtain information, including content, understanding the meaning of reading. Meaning, meaning (definition) is closely related to the purpose of the purpose, or we are intensive in reading. Reading skills are one of the language skills needed to understand a text. Desmons (2005: 49) stated that understanding a foreign language text not only requires the reader to have linguistic competence but also cultural competence. Boyer, 2010 states that Lire, c’est réagir au texte; lire, c’est raisonner means, reading is reacting to a text. Meanwhile, Nunan (1999: 199) stated that in acquiring a second language many people who think that reading and listening are the second skill after speaking and writing. Based on the French language curriculum (CECR), reading comprehension competence base level equivalent to competencies reading short texts very simply, can find special information contained in current documents such as short ad-text, leaflets, menu and schedule of an activity, and can understand simple and brief personal letters. Schulman developed the term TPACK (Technological Pedagogical and Content Knowledge) can be interpreted as technological knowledge, pedagogy, and content. This concept was developed based on the idea of knowledge of pedagogy and content developed by combining the two domains in learning. These relationships can be described in the picture below:
Method

Developing of Learning Media Procedures

The learning system design model developed using the Plomp (1997) model. It is through four phases, namely (1) the investigation phase, (2) the design phase, (3) the step of realization or construction, (4) the test, evaluation, and revision phases. The method used in this study is descriptive qualitative with documentation techniques through the data collection needed. Collection of documents related to essential data for the development of reading teaching materials. Document analysis is useful to complete and clarify the results of information, namely by observing, recording and collecting what is implied and written in each document or archive that is the source of data such as diaries, life history, stories, biographies, regulations, and policies. Documentation is in the form of images, such as photos, live photos, sketches, and others. TPACK-based media mechanism is that the data collected will be sorted into applications as the technology used, then draws pedagogical lines and knowledge about educational content and the content of technology and information from the text. Based on the data collected through documentation analysis then mapped in a table. The research procedure is described as follows.

Investigation Phase:
- Reading Material Mapping
- SKKD & Learning Objectives
- Indicator & Evaluation

Design Phase:
- Merging Investigation Results into an initial draft of development

Realization Phase:
- Preparation of Material into TPACK

Technique of Collecting Data

The technique of collecting data used is expert tests, questionnaires, and tests. The expert test is used to see the feasibility of the product produced, the survey is used to know the student's response to the learning used, and the proof is used to understand the impact of the learning done.
instruments used in this study were expert validation sheets, closed questionnaires, and extensive questionnaires and test questions.

**Technique of Analysis Data**

The technique of data analysis is conducted through validation and trial by calculating the scores obtained to assess the quality of the learning model developed. The data collected in this study are qualitative data, namely scores with a scale of 1-5 (score 1 for very less, score 2 for less, score 3 for enough, score 4 for good, and score 5 for very good) from the results of expert assessment and Student assessments. Qualitative data scores are converted into quantitative data using a conversion reference as in table 1 which uses a Likert Scale (Suharsimi Arikunto, 2003). The results of pretest and posttest were analyzed by comparative analysis that is comparing the results of the initial conditions with the conditions after getting learning with the model that has been developed.

**Results and Discussion**

Based on the purpose of the research, namely the developing of TPACK learning media, that would be produced a media. However, as the primary material of the media was data related to reading skills that will be supported by the media. The discussion of this paper contains the results of data collection and then mapped in the table.

Table 1. Mapping KD, GPA, Material

| Basic Competency | Indicators | Material |
|------------------|------------|----------|
| **Able to understand simple texts related to routine activities** | Understanding the text of routine activities for one day | Texte 2. Décrire la Routine (Describe routine activities) |
| | Distinguishing groups of verbs used in text | Chaque matin, je me réveille de bonne heure et je fais ma toilette: je me lave le visage, je me brosse les dents, je me peigne, je m’habille. Ensuite, je prends le petit déjeuner : du lait aux céréales et une tasse de chocolat. À sept heures trente je pars pour l’école. D’habitude je prends le bus mais le vendredi je vais à pied. À l’école – pas le temps de m’ennuyer : je lis, j’écris, je fais des problèmes. J’aime beaucoup le français, la géographie et l’histoire. Je rentre à la maison à 13 heures. Je prends le déjeuner puis je me repose. L’après-midi, je fais mes devoirs, ensuite je vais dans le parc où je rencontre mes amis. Le soir, je lis un peu, je joue sur l’ordinateur ou je regarde la télé. On dîne, je prends un bain puis je me couche tôt parce que le lendemain j’ai une autre journée très chargée. Source : https://id.pinterest.com/pin/16072280424031535/?lp=true |
| | Analyzing text content based on its grammar | |
| | Making question sentences according to text content | |
| | Answering questions related to text | |
| | Writing simple texts about routine activities of yourself or others. | |
The material in the table above is the presentation of the materials in reading learning namely Décrire la Routine (Describing routine activities), besides Les préférences des Français (Activities that people like France), les vacances en saison (holiday activities by season), and carte postale (postcards). The data needed from the table for Technological elements are Indicators and Materials, for Pedagogical elements are Indicators and Test Items to be developed, while Knowledge is the students’ knowledge of the relationship between KD-GPA-Material and Test Items as well as the knowledge conveyed through the text.

| Indicators                                      | Pedagogical                      | Technology                      |
|------------------------------------------------|---------------------------------|---------------------------------|
| Understanding the dialogue text related to self-introduction | Self Introducing dialogue/text  | Windows Movie Maker/Filmora/Powtoon |
| Understanding the dialogue texts related to introducing others | Introducing others dialogue/text |                                 |
| Answering questions related to self-introduction dialogue | The questions by Quiz           | Edmodo                          |
| Answering related questions introducing others |                                 |                                 |
| Being able to introduce yourself with basic level language | Roll Play – Video – in a pair | Post Edmodo                     |
| Being able to introduce others to basic level languages | Roll Play – Video – Group       |                                 |
| Retelling the identity of others verbally with basic level language | Reflection – Video             | Live Journal                    |
| Rewriting other people's identities in text form with basic level language | Report                          | Laporan Edmodo                  |
| Rewriting other people's identities in biographical form with basic level language |                                 |                                 |

The Results of Product Evaluation

There were still the weaknesses of the learning model that had been developed and needed to be revised, among others: 1) selection of methods for online lectures, 2) discussion forums that had not involved all students optimally, 3) limited internet facilities, 4) other facilities that had not been utilized support online learning such as WeChat, Kakao Talk, LINE etc. This facility would facilitate communication and sent voice messages, pictures and videos during discussion forums.

Conclusion

The results obtained in this study were a learning media with the framework of TPACK and learning content with online activities in e-learning (flexible learning) through the FBS E-Learning held in the course of reading French and the developed learning media have a suitable category from aspects of education,
media, and teaching materials. The results of the learning implementation found that this learning media was able to increase the activity and learning outcomes of French Language Education students in learning reading comprehension skills. In one chapter there was one Basic Competency, six to nine Competency Achievement Indicators, seven pedagogical types that would be loaded and five technologies used. The tables displayed are TPACK's content features that would be developed in the development of TPACK-based teaching materials.

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