

## **Examining EFL Students' Experiences in Developing Instructional Multimedia for Technology Integration in Educational Courses**

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### **Abstract**

This study aimed: (1) to elaborate EFL students' experiences in developing instructional multimedia on technology in education course; (2) to elaborate the difficulties and the solutions EFL students face in developing instructional multimedia on technology in education course. This study used a case study qualitative research design. The participants of this study were four students of English Education Department at Mulawarman University who were selected with specific criteria. Interview and documentation were used as instruments for this study. The result showed that most of the students in the Technology in Education course had applied their knowledge in creating content in their experience in developing instructional multimedia. The result also showed Based on the results, the difficulties that were found came from content of the material technology, video, managing time, and design.

**Keywords:** experience, developing instructional multimedia, PACIFIC.

### **1. Introduction**

The use of technology has become an integral part of living in the modern digital era. Technology and people have interacted in purposeful or unintentional ways as a result of technological progress. Çeçen (2020) stated that technology has advanced to the digital stage, and in Indonesia, various fields have adopted technology to streamline their work processes, including the education field. Technology has become an important component of the education field, providing a valuable aid to enhance the academic experience, referring to Rameez et al. (2020) most of the universities started their academic and other administrative activities with the help of technological devices and applications during the period of work from home.

In the modern digital era, individuals without a technology understanding may run into a number of challenges and limitations such as limited access to information: technology has become the primary means of accessing and disseminating information. For individuals who do not understand technology, they may have difficulty accessing information online. While ignorance of technology can pose challenges, it is important to note that technology literacy is a skill that can be learned. The important part in technology is instructional multimedia. Instructional multimedia refers to anything that can capture students' attention, stimulate their thinking, and evoke emotions to facilitate the learning process. Juma (2016) instructional multimedia, any channel of communication that can be used to carry visual or audio messages from the source to the receiver. If you view multimedia learning as information acquisition, then multimedia is an information delivery system

(Mayer, 2014). Multimedia that includes animation is more appealing and capable of improving student learning outcomes. Instructional multimedia designed according to multimedia principles lead to more learning compared to conventional methods (Salehi et al., 2016). Therefore, needed instructional multimedia for improving learning effectiveness: instructional multimedia has the potential to increase learning effectiveness. By combining various media formats, such as text, images, audio, video, and interactive elements, instructional multimedia can arouse learner interest and engagement, clarify conceptual understanding, and improve information retention.

As for instructional multimedia, PACIFIC (Power Point, Audacity, Canva, Internet, Filmora, Inknoe Class point, and CapCut) will be used. Biologists frequently use office tools like Microsoft PowerPoint, which enables the development of multimedia presentations where the user may rearrange the included items and modify other features like size, color, or form (Sidiropoulos et al., 2017). Using Audacity is mostly for recording, editing, and analyzing sound waves (Rohman et al., 2020). Upadhayay et al. (2017) stated internet for activities including playing online games, reading emails, and learning new computer programs. A graphic design tool called Canva is used to make social media graphics, papers, posters, presentations, and other visual content. Elsa et al. (2021) stated that visuals in the classroom, including Canva, can serve several purposes, such as; 1) to create concrete abstract ideas; 2) to motivate students; 3) to give direct attention; 4) to repeat the information; 5) to remember prior knowledge; and 6) to make learning effective. Filmora resembles traditional video editing software more (Theron et al., 2020). As for, Bong and Chatterjee (2022) the use of ClassPoint as an interactive quiz tool desirable for students provide greater student-instructor interaction and engagement during class. According to Choirun et al. (2021) CapCut, may edit videos by adding and removing clips, as well as including music and stickers.

Considering the previous issues, the researcher is motivated to carry out this study in order to provide instructional multimedia for EFL students using PACIFIC tools in Mulawarman university.

## **2. Literature Review**

Instructional multimedia include increased availability and repetition of instructional content, improved ability of students to learn at their own pace, increased student control of material, less demand on instructor time, and the provision of an alternative approach to describe complex topics or three-dimensional relationships (Ismail, 2021). Instructional multimedia might help learners to stimulate more of their understanding towards the content, can see pictures and can aid putting them in actual practice and in learning activities which consequently result to a more successful and effective learning and teaching. In addition, Chumsukon (2021), instructional multimedia support learning content that allow students to engage in the application of concepts and thus, offer an opportunity for assessment. Furthermore, the application of technology in learning leads us to the application of multimedia. Multimedia is the presentation of material using both words and pictures (Mayer, 2007). In addition, images describe structure and procedures while text defines important words and provides important explanations. Richard E. Mayer

(2001) stated that the process of integrating relevant words and images is more likely to occur when words and pictures are integrated rather than separated. The use of text and images follows Mayer's ideas by assisting students in creating an image, reducing the amount of irrelevant information, and increasing the visual processing of material.

### **3. Methods**

This research applied qualitative research as the approach of the study. According to Creswell (2012) typically, qualitative research is employed to determine the significance of key concepts, examine issues, and cultivate individual perspectives on social problems. Creswell (2009) defined that qualitative method is a process that requires researcher to collect, analyze, interpret, and write the outcome of a study. The research approach utilized for this study was the case study research method, as defined by Yin (2014) this method involves examining a present-day occurrence by asking how and why it happened. Thus, a case study is a form of qualitative research that is carried out in specific situations involving an individual, programs, activities, events, or groups.

### **4. Result**

#### **4.1.1. The EFL Students' Experiences in Developing Instructional Multimedia**

Based on the analysis above, it can be concluded that the participants in this research had applied PACIFIC and others multimedia in their experience in developing instructional multimedia. The researcher found that all participants had basis knowledge of various multimedia that used. It is in line with how Int1, Int2, Int3, and Int4 were able to explain the experience in applying and creating multimedia that they have been mentioned.

#### **4.1.2 The EFL Students' Experiences in Developing Instructional Multimedia**

Based on the analysis, it can be concluded that EFL students overcame various difficulties in developing for learning activity. The difficulties that were found came from content of the material technology, video, managing time, and design. Int1 found it difficult to manage the time with the friends, hard to operate Inknoe Classpoint, and also hard to explain the material project, thus she reschedule, asking for friends' help, and using video for helping Int1 in explaining the material. Int2 faced the difficulty in applying Audacity, Inknoe Classpoint, and Filmora. Int2 overcome the difficulty by watching video tutorial on Tiktok or YouTube. Int3 had to deal with selecting and organizing materials from the book to the PowerPoint, however Int3 overcame that difficulty by talking with his friends from other groups, and for Int4 had to deal with the design material that coherent, Int4 overcome the difficulty by using mindmapping in the material.

### **5. Discussion**

#### **5.1.1. The EFL Students' Experiences in Developing Instructional Multimedia**

Chumsukon (2021), instructional multimedia support learning content that allow students to engage in the application of concepts and thus, offer an opportunity for assessment. Based on the data interview, all participants were able to mention Multimedia such as PACIFIC and others, as same as Google Site, Tiktok, and YouTube.

Moreover, all of the participants were also able to explain the multimedia that they had mentioned. The students' experience in developing instructional multimedia is in line with theory proposed by Mayer (2014) if you view multimedia learning as information acquisition, then multimedia is an information delivery system.

#### 5.1.2. The EFL Students' Difficulty in Developing Instructional Multimedia

Based on the findings outlined above, it becomes evident that students encountered a range of difficulty when integrating multimedia into their learning activities. These difficulty primarily stemmed from issues related to the study material, time management, the operating systems of their multimedia, and a lack of familiarity with multimedia tools.

### 6. Conclusion

Based on the results, the difficulties that were found came from content of the material technology, video, managing time, and design. Int1 found it difficult to manage the time with the friends, hard to operate Inknoe Classpoint, and also hard to explain the material project, thus she reschedule, asking for friends' help, and using video for helping Int1 in explaining the material. Int2 faced the difficulty in applying Audacity, Inknoe Classpoint, and Filmora. Int2 overcome the difficulty by watching video tutorial on Tiktok or YouTube. Int3 had to deal with selecting and organizing materials from the book to the PowerPoint, however Int3 overcame that difficulty by talking with his friends from other groups, and for Int4 had to deal with the design material that coherent, Int4 overcome the difficulty by using mindmapping in the material.

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