# DEVELOPING DIGITAL LITERACY OF LEARNING MEDIA INNOVATION BASED ON LOCAL WISDOM FOR ONLINE CLASS TO IMPROVE LISTENING AND WRITING SKILLS

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#### ABSTRACT

The availability of technology in education enables educators to plan and implement innovative and interactive learning models. This research was development research (R&D) which aimed to develop the current media for teaching and learning the language in the digital era based on local wisdom for an online class to improve listening and writing skills in the information systems education program at ITB STIKOM Bali. Data was collected by means of documentation, interviews, observations, and questionnaires. The research procedure followed Luther's model design proposed by Branch (2009) with some modifications. The digital literacy-based listening and writing materials were appropriate to be implemented as the listening and writing materials that could support the teaching and learning process for the Information Systems education program at ITB STIKOM Bali. This was supported by the result of the experts' judgment who evaluate the appropriateness of the product in terms of content, language, presentation, and media aspect. The mean score in the experts' judgment based on the materials evaluation in the aspect of content, language, and presentation was 3,8 which belonged to the very good category. The mean score based on the graphic evaluation was 3.8 which belonged to the very good category. This digital literacybased listening and writing materials were packed into Google Form that consisted of 3 materials.

**Keywords**: Digital literacy based learning media, local wisdom, listening, writing

### INTRODUCTION

English is the foreign language taught at school from elementary up to university level in Indonesia. The purpose of teaching English in Indonesia are designed to make the students master four skills in English such as Reading, Speaking, Writing and Listening, and internalize other English elements i.e., Pronunciation, Grammar and Vocabulary. Those skills and the components should be improved and learned simultaneously to make students able to use their English appropriately and as native speakers. Some method or media that can improve teaching and learning English for EFL need to be updated and easier to be applied in daily life. Media are tools that are brought and provided to facilitate teaching-learning process and to make students easy to understand materials given by the teacher.

Media is an instrument that is used to transform messages or information from "resource" to "receiver" Criticos (in Daryanto, 2015). Based on these definitions, it can be said that the learning process is a process of communication. The learning process contains five components of communication, teachers (communicators), learning materials, learning media, students (communicants), and learning objectives. So, learning media is everything that can be used to channel messages (learning materials), so that it can stimulate attention, interest, thoughts, and feelings of students in learning activities to achieve learning goals. Gerlach and Ely (in Mubaraq, 2020) stated that instructional media plays a key role in the design and use of systematic instruction. A medium, broadly conceived, is any person, material, or event that establishes conditions which enable the learner to acquire knowledge, skills, and attitudes. In this sense, the lecturer, text book, and campus environment are also media.

These days, teaching and learning have begun to integrate technologies in its' process. Information and communications technology (ICT) or digital technology can be referring to online or internet usage. It can be for communicating, creating and sharing information, multimedia texts, and the like. Digital media includes many kinds of things that can be surf by internet such as websites, electronic books or E-Books, many kinds of software e.g. e-mail or anti-virus programs, audio material from MP3, MP4 or podcast, video, video games, mobile media applications or 'apps', and social media.

Sometimes English becoming difficult to learn as a foreign language,. As this problem appears, lecturers have to be able to solve. Even though it is included in the campus that focuses on teaching and learning about information and communication technology, English is also important and needed by them because Technology and English are interrelated and worldwide. ITB STIKOM Bali students must learn and have good skills in mastering English because all aspects and teaching on computers, the internet, technological matters then use English, for example one of the newest topics today in the field of technology is about IoT (Internet of things ) and AI (artificial intelligence). All explanations and all about them in English. That is, if ITB STIKOM Bali students do not have the ability to speak English, how can they understand it? So that English becomes the main point that they must be mastered when they want to master of technology.

RKPS in teaching English as a technological foreign language allows students to master four integrated skills, such as: listening, speaking, reading, and writing. In addition to cognitive skills, students are also required to have competence in both affective and psychomotor aspects. There are several factors needed to achieve the success of the teaching and learning process. These factors are: the role of lecturers, the role of students, teaching and learning strategies, as well as materials and media that are relevant and appropriate for students. Furthermore, the aim of language teaching is primarily to enable students to communicate in their target language.

Listening and writing are productive skills in learning English that must be mastered by ITB STIKOM Bali students. Students must be able to communicate in written form accurately to be applied in everyday life, especially in teaching writing and listening. Students must be able to listen and write with correct grammar, punctuation, and diction. One of the ways to solve the difficulty, especially in teaching listening and writing are by using and developing this kind of teaching learning media. Moreover, teaching and learning process that implemented in english classes of ITB STIKOM Bali using online meeting due to post covid-19 pandemic. This situation become such a challenge for both lecturers and students to build an effective teaching and learning situation. Normally, in online meeting, students often felt boredom and couldn't stay focused on the materials given by lecturer. It was because students got lot of distractions from their environment, doing multitasking things while following the lesson, and conventional way of teaching that used by lecturer to teach them via online class.

Those kind of problems encountered by students in online meeting need to be solved immediately. One of the thing that lecturer can do is to create an interactive online class for them in case of increasing their curiosity in learning new things on online meeting. The next thing is to create variations way of teachings media to make them pay lots of attention to the

material being given to them. And the other thing is to syncronize the materials with traditional culture that grow up in their place. In this case is balinese culture based on local wisdom, and this occassion will be able to bold their understanding of balinese culture aswell as to actualize their understanding in their daily life. This chance is also as a good opportunity to introduce balinese culture to the students from outside bali.

In order to make it happen, kinds of media supports are really needed. The Digital Literacy method in teaching listening and writing become one of the answer to solve the problem. The Digital literacy Method combines face-to-face classroom methods with computer-mediated activities to form an integrated instructional approach. In the past, digital materials have served as complementary, helping to support face-to-face teaching (Bonk, C. J. & Graham, C. R, 2017). Based on the factors and situations above, the researcher conducted research in the context of Developing Digital Literacy of Learning Media Innovation based on local wisdom for Online Class to Improve Listening and Writing Skills.

## RESEARCH METHODOLOGY

This research can be categorized as Research and Development (R&D). It refers to evaluation materials in which research findings are used to develop new products (Borg & Gall, 2013). In connection with the above definition, this research is considered as preliminary research and development (R&D) because the purpose of this research is to design a new product Digital Literacy of Innovation Learning Media based on local wisdom for online Class to Improve Listening and Writing in Programs Education Information System ITB STIKOM Bali.

This media design is for the ITB STIKOM Bali Information System education program from the Luther (2013) model. At each stage there are two activities, namely evaluation or review and revision of the draft. Then, the prototype of product is "Digital Literacy of Innovation Learning Media based on local wisdom for online class to improve listening and writing in Information System program at ITB STIKOM Bali. This media is available in google form.

In connection with the above definition, this study uses the Luther (2013) model which states that in developing multimedia there are six steps that must be followed, namely; (1) concept, (2) design, (3) collection of materials, (4) assembly, (5) testing, and (6) distribution.

The data were analyzed through several steps, namely; 1) data was collected from questionnaires filled out by students, 2) then, the data were classified and entered into a coding table, and 3) data was calculated to find the results of the questionnaire. The results of the questionnaire were described descriptively and the researchers drew conclusions on the application of local wisdom-Based Digital Literacy of Innovation Learning Media for online Class to Improve Listening and Writing in Information System education program ITB STIKOM Bali.

In addition, the product Digital Literacy of Innovation Learning Media based on local wisdom for online Class to Improve Listening and Writing at the ITB STIKOM Bali Information System Education Program was analyzed quantitatively.

#### RESULT AND DISCUSSION

Based on the result of the students' need analysis questionnaire, the researcher took the highest percentage of the statement of the respondents. It was found that most of students' goal in learning English was to be able to communicate using English in daily life both spoken and written text. The students' goal in learning listening was to help them to develop their knowledge and understand about the spoken of the speaker. Then followed by writing exercises which developed based on listening activity that students' had. The students' problem during listening English were comprehend the new vocabularies they heard in the listening materials. The listening input that the students preferred was came from interactive learning multimedia like social media. If there was a digital media developed based on books, the students preferred the material presented in reduced and simplified. The students' opinion about the content of materials should be presented in digital-based listening materials was having a clear display and presentation of material. The topic of listening that the students most preferred was about local wisdom around their life and environment. The effective duration of audio listening that preferred by the students were 15-30 minutes.

It was found that the activities for learning listening that the students most like was listen then complete the sentence and respond it into writing form. The teacher role that the students preferred was giving clear explanation about the steps for doing an exercise. The role of the students that the students preferred was actively to participate in learning activities in the online class The researcher developed digital-based listening and writing materials for the Information Systems education program at ITB STIKOM Bali based on the result of data from needs analysis. Those data were used as the guidance in developing digital literacy based listening and writing materials.

Digital literacy based listening and writing materials was designed firstly by designing the screen, such as home screen, main materials, and exercise. The home screen or start screen is the opening of the platform in Google Form. It consists of five parts: The title of the materials, students' identity that consist of (name, Nim/ID number, and class), pre-listening and writing activities. In pre-listening and writing activities, there are several questions that aims to make the students able to predict and brainstorm information as well as prepare the students to establish a link between their previous knowledge and newest information. The formulation questions of writing activities belong to the pre-listening activities. In the main materials or whilst-listening and writing, the researcher inserting the recording of the audio into Google Form and transform them into links.

In the main materials part, the students do the listening activity by following the instructions in Google Form. In the listening activity, the students are asked to listen the audio of listening is about three times. Then, while listening audio they write everything that they listen. After that, they answer some questions provide related to audio that they have just listened.

There are two buttons under the platform, such as "Back" and "Next" button here the user can directly go back to the main menu or "Next" to the next menu. Below is the first design of the main materials or whilst-listening in the digital-based listening materials.

In the exercise or post-listening and writing, there are two main parts: the instructions for doing the exercise and questions. After doing some activities in the

previous part, the students should do the exercise. In the exercise, the students are asked to complete the statements properly. There are two form of exercise such as objective and short essay. This activity belongs to the post-listening and writing activity which is the step after the students have listened. In this step, the students must do the exercise related to the listening that they have heard before and do the writing exercise.

There are two buttons under the platform, such as "Back" and "Send" buttons. The "Send" buttons aims to send the exercise of the students. After designing the screen, continued by designed the layout of the Google Form.

The features of Google Form can give the direct feedback to the students. After finishing the exercise, the students can get their score automatically and they can find the key answer of the questions. Moreover, they can find their progress in doing the exercise. There are two buttons in this part such as, "view score" and "view the previous score".

After designing all material in google form as draft of digital literacy listening and writing materials, the experts' judgment was conducted to evaluate the appropriateness of the product in terms of content, language, presentation, and media aspect. From the evaluation of the materials and media by the experts, it could be concluded that the developed digital literacy based listening and writing materials was appropriate to be implemented as the listening and writing materials for the Information Systems education program at ITB STIKOM Bali. The mean score in the experts' judgment based on the materials evaluation in the aspect content, language and presentation was 3,8 which belonged to the very good category. The mean score based on the graphic evaluation was 3,8 which belonged to the very good category. However, from the results of experts' judgment rating scale and the blueprint, the experts only gave the note in terms of instructions.

# **CONCLUSION**

From the explanation above, the digital literacy based listening and writing materials was appropriate to be implemented as the listening and writing materials that could support the teaching and learning process for Information Systems education program at ITB STIKOM Bali. This was supported by the result of the experts' judgment who evaluate the appropriateness of the product in terms of content, language, presentation, and media aspect. The mean score in the experts' judgment based on the materials evaluation in the aspect content, language and presentation was 3,8 which belonged to the very good category. The mean score based on the graphic evaluation was 3,8 which belonged to the very good category. This digital literacy based listening and writing materials was packed into Google Form that consists of 3 materials such as Word Processing, Asking and giving for information, and Globalization. Therefore, the written materials of second draft and the final product of the digital literacy based listening and writing materials are the same product. That was the final product of this research.

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