

Assemblr Edu Analysis and Interpretation as an Interactive Media in Language Learning

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Abstract

Assemblr Edu is a mobile software that can be used as a multimedia-based learning. The interest of this mobile software is the ability to produce writing accompanied by interesting moving pictures and videos and it is very easy to use, so the language teachers can use this mobile software easily and apply it to the learning process in the classroom. The Assemblr Edu application is an alternative offering that can be used to create interactive and innovative audiovisual learning media, so as to increase the attention and activity of students in language learning. Based on this, the formulation of the problem can be: 1) How is the Assemblr Edu implemented in language learning? 2) What are the opportunities and obstacles of implementing Assemblr Edu in language learning? The purpose of this research is; 1) How to use the Assemblr Edu in language learning. 2) To find out the advantages and weaknesses of Assemblr Edu implementation in language learning. This study uses qualitative approach, with a type field-research. The data sources used are primary data sources, specifically teachers and students and secondary data sources, that is related references. Data collection techniques in this study used observation and documentation. The data analysis technique uses qualitative data analysis with stage; data reduction, data presentation and depiction conclusions.

Keywords: *Assemblr Edu, Interactive Media, Language Learning.*

A. Introduction

In this digital era, the world of education is increasingly required to provide innovative and efficient learning. The ease of accessing the internet should be used by educators to improve the quality of education. It is very easy to find technology-based learning applications today, even if we are using a smartphone. Learning material can be delivered via student gadgets and the teachers act as a facilitator.

The E-learning system is learning technology that uses information technology as the main medium supported a variety of applications (software) to create learning system. This system must be supported by four main components, specifically the operating system, software, hardware, and the internet. The example of that application is *Assemblr Edu*. This M-learning application is technology-based media innovation that uses two-dimensional or three-dimensional objects. Apart from that, it come with annotations, videos and music as well as text.

Audiovisual media can provide more experience than other media, because when the media is used the senses within themselves will find it easier to respond

and capture the material presented. According to its nature, audiovisuals have many advantages, including they can make abstract concepts more concrete, can display accelerated or slowed motion so that it is easier to observe, can display details of an object or process, and making the presentation of learning more interesting, so the learning process more fun.

Utilization technology is one way to attract students to enjoy learning languages. The learning process using video tutorial media that utilizes the *Assemblr Edu* software is expected to be able to bind and increase student's attention and activity in language learning, due to the type of animation which is interactive, interesting, and innovative. Thus, language learning will be more easily accepted and implemented by students.

B. Research Methods

This study uses a qualitative approach, with a type of field research. The data source used is a primary data source, such as *Assemblr Edu* application and a secondary data source, such as related references. Data collection techniques in this study use observation and documentation. The data analysis technique uses qualitative data analysis with stages: data reduction, data representation, and depiction conclusions.

1. Data Collection Techniques

To obtain data and process the materials needed in this study, several techniques were used including:

a. Observation

This method is used to collect data in the form of direct observation on the use of the *Assemblr Edu* application.

b. Documentation

This method is used to obtain data about the contents of the *Assemblr Edu* application and how the *Assemblr Edu* application works through the *Assemblr Edu* web and mobile software.

2. Data Analysis Techniques

a. Data Reduction

Reducing data means summarizing, choosing the main things, focusing on the things that are important, looking for patterns and discarding unnecessary ones.

b. Data Presentation

Presentation of data in this study was carried out in the form of a short narrative description.

c. Conclusion

The conclusion in this study is a description of an object that is still uncertain so that after research it becomes clear.

C. Research Result Language Learning

The history of teaching a second language begins with the “private” model, because in the past only prominent people and aristocrats were able to learn a second language. In the 17th century AD, a Czech educator, John Amos Comenius, in his book “The gate of languages unlocked” which was published in 1631, he suggested how to learn language through movements and activities that directly accompany language expressions or through concrete images, without being overly burdened with the mastery of rules (Ahmad Fuad Effendy, et al, 2017:23-24).

In language learning there are four language skills that must be mastered, like listening, reading, speaking and writing. To achieve learning objectives that cover the four aspects of language proficiency, certainly requires interactive media. With this interactive media, the subject matter to be conveyed can be recorded properly and shows a reactive from student, so that student can realize listening, reading, speaking and writing skills.

Interactive learning media usually refers to digital product and services in computer-based system that respond to user actions by presenting content such as text, moving images, animation, video, audio and video games. Interactive media is a multimedia-based tool that can describe messages or information from teacher to students which in the process occurs 2-ways active communication between multimedia and users with the aim to make the learning process easier.

Learning with animated media, images or videos has a major influence on language learning. With this media student will get direct experience that is capture by the senses, so that learning success will be easily realized. The participation of teachers to optimize the use of mobile learning is urgently needed. The progress of the times is so fast and the ability of students to communicate gadgets is a concern for teachers to be able to use it as an educative learning tool.

Learning Media; *Assemblr Edu* software

Media is vehicle for funneling learning information and messages (Syaiful Bahri Jamarah, Aswan Zain, 2015:120). Learning can be easily accepted by student through medium. This media serves to clarify the learning material delivered by the teacher in an interesting and efficient manner. Interactive and innovative media are certainly needed in this digital era, every teacher is required to take advantages of technology to develop student’s learning abilities.

One of interesting and innovative media is using integrative CALL (Computer Assist Language Learning). Integrative CALL is a multimedia computer and internet-based learning. Integrative CALL aims to combine two abilities at once in the language learning process, namely language skills and mastery of technology. With integrative CALL, we try to integrate various language skills (listening, speaking, writing and reading) and integrate technology more deeply into language teaching. Computer based learning is a learning program using computer software that contains learning content. The system directly conveys material to participants by interacting with the subject programmed in the application.

Technology based learning has a variety of types, including learning that uses 2D or 3D animation such as AR learning media. Augmented Reality is an

operating system that combines and projects two-dimensional or three-dimensional object in the cyberspace and the real world, via a tablet or computer camera device. With Augmented Reality, it can help world of education in developing learning media that combines the cyberspace and the real world.

The use of technology in learning produces several learning innovations, one of which is known as M-learning (mobile learning). Dwiyogo explained that the term m-learning (mobile learning) refers to the practical use of modern technology products such as PDAs, iPods, PCs, tablets, and cellphones or smartphone in the learning process, so that it makes it easier for student learn more practically and flexibly. M-learning can provide teaching material that student can access at any time.

Assemblr Edu is a digital platform for teachers and students to make learning more fun and interactive using 3D and Augmented Reality technology. *Assemblr Edu* is a technology-based media innovation that can be used by teachers to increase student learning motivation through learning that is designed in such a way as to use either two-dimensional or three-dimensional objects. In addition, the feature is equipped with annotations, videos and music and text, which really supports pro-student learning. Learning is designed interactively so as to encourage students' critical thinking skills. Even 2D and 3D objects can be projected realistically which makes learning interesting and not boring.

Assemblr Edu is almost the same as Google Classroom, in this application there are classes that can be used to share subject matter. Each teacher can interact with students through the classrooms in the application. The materials provided by *Assemblr Edu* are very diverse, there are many templates that teachers can develop according to their needs. The learning animations offered by this software are varied, so teachers can easily send 3D and 2D videos to their respective classes.

Learning through the *Assemblr Edu* application can be done through student gadgets. This application is designed for mobile learning so students can download it through the play store or app store. In addition, the *Assemblr Edu* application provides several templates that teachers can use to teach. This application also contains several types of learning spaces such as language, biology, chemistry, geography, and so on. For teachers who want animated videos, there is a separate room to make learning.

How to use *Assemblr Edu* software

Student or teacher are advised to download the application on the play store and update if application update is available. Meanwhile, to be able to start their first creations or works using a laptop or mobile phone, teacher must have an *Assemblr Edu* account. In first scene, the teacher will find the maker area, where the marker area is a place to put the desired objects, can be adjusted to interests, creativity, subjects taught and so on. If you don't find the desired object, the teacher can submit or fill out a 3D object registration form to the *EDU Assemblr Team*. This is done to improve the quality of learning with *Assemblr*.

At the beginning of the *Assemblr Edu* software several menus will appear, including: Class menu, to share knowledge or collaborate with other classes,

select the class menu. Topic menu, to find high-quality educational content, lots of AR-based learning to choose from, and can share individual work. Scanner menu, to read AR, AR that has been made can be seen by copying the barcode and can be used for sharing and viewing other people's work. Your menu, like your profile can do the things we want. can create, or find friends, to display works in 3D or AR, in this menu you can create animations with images or text and videos.

How to create AR animations using *Assemblr Edu*:

1. Click the plus sign
2. Select a simple editor or classic editor will appear. In the simple editor options there are contents that have been prepared for more than 1000 objects. Whereas the classic content editor is built from scratch with blocks
3. Choose a simple editor
4. Click the blank project (maker area). In making AR through the *Assemblr Edu* software, finger skills are very decisive in making works
5. Click the lower left button, several menu options will appear namely, 3D objects, text, images, videos, and notes
6. Select a 3D object, there will be several options to choose from about dinosaurs, education, furniture, reptiles, cartoon animals, alphabet, fruits packs etc.
7. Select the fruits pack, place the image in the maker area, adjust the image according to taste
8. Add text, fill in the text according to the desired material, adjust the color to make it more attractive
9. Add an image, click add from gallery. Find the required image
10. If you want to add a video, copy the link and paste the link in the column provided
11. Provide a description of the image with the note menu, then provide a note/information on the image you want to explain
12. Post the work that has been made, click on the top right then options will appear to publish the project, share it to class, share the web player link, embed web player, share the QR maker, take pictures, and take videos
13. Select Publish project
14. Select the desired cover (auto / take a picture)
15. In the project name column, fill in according to the project being made
16. In the description column, enter a project description
17. Publish the work, select the publication for personal
18. Click update Then distribute the markers
19. Download markers. After downloading the work, it can be immediately shared with the class or wa. QR codes can also be shared, but only those with the *Assemblr* app can view them.

Advantages And Weaknesses Of *Assemblr Edu* In Language Learning

According to Vaughan, the advantages of interactive media are that they attract the senses and attract interest, because they combine sight, sound and movement. The advantages of learning language through the *Assemblr Edu* mobile software:

1. Have a pretty good video quality
2. The application is able to enlarge small objects
3. Image objects are in the form of 2D and 3D, making it easier for students to construct their thoughts
4. Objects can be rotated from various directions, so that the displayed material looks real
5. Easy and simple operation so that everyone can make professional video tutorials in a relatively short time.
6. Can easily mix different content with different backgrounds, and doesn't require a lot of equipment.
7. Provide further editing facilities. *Assemblr Edu* is equipped with further editing facilities to increase multimedia needs in 2D and even 3D video or image animation
8. Work that has been made can be directly distributed in class or published to the public

Weaknesses of the *Assemblr Edu* mobile software are:

1. Requires a large memory space on the smartphone
2. Requires high specification on personal computer
3. Some content and item are paid
4. Using a stable network connection

D. Discussion

Analysis and interpretation *Assemblr Edu*

Learning using a mobile learning system can make students not easily saturated with subject matter that maybe considered difficult to learn. In addition, it makes students interested in learning material because learning is fun, not monotonous just listening to the teacher explaining the material. The animated images and videos contained in the *Assemblr Edu* application, for example, can be used as tools for learning and teaching. Teacher can easier show the purpose the material through pictures and explanatory videos provided in the mobile software; *Assemblr Edu*.

The subject matter is explained in detail equipped with text, audio, animated images and even videos to give an interesting impression. Through the text displayed, student can record with their eyesight and construct their thoughts and then put it down in writing. With audio, students will easily understand structured material patterns and practice their ability to construct what they hear into spoken and written expressions. While animated images will make it easier for students to remember lessons. In this way the goals of language learning can be achieved.

For students, m-learning can increase learning flexibility because of the practicality of m-learning tools. This means that students can more easily access learning materials at any time and repeatedly, so that students can still strengthen

their mastery of learning material. Whereas for educators m-learning makes it easier to update learning materials which are their responsibility in accordance with the demands of scientific developments that occur, increase their insights and skills, and make it easier to convey abstract subject matter with clear and attractive visualizations through mobile devices that used in m-learning.

Learning languages through the *Assemblr Edu* mobile software, the subject matter is explained in detail with text, audio, animated images and even videos to give an interesting impression. Through the text displayed, students can record with their eyesight and construct their thoughts and then write them down in writing (writing and reading skills). With audio, students will easily understand structured material patterns and practice their ability to construct what they hear into spoken and written expressions (listening and speaking skills). While animated images will make it easier for students to remember lessons. In this way the goals of language learning can be achieved.

E. Conclusion

Language learning through the *Assemblr Edu* mobile software is very helpful for teaching staff in achieving learning effectiveness, especially in subjects where the majority are practical. Maximizing the achievement of learning objectives in a short time. Can stimulate students' interest in learning to be more independent. Students can discuss or ask for explanations from friends in the same class. Students can learn to concentrate more. Students' reasoning is more focused and more competent. Students become active and motivated to practice the exercises. Students can show it at home because the material can be played back. Meet the demands of the advancement of the educational era, especially in the use of the technology media field. Provide a more structured understanding of skills.

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