

CHAPTER I

INTRODUCTION

1.1 Problem Background

Education is one of the most important needs in human life. With education, we are able to make a change in the form of progress, especially in the field of education and technology, which makes us as a society innovative and motivated to be able to express creativity and be able to create and advance science and technology in a country. With this change, it becomes an overview to be able to know the level of education that exists. Each individual must have knowledge in the field of education so that they can adapt to changes that have occurred from time to time and compete to keep up with global changes in the field of education. Factors that have a major influence on the quality of an education can be seen in the processes and stages carried out in learning that are less effective and not on target. Changes that occur, especially in the field of education, are based on the existence of learning resources in the form of teaching topic, which become a basic guideline used in the field of education. This is also one of the references for students to be able to use them in the learning process as a reference medium.

In terms of teaching topic, this is one of the topics used by teachers to be able to carry out a learning process and is a guide for students to be able to understand the learning topic that will be carried out at meetings in the classroom. This teaching topic can contain an arrangement of learning topic that will be implemented and learning topic based on the existing curriculum so that they can achieve the desired goals and targets in the learning process at school. One of the most common examples that we know of is that the book itself has a very important function for both teachers and students as teaching topic, where the function of the book is as a guide for all activities

carried out in the teaching and learning process and also as a substance of competence and indicators that must be taught in the classroom in the learning process given to students.

Basically, there are many forms that can be used as teaching topic, including textbooks, print books, reading books, student worksheets (LKS), electronic books, video tutorials, and many others. As we know that the teaching topic used in Indonesia tend to be monotonous using textbooks, in today's era, when textbooks are used as teaching topic, they are no longer effective. Given that students are now more likely to use electronic media as a source of learning reference, there are already many learning resources or teaching topic that they can access easily with the gadgets they hold. So that gaining knowledge can be done wherever and whenever they are, not only in the school environment.

With the Covid-19 that hit Indonesia in 2019, the whole world, especially Indonesia, was a country that had the decision to stop all activities that were usually carried out, so that this outbreak or virus forced several activities, especially in the field of education, to be stopped, and high-ranking officials said that the government is not just silent but is taking steps to create other options so that the learning process in the education sector can continue as it should. The impact of the existence of Covid-19 is to divert the learning process that is usually carried out in schools or classes to be carried out *online* at various levels in the education sector. This decision was taken considering the safety and health conditions of the Indonesian people due to the impact of the Covid-19 pandemic virus, so the main focus of the government is to stop the spread of the Covid-19 pandemic virus in Indonesia (Merrisa & Abdul., 2021).

So that this makes technological developments quite rapid and indirectly affects the learning practices carried out, there must be an adaptation of the form of teaching topic used, even though the printed teaching topic physically provided in each school are still there. Now that the learning process has begun to gradually improve as before or is carried out with offline learning, electronic media, or e-books, can still be used and are still relevant to the learning process carried out in class. Basically, an e-book

is the result of an adaptation or development of an ordinary textbook that has a physical or printed form and is modified into a book that has a digital or electronic form.

Electronic books, commonly called e-books, are a form of topic that is very popular in this era and is usually used as teaching topic to assist the learning process in the classroom. This is because their use is more effective and flexible. So that students can easily access e-books whenever and wherever they are by using electronic media in the form of smartphones that they have without having to bother carrying physical books, which have other weaknesses. So that with the development of this e-book, it is integrated with the development of multimedia, which can be designed in such a way as we want, such as the presence of image, video, audio, or sound components, and many other features that can be developed to achieve the desired learning objectives in the classroom (Waryanto et al., 2017).

One of the ways to make the learning process more interesting and interactive is by developing electronic books. This keeps teachers and students from being left behind by advances and technological developments that are increasingly advanced, especially in the development of electronic books as teaching topic or for learning topic to be carried out at meetings or in the next learning process. This is not only dependent on teaching topic; it can also be seen from the learning media used to support the learning process. Is it appropriate and interactive so that students who use learning media are not easily bored and the goals of a learning process can be achieved according to the targets desired by the teachers, So that researchers or writers make titles of thesis proposals that aim to help solve problems in the development of electronic books with more interesting media and sophisticated media to keep abreast of developments in technology, information, and communication (ICT), which are increasingly developing in this day and age (Rahma & Delsina., 2019).

The title raised in writing or making this thesis is **Development of Electronic Book Using Canva Media Based on Flip PDF Professional on Biodiversity Topic for Class X SMA Negeri 2 Medan**. The title of the thesis that was raised based on the existence of a problem that existed at the location where the research was going to be

carried out. The problems that exist in schools so that researchers or writers raise the thesis title, is *Development of Electronic Book Using Canva Media Based on Flip PDF Professional on Biodiversity Topic for Class X SMA Negeri 2 Medan*, are as follows:

1. Lack of additional media that have complete information on biodiversity topic
2. If there is additional media on biodiversity, it will definitely be monotonous and tend to be uninteresting
3. There is no additional media regarding interactive biodiversity topic so that it can be used in the learning process in the classroom
4. According to the results obtained from the questionnaire in the initial observation activities of the students, as many as 50% have never used e-books for learning support or reference
5. The learning outcomes of students regarding biodiversity topic tend to be quite low and even only reach the minimum completeness criteria (KKM), namely 75

After explaining the problem of student learning outcomes in biodiversity topic, it becomes a reference for researchers or writers to make biodiversity e-book products that are complete, interactive, and interesting to be able to improve student learning outcomes, where effectiveness in improving student learning outcomes in this research was carried out by conducting pretest and posttest tests, which will be tested directly on the class that will be used as the object of research in this thesis. The idea raised for the process of making this E-Book is based on problems that exist and arise in the SMA Negeri 2 Medan environment, which will be studied. After the first observation process or activity is carried out by interviewing the biology teacher, the results obtained show that students are more enthusiastic if learning is carried out with interesting variations. For example, the use of PPT media that supports learning and other interactive media, such as Google Classroom, so that the learning process carried out in the classroom is not monotonous.

So, from the explanation above, researchers or writers of this biodiversity e-book chose Canva media, which can help the process of making biodiversity e-books. This Canva medium has several features that facilitate the process of designing or creating biodiversity e-books. For example, **(1) design features** (which contain the design model templates that we will use), **(2) element features** (which contain elements that can support the creation of a biodiversity e-book), and **(3) text features** (which contain various types and models of text that can be used to design writing for e-book creation), **(4) upload feature** (contains a place for us to upload some photos or videos imported from other media such as the internet that will be added to the biodiversity e-book design), **(5) image feature** (contains several tools to be able to draw directly on the sheet of paper to be designed), **(6) project features** (containing a collection of projects or designs that we previously made), and it can be concluded that this electronic book development medium was made using *Canva* and with the help of *Flip Pdf Professional*.

The development of this e-book was made with the title biodiversity which is one of the chapters contained in biology learning in semester 1 or odd semester was chosen because according to the author or researcher from the results of first observations made by the biology teacher it was stated that this biodiversity topic is quite complex topic and can be said to be difficult if the discussion is not appropriate but sometimes this biodiversity topic is explained briefly and even overlooked so the researcher or author of this e-book makes a development based on the title biodiversity which is more complete, complex and interactive so that the topic can be studied again in more depth.

Biodiversity can make us as individuals or living things better understand the existence of diversity that exists on this earth, so that it makes us as living things try to protect or maintain the survival or sustainability of diversity in the topic. The scope is also quite broad or complex, where we can also explain the whole nature, be it plants, animals, or other microorganisms that live on our earth. Therefore, with the development of biodiversity topic, it becomes topic that is necessary or important to

learn at the school level, and the explanation and delivery of this topic can be done in any medium that can be easily digested and understood by students at school.

The developments made on this biodiversity e-book product certainly have advantages and disadvantages that are described or felt by many people, and the possibility of the response will be different, so that if this biodiversity e-book is not 100% efficient in the learning process carried out in class, this can be corrected by revising the content contained in it or by making the content interesting and interactive, and the content must be in accordance with the basic competencies and indicators to be achieved in the learning process so as to minimize the inefficiency of the e-book being developed. Basically, this biodiversity e-book was created or developed to be used as an additional book or reference book to support the learning process in the classroom on biodiversity topic.

From the title raised in the writing of this thesis, **Development of Electronic Book Using Canva Media Based on Flip PDF Professional on Biodiversity Topic for Class X SMA Negeri 2 Medan**, the following will explain and describe some of the previous research related to the thesis title:

1. According to Hidayah et al., 2023, with the research title "Learning Moving Topic for Students Using Canva Video Media," the use of Canva media for the process of developing learning media is very helpful with some of the advantages possessed by Canva, so that it can support every step of the design carried out for making learning media in the form of videos using Canva, and with the development of this learning media, it helps in the learning process in the classroom, and everything in the learning videos is integrated with problems that occur in the school environment at SDN Cikasungka 2 Tangerang.
2. According to Wiryani et al., 2021, with the research title "Pengembangan Media Pembelajaran Berbasis Website Canva Materi Manusia Pedukung Gua Putri & Gua Harimau," the test results obtained in this study are valid, which are described based on the overall assessment of expert validators,

and the learning outcomes of students have increased by 45% using n-gain calculations, so from this study it can be concluded that the title of this study has a valid validity and effectiveness value and is suitable for use as a learning medium used in class.

3. According to Hapsari & Zulherman., 2021, with the research title "Analisis Kebutuhan Pengembangan Media Vidio Animasi Berbasis Aplikasi Canva pada Pembelajaran IPA," the results of an analysis of the needs of teachers in nine elementary schools in Jakarta and Wonogiri show that the value obtained is 90%, stating that the Canva application-based video media is attractive for use in the learning process in the classroom, and the results of the analysis carried out on students show a value of 91.4%, stating the need to use video media based on the Canva application to assist the learning process of science that will be done in class.

1.2 Problem Identifications

From the description of the background of the problem above, it is easy to identify the problem as follows:

1. Teaching topic and learning media for students used to support and assist the learning process are still monotonous, using printed books or textbooks that have been provided by the school.
2. There are very few free e-books that students can easily access that are integrated with several supporting features, such as pictures, videos, and many other features.
3. Develop an interactive and more interesting E-Book for biodiversity topic.
4. There are still very few teaching the topic and learning media in the form of E-Books that discuss biodiversity topic specifically and in detail.
5. Students' low understanding of biodiversity topic, which makes students really need additional reading sources to be able to add insight.

1.3 Problem Scope

There are several points taken from the problem scope of this research, as follows:

1. E-Book creation and development: The scope of this research is very focused on the creation and development of E-Books using *Canva* media and *Flip PDF Professional*. This also focuses on the process of making templates, layouts, fonts, colors, images, and various alternative features that can be used to increase students' interest in using this interactive E-Book.
2. Biodiversity topic: The scope of this research is also limited and focuses on one topic, namely biodiversity topic, as the main topic raised in the process of making and developing the E-Book. This biodiversity topic also has several existing topics, usually referred to as sub-chapters, namely the definition of biodiversity, types of biodiversity, the benefits of biodiversity, and the importance of being able to preserve or protect the biodiversity environment.

1.4 Problem Limitations

There are several points that are limitations of the problem in this study, namely:

1. E-Books will be developed by focusing on Biology subjects and biodiversity topic.
2. E-Book research is based on research on biodiversity topic or subjects using *Canva* media.
3. E-Book development is carried out to find out how appropriate the E-Book is to be used as teaching topic, learning media, and as a learning resource that is tested by validators, such as content experts, teaching learning experts, design experts, and the results of opinions, assessments, and responses from subject teachers and students at school.

1.5 Problem Formulation

From the limitations of the problems that have been described above, the problems that exist in this study can also be formulated as follows:

1. What are the results of the assessment and responses of the content expert validators regarding the eligibility of the E-Book on Biodiversity topic?
2. What are the results of the assessment and responses of the teaching learning expert validators regarding the feasibility of the E-Book on Biodiversity topic?
3. What are the results of the assessment and responses of the design expert validator regarding the eligibility of the E-Book on Biodiversity topic?
4. What are the responses from biology teachers and students regarding the E-Book products developed as teaching topic and learning media for Biodiversity topic?
5. How is the effectiveness of the E-Book on Biodiversity topic based on the assessment of student learning outcomes?

1.6 Research Objectives

Based on the formulation of the problem described above, it can be seen that the purpose of this research is as follows:

1. Know the results of the assessment and responses of content expert validators regarding the eligibility of E-Books on Biodiversity topic.
2. Know the results of the assessment and the responses of teaching learning expert validators regarding the feasibility of E-Books on Biodiversity topic.
3. Know the results of assessment and responses of the design expert validator regarding the eligibility of the E-Book on Biodiversity topic.
4. Knowing the responses from biology teachers and students regarding E-Book products developed as teaching topic and learning media for Biodiversity topic.
5. Knowing the effectiveness of the E-Book on Biodiversity topic based on the assessment of student learning outcomes.

1.7 Research Benefits

Based on the research objectives described above, it can be seen that the benefits of this research are as follows:

1. Theoretical benefits

As for some of the theoretical benefits that can be taken, they are as follows:

- a) Increase knowledge specifically about Biodiversity topic.
- b) Become a guideline or reference to be able to further develop similar studies in the future.
- c) It is an additional reference that can be used in the learning process in the field of Education, especially in Biodiversity topic.

2. Practical Benefits

a) For students

As topic to assist students in increasing learning interest and student learning focus in an effort to reduce student learning difficulties with this more interactive media.

b) For teachers

As a medium to be able to help teachers in the learning process carried out in the classroom and is also useful for increasing learning process activities that are more interactive and interesting, as well as the objectives of the learning process to achieve the desired target or goal.

c) For researchers

As topic to add references for students or prospective teachers in knowing and improving skills in the learning process of students with interactive and interesting media for use in class.