ICHSS

THE 2nd INTERNATIONAL CONFERENCE OF HUMANITIES AND SOCIAL SCIENCE
"Freedom to Learn in Education, Social, Religious, Culture, and Language Perspective"

FLIP PDF PROFESSIONAL APPLICATION AS ICT-BASED LEARNING MEDIA IN THE ERA OF *MERDEKA BELAJAR*

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Abstract. In the midst of the rapid development of Information and Communication Technology (ICT), the learning process as a means of transferring knowledge should also be able to adapt. Moreover, entering the era of *Merdeka Belajar* which is the government's strategic step in transforming education for the realization of superior Indonesian Human Resources (HR) who have the profile of Pancasila students. One form of adaptation can be through the internalization of ICT in every learning implementation. This allows students to be directly involved in technological developments that are running increasingly unstoppable. Interactive E-book is an alternative ICT-based learning media that has many advantages and can be adopted into learning easily and practically. Learners can utilize it anywhere and anytime through their computers, laptops, or mobile phones. On the other hand, the utilization of Interactive E-book allows teachers to be able to create effective and efficient interactive learning media. The application that is quite interesting and can be used to make Interactive E-books is the Flip Pdf Professional application. This is based on its features that can be used by teachers to design learning that is oriented towards ICT adaptation, distance learning systems, student learning independence, and high student participation in the learning process. The Flip Pdf Professional application allows teachers to create concise but complete lesson media, starting from apperception, core material, examples of material in various formats (sound, image, video), sample exercises, up to practice questions or final assessment.

keywords: learning media, flip pdf professional, *merdeka belajar*, pancasila students.

INTRODUCTION

The purpose of education consists of many things, one of which is to be able to open one's mind. A person who has insight will be able to compete in today's global era. Based on these goals, education cannot be separated from technological advances. Technological advances should be directly proportional to the progress of education, be it in the planning process, implementation, the resulting output, as well as the evaluation and decision-making process or policies. In the midst of the rapid development of Information and Communication Technology (ICT), the learning process as a means of transferring knowledge should also be able to adapt. Moreover, entering the era of *Merdeka Belajar* which is the government's strategic step in transforming education for the realization of superior Indonesian Human Resources (HR) who have the profile of Pancasila students. One form of adaptation can be through the internalization of ICT in every learning implementation. The rapid development of technology and the ease of obtaining information will easily provide alternatives to innovate in the selection and creation of learning media that are more effective and efficient to be implemented in the classroom. This also allows students to be directly involved in technological developments, especially considering that the purpose of learning is to prepare students to be able to live their adult lives in society.

Sadiman (2014) argues that various equipment can be used to convey teaching messages to students through sight and hearing to avoid verbalism that might occur if only using visual aids alone. Therefore, teachers must be able to create learning media from various equipment, in this

case the development of media created by computer and IT experts that can be used to convey teaching materials. Many IT products can be used by teachers, including Interactive E-books based on the Flip Pdf Professional application which will certainly be able to optimize knowledge transfer activities that occur in the classroom.

Khairinal et al., (2021) have conducted research on the development of E-book learning media based on Flip Pdf Professional to increase learning independence and student interest on economic subjects for students in class X IIS 1 SMA Negeri 2 Kota Sungai Penuh. Based on the results of the trial use of the student learning independence questionnaire assessment of the E-book developed with an average score of 80% with the criteria "Good" and the category "High". From these responses it is concluded that the E-book developed can increase student learning independence; in addition, based on the results of the trial use of the student interest questionnaire assessment of the E-book developed with an average score of 83% with the criteria "Good" and categorized as "High". From these responses, researchers concluded that the E-book developed could increase students' interest in learning.

Febrianti (2021) has also conducted similar research with the results of validation by two expert validators of the Flip PDF Professional-based digital book getting an average score of 4.7. Then, the effectiveness results are reviewed from three aspects, namely pretest, posttest, and N-Gain. The pretest results showed that the average student score was 50 and the posttest score showed 87, and obtained an N-Gain criterion of 0.74 in the high category. Thus, the Flip PDF Professional-based digital book product developed can be used in ecosystem learning in grade V elementary school. From the two examples of results above, it can be understood that the Flip PDF Professional-based E-book has a significant positive impact when used as an alternative learning media for students while adapting it to the technology that will certainly be faced in their social life in the future.

RESULT AND ANALYSIS

1.1 ICT and Learning in the Era of *Merdeka Belajar*

Education is basically an activity or process of helping humans develop themselves towards maturity of attitudes and behavior, so that they are able to face all changes and problems in their life journey. Furthermore, education should be something that must be fulfilled to improve the standard of living of the Indonesian people in order to be able to be equal and side by side with other nations. Therefore, the formulation of the national education system should be able to ensure equitable education for all Indonesians in order to face the times in the realm of science and technology. This is based on the fact that education, as a knowledge transformation activity, develops in line with technological developments. As stated by Ngafifi (2014), technological progress will run in accordance with scientific progress and every innovation is created to provide positive benefits for human life. Thus, it is not wrong to say that in the current era of globalization, mastery of technology is a prestige and indicator of a country's progress. Countries are said to be developed if they have a high level of technological mastery (high technology), while countries that cannot adapt to technological advances are often referred to as failed countries.

In connection with the discussion about the harmony of education and technology, it should be understood that this will really go hand in hand if the implementation of education is packaged with appropriate technology. This means that the implementation of learning in the classroom is carried out by utilizing technology-based media that is available and in accordance with the criteria of the material to be provided. According to Sudjana and Rivai (in Afandi, 2017) in the teaching and learning process, there are two most influential aspects, namely teaching methods and media as teaching aids. At this point, it can be understood that technology can take on one of these important roles, namely as a medium that will be an aid to teaching. Of the various technologies available in human life, one that is relevant to be presented and functioned in the implementation of learning in the classroom is Information and Communication Technology (ICT) or in circulation it is also familiarly called ICT (Information and Communication Technology). This is considering the rapid development of ICT in recent years, namely in accordance with data released by BPS in

2020 which shows that Indonesia's ICT Development Index (IP-ICT) is 5.59 on a scale of 0-10. This value increased when compared to 2019, where the index was 5.32 (https://www.bps.go.id/, 2020).

The term technology adaptation is also inherent in the frame of a new learning breakthrough that is being implemented in Indonesia. The breakthrough is called *Merdeka Belajar*. The *Merdeka Belajar* policy, which has been present in Indonesia since 2019, is a strategic step by the government in transforming education for the realization of superior Indonesian Human Resources (HR) who have the profile of Pancasila students. According to Ammas (2021), the spirit of innovation and change is the first spirit of the *Merdeka Belajar* program to be implemented in the Indonesian education sector. This is reinforced by the opinion of Yamin & Syahrir (2020) which states that in the era of the industrial revolution 4.0, the education system is expected to realize students who have skills capable of critical thinking and problem solving, creative and innovative as well as communication and collaboration skills. In addition, it is also very necessary to have the skills to find, manage and convey information and skillfully use information and technology.

According to the Ministry of Education and Culture, *Merdeka Belajar* is giving freedom and autonomy to educational institutions and freedom from bureaucratization, lecturers are freed from complicated bureaucracy and students are given the freedom to choose the fields they like (D. J. P. Tinggi, 2020). Minister of Education and Culture Nadiem Anwar Makarim wants to create a happy and conducive learning atmosphere for students at various levels, starting from primary, secondary, and tertiary levels through the *Merdeka Belajar* policy that was formulated. According to him, Merdeka Berlajar departs from the desire for educational output to produce better quality and no longer produce students who are only good at memorizing but also have sharp analytical skills, reasoning and comprehensive understanding in learning to develop themselves (Suhartono, 2021).

Through the birth of this *Merdeka Belajar* policy, the Ministry of Education and Culture hopes that the implementation of the curriculum in the learning process must be carried out in a fun way. Then, if this process is developed with innovative thinking from teachers, this can foster a positive attitude of students in responding and playing an active role in learning. *Merdeka Belajar* is a natural learning process in achieving freedom of thought and innovation in education. The essence of *Merdeka Belajar* is to explore the greatest potential of teachers and students to innovate and improve the quality of learning independently. The independence referred to in this case is not only following the educational bureaucratic process but innovations that can advance education in producing globally competitive human resources (Suhartono, 2021).

Teachers and educators as the leading element in the implementation of learning play an important role in ensuring that students' learning outcomes continue to meet the predetermined standards and targets. On the other hand, technology is also inseparable from life. If we look deeper, currently there are various things in daily life that require or involve technology in it such as population administration, education services, health, to the standardization of job vacancies. An alternative that can be chosen is to use ICT to help achieve the learning achievement targets of students as well as familiarize students with technological developments or ICT to ensure they are truly ready to socialize and compete when returning to society.

1.2 E-book

Reading is an activity of absorbing information that is mediated by writing. The writings initiated by the author are spread in various forms. However, when discussing the term reading, it is certainly closely related to books. People have long been accustomed to juxtaposing the two terms for their daily use. Books are the most common means used to seek information or knowledge through reading activities. Over time, books have also undergone many developments, both in terms of information content, genre, size, and shape. One of the transformations of books that is currently quite massively used by various groups is E-books.

According to Shiratuddin (in Restiyowati & Sanjaya, 2020), E-book or electronic book is a textbook that is converted into a digital format, E-book also has the meaning of a learning environment that has an application that contains a multimedia database of instructional resources that stores multimedia presentations on topics in a book. Meanwhile, according to Alwan (in Khairinal et al., 2021) Digital Book or often called E-Book (Electronic Book), in the world of

education is a publication in the form of text and images in digital form that is produced, published, and can be read through a computer or other digital device. So, it can be said that this E-book is a digitization of conventional reading media such as magazine books, newspapers, tabloids, journals, and the like.

In line with the above, Khairinal, et al. (2021) describe that Digital Book is an electronic book of a traditional book with digital features that can help readers and is an attractive tool for most students. Digital books are proof of the development of advanced technology that is expected to develop over time to renew traditional paper books for a prospective future. There are many formats of electronic books that can be used as a reading medium to replace these books. The formats also have their own popularity. As for the popularity, it can be influenced by the availability of various electronic books (content) in that format and the availability and ease of operation of software and hardware as a reading tool. These formats include: 1) Plain text; 2) PDF; 3) JPEG; 4) LIT; 5) Docx; 6) HTML; and 7) Open Electronic Book Package format.

According to Heryana (2020), traditional or physical books in reality are still the main choice. However, in order to respond to developments in the era of technology like now, there needs to be a solution as an effort to cultivate literacy in the midst of modernity. Electronic books or E-books are present as a form of providing access to in-depth knowledge through digital media with all its advantages and disadvantages. E-books are present in this context, because E-books are an evolution of physical books. The difference is only in the form of delivery, E-book is an abstraction of physical books in digital form. This is certainly relevant to the paradigm that exists in today's generation which indeed tends not to be able to escape the use of digital media and the internet as a means of supporting its activities. Therefore, the existence of E-books is certainly one of the things that can be used as ammunition to maintain interest in reading and literacy culture for current and future generations.

E-books in their development should be interpreted as an alternative media in obtaining in-depth reading sources through digital media. Therefore, it is necessary to understand the advantages offered by E-books when compared to physical books so that their utilization can also be more optimal. According to Heryana, (2020) the advantages found in E-books can be described as follows.

1.2.1 Practical and Accessible

The use of E-books is very easy and practical by capitalizing on electronic devices such as cellphones that can access them anywhere and anytime. In addition, it can also be used in between uses and activities through smartphones because it does not require physical containers such as bookshelves. In addition, tens to thousands of E-book titles can be stored in one device, even small devices such as smartphones as long as storage is available (memory).

1.2.2 Cheaper (Economical)

The cost to obtain an E-book is cheaper than the price of a printed (physical) version of the book. In addition, there are relatively many websites or channels that free their collections for download by anyone who intends to use them.

1.2.3 Environmentally Friendly

The main material for making paper and books is physically trees. The more books are printed, the more trees are cut down in nature. On the other hand, E-books do not require this material because if you want to double the quantity of E-books, there are many features that support this (share, copy, download, paste).

1.3 Interactive E-book Based on Flip Pdf Professional Application

There are various hardware and software in ICT that can be empowered in learning, including computers, cellphones, internet networks (Cellular or Wifi). In addition, as mentioned at the beginning of this discussion that technology can take one important role, namely as a medium that will be an aid to teaching, ICT can also be optimized to become an intermediary for the delivery of material (knowledge) provided by educators to their students. There are various ICT-based products which in fact can be utilized to develop learning media. One of them is the Flip Pdf

Arief Setyawan[1], Fiyan Ilman Faqih[2]
Flip Pdf Professional Application as ICT-Based Learning Media in the Era of *Merdeka Belajar*

Professional application which can function as an Interactive E-book builder (maker) so that it allows educators to create learning media that is attractive and according to the criteria of the teaching material they want to convey.

Flip Pdf Professional is an application that can be used to convert PDF publications of digital flipping pages that make it possible to create interactive learning content with several supporting features. Flip Pdf Professional is different from the pdf that is usually used. In terms of appearance, Flip Pdf Professional is like an E-book display that can be flipped when reading it (Khairinal et al., 2021). From here, it can be understood that E-books made using Flip Pdf Professional can look and use like physical books in general. This is because there is a feature that illustrates the sound of sheets of paper being opened page by page and the animated display of page opening as in a real physical book. An example can be seen in the image below.

Fig 1. *E-book Page Display Created Using Flip Pdf Professional*

It should be understood that the Flip Pdf Professional application above is not a standard application built into the Windows program. Therefore, if you want to operate it, the installation process is required first on your computer/laptop device. For installation, you can directly download and activate through the website https://www.flipbuilder.com/flip-pdf-pro-for-windows/ or other sources that are credible and can be accounted for legality.

The features that are excess in the Flip Pdf Professional application are as follows (Flipbuilder, 2022).

1.3.1 Easily convert files from various options such as regular pdfs into E-books that have realistic flipping effects (Page-flipping E-books), combine pdfs into one Page-flipping E-book, and convert a number of pdfs at once into Page-flipping E-books in sequence.

1.3.2 Provides a variety of templates, themes, animation scenes that can be quickly customized to meet users' needs in creating interactive E-books. Users can also create their own templates, themes, animation scenes and then save them in the application system so that they can be accessed and reused at a later date.

1.3.3 Create a table of contents that will make it easier to navigate through the contents for the pdf/E-book.

1.3.4 Provide controls for various settings such as adding a button on the page to open a page link (trigger) linked to Javascript or loading files in a pop-up window (image, video, sound).

1.3.5 Can add a password to maintain security or provide a watermark to maintain the originality of the Page-flipping E-books that have been created.

1.3.6 Supports flexible output formats, such as html, exe, zip, Mac App, mobile version (android/iPhone) and burning to CD so that it can be adjusted to the device or program that will be used to open it.

Arief Setyawan[1], Fiyan Ilman Faqih[2]
Flip Pdf Professional Application as ICT-Based Learning Media in the Era of *Merdeka Belajar*

Based on the description of the utilization of the Flip Pdf Professional application for making interactive E-books above, it is hoped that the resulting media is relevant and can be an alternative for use as learning media in the education system in the current era of *Merdeka Belajar*. The distribution and use system is relatively easy because it has several options, be it delivered in the form of html (web), computer applications (exe), andoid applications (apk), or in the form of url links and shared online via social networks such as Whatsapp, Email, Facebook, Twitter, Google, Instagram, Yahoo, and so on. In addition, the resulting E-book is also quite effective and efficient because it is in the form of multimedia learning media (there are sounds, images, videos that can be integrated in it) which generally attracts students and encourages their desire to learn more. This is in accordance with what Darmawan (in Ariyanti et al., 2020) said about the characteristics of multimedia learning which include the following.

1. Contains representative material content in visual, audio, and audiovisual forms.
2. Various communication media in use.
3. Has the power of colour language and object resolution language.
4. Varied types of learning.
5. Varied learning and reinforcement responses.
6. Develops the principle of self-evaluation in measuring the learning process and results.
7. Can be used classically or individually.
8. Can be used offline or online.

Starting from the ease of operation, the advantages possessed and also its suitability with the characteristics of multimedia learning media that have the potential to encourage students' desire to learn, it is quite feasible if the Flip Pdf Professional application is utilized to develop interactive E-books as a means of educating students. Moreover, in the development of technology that has entered this digital era. The use of E-books in this digital era has implications for the ease of daily human life, especially those related to reading activities (Makdis, 2020).

The other side that needs to be understood before maximizing the use of E-books created with the Flip Pdf Professional application is its shortcomings or weaknesses. This is so that when the utilization process has not encountered problems in the middle of the road or afterwards. According to Makdis (2020), the disadvantage of E-books lies in convenience. Reading E-books for long never provides comfort like printed books. There are complaints from readers when reading E-Books for too long. The eyes become sore or feel tired. This is due to the effect of staring at the monitor screen (there is a maximum limit). Therefore, the advantages and disadvantages of E-books must be understood so that they can be utilized as best as possible.

CONCLUSION

Entering the Era of *Merdeka Belajar* accompanied by the rapid development of ICT/ICT, the learning process as a means of transferring knowledge must be able to adapt. One form of adaptation can be through the internalization of ICT in every learning implementation. This allows students to be directly involved in technological developments that are running increasingly unstoppable. Interactive E-book is an alternative ICT-based learning media that has many advantages and can be adopted into learning easily and practically. Learners can utilize it anywhere and anytime through their computers, laptops, or mobile phones. On the other hand, the utilization of Interactive E-book allows teachers to be able to create effective and efficient interactive learning media. The application that is quite interesting and can be used to make Interactive E-books is the Flip Pdf Professional application. This is based on its excellent features that can be used by teachers to design learning that is oriented towards ICT adaptation, distance learning systems, student learning independence, and high student participation in the learning process. The Flip Pdf Professional application allows teachers to create concise but complete lesson media from start to finish. However, everything certainly has disadvantages that can be taken into consideration to utilize it wisely.

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