

The Development of E-Book Learning Media in Class Management Course

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Abstract. This study's goal is to know the feasibility of e-book learning media on Class Management course at Elementary School Education study program, Faculty of Science Education, State University of Medan. The ADDIE model, which stands for analysis, design, development, implementation, and evaluation, is used in this type of research. Questionnaires for media expert and material expert are the instruments used to collect data. The results of the feasibility analysis show that for the material, material expert gives an average score of 4.59 which was included in "the very good" category and for the media, media expert gives an average score of 4.63 which was included in "the very good" category.

Keywords: E-Book, Class Management Course, Design Feasibility, Material Feasibility

1 Introduction

The growth of education, which is a key component of a country's prosperity, is now a challenge for Indonesian society. The importance of education in human existence cannot be overstated. The growth of people as well as society has to be balanced and perfected, which requires education. Education as an endeavor to improve children's morals, minds, and bodies in order to promote life's perfection, namely living and raising children in harmony with nature and society [1]. The quality of education today and in the future, as well as the caliber of graduates it produces, are influenced by a number of educational factors. The elements of education are: (1) goals; (2) subject educators; (3) educators; and (4) environment [2]. As a result, education is crucial to ensuring the growth and stability of the country's life. Education is a labor-intensive process that aims to create clever, talented, and creative people who can compete in the face of technological advancements.

The objectives of national education are to: (1) equip students to be intellectually and/or professionally competent members of society; (2) create and distribute science, technology, and/or art; and (3) use these things to improve national culture and boost communal standards of living [3]. When lecturers can develop educational materials that are suitable for the subject matter and the maturity level of college students, learning will be more effective and successful. In order to prevent college students from becoming disengaged from their studies and to make learning activities more engaging and fruitful, it is possible to improve interaction in the learning process by using the correct learning media. Learning media refers to various

forms of media, such as books, videos, audio recordings, interactive software, and online resources, that are designed to support and enhance the learning process. These educational materials are created to provide information, facilitate understanding, and engage learners in acquiring new knowledge or skills. Learning media can take many different formats and serve various purposes depending on the subject, target audience, and educational goals. Here are some common examples of learning media:

- a. Textbooks and printed materials: Traditional textbooks are a fundamental form of learning media that provide structured information and learning activities across different subjects. Printed materials like handouts, worksheets, and study guides also fall into this category.
- b. Digital media: With the advancement of technology, digital media has become increasingly prevalent in education. This includes e-books, online articles, digital magazines, and interactive multimedia resources that can be accessed through computers, tablets, or smartphones.
- c. Videos and animations: Visual media, such as educational videos and animations, can effectively convey complex concepts, demonstrate experiments, or illustrate processes. These media formats are often used in blended or online learning environments.
- d. Audio recordings and podcasts: Audio-based learning media can be useful for auditory learners. They include recorded lectures, podcasts, audiobooks, and language learning resources that focus on listening and comprehension skills.
- e. Interactive software and simulations: educational software and simulations allow learners to actively engage with the content, practice skills, and explore virtual environments. These tools can be particularly effective for subjects like science, mathematics, or language learning.
- f. Online learning platforms and courses: Learning management systems (LMS) and online platforms provide a range of educational resources, including multimedia content, assessments, discussion forums, and collaboration tools. These platforms facilitate remote learning and often offer structured courses on various topics.
- g. Gamified learning: Gamification incorporates game elements, such as points, badges, and leaderboards, into the learning process to enhance engagement and motivation. Educational games and gamified applications can be effective for reinforcing concepts and fostering problem-solving skills.
- h. Augmented reality (AR) and virtual reality (VR): Through simulations using virtual spaces, AR and VR technologies create immersive learning experiences by displaying digital content into the real world.

These are just a few examples of learning media, and the field is constantly evolving as technology advances. The choice of learning media depends on the educational context, learning objectives, and the preferences and needs of learners and educators.

The use of the proper learning media will result in successful learning outcomes, such as altered behavior in college students. Utilizing learning media is one technique to get concepts through to college students effectively and overcome communication breakdowns. Learning media now plays a role in the process through which college students can have memorable learning experiences. Learning media serve a crucial function in the classroom. There are many references about the functions of learning media. The functions of using learning media are to: (a) present actual objects and rare objects in learning, (b) make duplications of actual objects in learning, (c) make abstract concepts to concrete concepts, (d)

give similar perceptions to all learners, (e) overcome obstacles to time, place number, and distance in learning, (f) consistently re-present information to learners, and (g) provide learners with a non-stressed, relaxed, and engaging learning atmosphere [4]. The other functions of learning media are divided into 5 other types: (a) educational function, this is because learning media affects the learning process and outcomes which will certainly also affect education, (b) social function, namely through learning media, students get the opportunity to develop and expand interaction between students, interaction with society and interaction with the surrounding nature, (c) economic function, meaning that learning media can be used intensively, for example, one tool can be enjoyed by a number of students and can be used continuously, this happens due to technological advances, (d) political function, meaning that learning media can be used by educational masters to express views and teaching between the center and the regions in the implementation of teaching, and (e) the function of cultural arts, namely through educational media, students can obtain and get to know various cultural art results of human works [5]. Next, learning media has several functions, namely: (a) the function of attention, which is to make students feel interested in convergency, (b) affective function, learning activities to read illustrated texts so as to make students enjoy learning, (c) cognitive functioning, in this case can facilitate the achievement of goals to understand and remember information, and (d) compensatory function, providing excuses to help the understanding of the text of the content of the lesson presented [6].

Along with the sophistication of scientific and technological advancement, learning media utilization is also becoming more advanced. In order for learning implementers to fully appreciate the benefit, which include their ability to hasten the dissemination of information, facilitate students' comprehension, and other things. The advantages of learning media are discussed in several literature. The advantages of using learning media are: (a) giving criticism to help improve learning that has already occurred or will soon be scheduled, (b) the subject topic for students who are more functioning and perceive its advantages, (c) delivering enrichment opportunities to students based on what they have expressed, (d) acquaint the student with the material to make them more persuadable about the lessons being taught, leading to an increase in the student's esteem and appreciation, (e) By comparing the learner's concepts with those he acquires outside of school, the learner's feelings will become deeply ingrained in him, and (f) indirect comparison of the information gained from learning media outside of the classroom with that provided by the teacher [7]. The other advantages of learning media then include: (a) learning messages and information can be communicated in a more compelling, concrete manner than just through written or spoken words (verbalistic); and (b) they can transcend the constraints of time, space, and sensory capacity. For instance, a massive object could be substituted with reality, pictures, frame videos, movies, or models. Film footage, videos, and other media can be used to replay current events or past occurrences. It is possible to present too-complex objects using models, diagrams, and other tools, (c) improves students' active attitude in learning, (d) creates interest and desire for learning, (e) enables students to interact with reality and the environment more directly, (f) provides for personalized learning based on each student's skills and interests, and (g) provides students with the same stimulants, experiences, and perceptions [8]. Then, the advantages of using learning media are: (a) make concrete abstract concepts. Through the use of learning media, concepts that are still seen as abstract and challenging to explicitly explain to students can be made concrete so that students can understand the course material, (b) can bring materials into the learning environment that are excessively risky or difficult. For example, the teacher explained with the television media about the beasts that could not be presented in the classroom directly, (c) can introduce items into the learning environment that

are overly big or little. For example, the teacher will show airplanes or bacteria through the medium of images, and (d) may display motions that are overly quick or slow. For example, the teacher will show the movement of darting arrows or the growth of sprouts [9].

Learning media come in a wide range of classifications, and lecturers can use a number of learning media to create new lessons every day. For lecturers to be able to increase their college students' interest in studying, several learning media are required. Learning media is one method that is considered effective for creating a more optimal learning process. This aims to motivate positive results from a learning process so that later it will achieve the planned goals. There are many references about the variety of learning media. There is a viewpoint that claims that as technology, information, and communication (ICT) have advanced, there have been changes in the sorts of learning media. These newer learning media include: (a) audio media, media that relies on sound capabilities, such as radio, cassette tapes, vinyl records, and MP-3; (b) visual media, media that relies on the sense of sight, such as photographic media, images, graphics, and posters; (c) audiovisual media, which includes both sound and visual components and includes things like television, videotapes, and video compact disks (VCD), (d) animated media, that is, moving images/ graphics made by recording still images, then the recording of these images is played back in sequence so that they are seen no longer as each separate image, but as a unity that produces the illusion of uninterrupted movement. While the animation's characters are made up of two-dimensional (2D) and three-dimensional (3D) images that represent people, animals, or other real objects, animated characters can be perceived as images that contain objects that appear to be alive because of the collection of images' regular and alternate display changes. Writing, object shapes, colors, and special effects are all examples of objects that can be seen in an image, and (e) multimedia, which combines a variety of elements including audio, visual, audio visual, and animation, as well as text, graphics, images, and photos, can also be considered [10]. Next opinion classifies media on the basis of the complexity of a medium. On that basis, this opinion divides media into two groups, namely: (a) large media (expensive and complex media) which include major media for example: film, television, and NCD video, and (b) small media (simple and cheap media) which includes small media for example: slides, audio, transparency, and text. In addition, this opinion also distinguishes the media on the basis of its reach, which is: (a) mass media (the coverage is wide and simultaneous) which includes mass media are radio and television, (b) group media (the coverage is as wide as a certain room), which includes group media are: audio, video, OHP, and slide tapes, and (c) individual media (for individuals), those that include individual media are: textbooks, telephones, and learning computer programs (CAI) [11]. According to the opposing viewpoint, there are different categories into which learning media can be categorized.

- a. Judging by their characteristics, the media can be divided into:
 - 1) Auditory media, also known as media with only a sound component or media that can only be heard.
 - 2) Visual media, which is a kind of communication in which sound is not present and can only be seen.
 - 3) Audio-visual media, a kind of media that in addition to including audio components also includes visual components, such as visible images.
- b. Judging from its range ability, the media can also be divided into:
 - 1) Media with a broad and concurrent coverage power. Students should be able to learn about real items or events while using this medium, without the need for a dedicated space.
 - 2) Media has a finite amount of time and space for coverage.

- c. Judging from the way or technique of use, the media can be divided into:
- 1) Projected media. To project this form of media, special projection equipment is needed, such as a film projector, a slide projector, or an OHP. The media cannot operate without this support tool.
 - 2) Unprojected media [12].

Then, opinion found expressed that grouping learning media based on technological developments, namely: (a) print technology media. The media group of print technology results includes text, graphics, photographs or photographic and reproductive representations, (b) audio-visual technology produced media. Audio-visual teaching has the characteristic of using hardware during the teaching and learning process, such as projectors, films, and tape recorders, (c) computer-based technology media. The difference between media produced by computer-based technology and those produced by print technology and audio-visual technology is because information or material is stored in digital form, and (d) media combined print and computer technology. This media generates and stores material by combining the use of several forms of computer- controlled media [13].

As a learning media, the e-book is very important for lecturers and college students. Digital book is often called e-book (electronic book). There are many statements about e-book. A digital book is an electronic book from a traditional book with digital features that can help readers and is an interesting tool for most students. Digital books are a form of realization of technological developments which are expected to continue to innovate in order to be able to renew books made of paper material so as to create a prospective future [14]. Next, e-books are books that are programmed into a computer so that they can visualize abstract material into visual form and can also be animated so that it makes it easier for students to understand the material and can better attract students' attention to follow the learning process which in the end can increase student learning success [15]. Then, e-books have benefits to support the learning process, namely: a) students can be seen as active because there is an interesting learning and learning process that has a deep meaning, b) students can incorporate new creative ideas into their pre-existing knowledge to understand the meaning or curiosity and doubts that have been in their minds, c) allow students to work together in groups, d) allows students to actively and enthusiastically strive to achieve the desired goal, e) learning situations are more meaningful, and f) allow students to be aware of what they have learned [16]. The other claim stated that the benefits of digital books include: a) they are easy to carry because they are soft copies that readers can use in portable electronics, b) it is not heavy because the digital book only needs to be put in a folder inside the portable electronics, so what is carried is only a portable digital device, c) it is simple to duplicate because the digital book is simple to copy for free so that it will save money and support learning needs, and d) paper is not needed because of the advantages of digital [17]. Different statement found that expressed among others the shortcomings of e-books: (a) reading on screen, (b) battery power, (c) security issues, (d) permanent, (e) lack of standardization, (f) borrowing books, (g) hidden costs, and (h) direct costs [18].

State University of Medan (Universitas Negeri Medan), which has the responsibility of producing graduates who are capable of becoming certified teachers, is one of Indonesia's higher education institutions that also contributes to achieving the goals of national education. The Elementary School Education study program is a vital part of State University of Medan and helps the institution fulfill its mission to develop qualified and competitive teacher candidates who can meet the needs of the community and the issues they face. However, based on observation conducted in the Elementary School Education study program's Class Management course, it was discovered that college students have trouble comprehending the

course material since there is a dearth of literature or references associated to it. Therefore, it is crucial to develop educational materials, especially e-book that may improve college students' grasp of Class Management course. Lecturers can make e-book for learning media. According to the information, it is important to carry out a study titled "The Development Of E-Book Learning Media On Class Management Course".

2 Research Methods

The ADDIE approach is being used in this research and development project. Research and development (R&D) is frequently understood as a process or series of stages to create or enhance a product [19]. In this investigation, data were gathered using both observation and validation sheets. An observation was done to learn more about challenges connected to learning media in order to create products that are consistent with the findings of the observation. Validation sheets are being used to obtain information from media and material experts to assess the feasibility of the generated e-book for the product that is presently being developed. A media expert is required for this study as a validator, a source of suggestions or remarks on the media, and a material expert is required as a validator, a source of suggestions or remarks on the materials.

3 Result and Discussion

3.1 Analysis stage

3.1.1 Literature studies and field studies

This stage aims to gather data on: (1) what media is often used is part of the learning process of Classroom Management course, which are usually used in Elementary School Education study program, (b) how the student's learning outcomes, and (c) what obstacles are experienced during the learning. Additionally, at this point information connected to the subject matter being raised and created is also sought out. This includes reviewing theories discovered in books, journals, and research studies that are pertinent to the production of the e-book learning medium that will be implemented.

3.1.2 Need analysis

The needs analysis carried out including curriculum analysis, Classroom Management learning characteristics, student characteristics, and the use of applications to develop e-book learning media.

3.2 Design stage

3.2.1 Assign CPMK and Sub CPMK

CPMK and Sub CPMK were decided to be created in e-book learning media as a

consequence of talks and numerous considerations with the lecturers of the Class Management course at the Elementary School Education study program.

3.2.2 *Designing learning media*

In order to create an e-book for the Class Management course, an overview and design must be made for learning media. In this step, the appearance and content for the e-book learning media are designed, including the selection of the picture, any accompanying videos, and any activities that fit the content and the aim for creating the e-book.

3.3 Development stage

3.3.1 *Media production*

In line with the design that has already been made, a product is manufactured. The Kvisoft Flipbook application was used to create the e-book, which includes graphics and videos to complement the lessons that would be covered there. To make the information easier for visitors to understand, the material displayed is a summary of the content on the topic that has been chosen. Additionally, the storage capabilities of various student smartphones are taken into account.

3.3.2 *Product validation*

The validation stage is divided into two steps: media validation and material validation. An evaluation of the material supplied is sought from the material expert during the validation of the material, which is done by the material expert. While media validation is done by media expert, the goal is to receive a review from media expert regarding the media. data collected by experts who were surveyed. Each expert's information is gathered, converted to quantitative data, then continued by looking for the average data. The average data results determine the feasibility of the e-book being developed. The suggestions and inputs of each expert are then used as guidelines for making revisions or improvements to the e-book learning media developed. The following table shows the findings of the evaluation of material expert and media expert:

Table 1. Expert Evaluation Of The Material

No	Aspect	Indicator	\bar{X}	Category
1	Content	conformity of the material with the curriculum	4,60	Very Good
2		conformity of the material with the Sub CPMK	4,67	Very Good
3		Clarity of the material presented	4,33	Very Good
4		ease of understanding the material	4,50	Very Good
5	Learning	collapse of the presentation of the material	4,67	Very Good
6		simplicity of the language used	5,00	Very Good
7		suitability of the example with the material	4,50	Very Good
8		Adequacy of practice	4,83	Very Good
Average			4,59	Very Good

Table 2. Expert Evaluation Of The Media

No	Aspect	Indicator	\bar{X}	Category
1	Display	Font type selection	4,00	Good
2		Font size selection	4,60	Very Good
3		Color and writing composition	4,67	Very Good
4		Image and graphic placement	4,83	Very Good
5		Media presentation order	5,00	Very Good
6		Video Placement	4,00	Very Good
7	Media Elements	Music carrying capacity	4,83	Good
8		Video carrying capacity	5,00	Very Good
9		Ease of use of the media	4,50	Very Good
10	Grammar	Easy to understand	5,00	Very Good
11		Readability of the text	4,50	Very Good
Average			4,63	Very Good

4 Conclusion

The following conclusion can be drawn from the previous description:

- a) This development research uses several stages, namely analysis, design, development, implementation, and evaluation. However, because this semester lectures started in August so that the implementation and evaluation stages could not be carried out, so until this progress report was made, this research was only up to the development stage.
- b) The analysis phase includes: 1) literature study and field study and 2) needs analysis. The design stage includes: 1) establishing CPMK and Sub CPMK and 2) designing learning media. The development stage includes: 1) media production and 2) product validation.
- c) The average score from the validation of the data from the material expert was 4.59, placing it in the very good category, and the average score from the validation of the data from the media expert was 4.63, again falling into the very good category.

References

- [1] Nurkholis. (2013). Pendidikan Dalam Upaya Memajukan Teknologi. *Jurnal Kependidikan*, 1 (1): 24-44.
- [2] P. Supendi. (2016). Variasi (Format) Sistem Pendidikan Di Indonesia. *Almufida*, 1 (1): 159-181.
- [3] *Peraturan Pemerintah RI No. 60 Tahun 1999 tentang Pendidikan Tinggi*.
- [4] H. Fikri & A. S. Madona. (2018). *Pengembangan Media Pembelajaran Berbasis Multimedia Interaktif*, Yogyakarta: Samudra Biru.
- [5] Hasan, M., Milawati, Darodjat, Harahap, T. K., Tahrim, T., Anwar, A. M., Rahmat, A., Masdiana, & Indra, I. M. (2021). *Media Pembelajaran*. In F. Sukmawati (Ed.), Tahta Media Group (Issue Mei).
- [6] Ega Rima Wati. (2016). *Ragam Media Pembelajaran*, Jakarta: Kata Pena.
- [7] M. Ramli. (2012). *Media Dan Teknologi Pembelajaran*, Banjarmasin: IAIN Antasari Press.
- [8] Khadijah. (2015). *Media Pembelajaran Anak Usia Dini*, Medan: Perdana Publishing.
- [9] Rudi Susilana dan Cepi Riana. (2009). *Media Pembelajaran: Hakikat, Pengembangan, Pemanfaatan, dan Penilaian*, Bandung: CV. Wacana Prima.

- [10] H.Fikri & A. S. Madona. (2018). Pengembangan Media Pembelajaran Berbasis Multimedia Interaktif, Yogyakarta: Samudra Biru.
- [11] Hasan, M., Milawati, Darodjat, Harahap, T. K., Tahrim, T., Anwari, A. M., Rahmat, A., Masdiana, & Indra, I. M. (2021). Media Pembelajaran. In F. Sukmawati (Ed.), Tahta Media Group (Issue Mei). Tahta Media Group.
- [12] Wina Sanjaya. (2011). Strategi Media Pembelajaran Berorientasi Standar Proses Pendidikan, Jakarta: Kencana Prenamedia Group.
- [13] Arsyad, Azhar. 2008. Media Pembelajaran. Jakarta: Raja Grafindo Persada.
- [14] Jannah, Naimatil, Noor Fadiawati, and Lisa Tania. 2017. Pengembangan E-Book Interaktif Berbasis Fenomena Kehidupan Sehari- Hari Tentang Pemisahan Campuran. *Jurnal Pendidikan Dan Pembelajaran Kimia*, 6 (1): 186–98.
- [15] Hanikah, Faiz, A., Nurhabibah, P., & Wardani, M. A. 2022. Penggunaan Media Interaktif Berbasis Ebook di Sekolah Dasar. *Jurnal Basicedu*, 6 (4): 7352- 7359.
- [16] Lestari, R. T., Adi, E. P., & Soepriyanto, Y. 2018. E-book Interaktif. *Jurnal Kajian Teknologi Pendidikan*, 1 (1): 71-76.
- [17] Yusminar. 2014. E-book dan Pengguna Perpustakaan Perguruan Tinggi di Jakarta. *Al-Maktabah*, 13(1): 34–39.
- [18] Fahrizandi. 2019. Mengenal E-Book di Perpustakaan. *Journal of Library and Information Science*, 3 (2): 141-157.
- [19] Wanto, S., Okilanda, A., Arisman, Lanos, M. E., Putra, D. D., Lestari, H., . . . Oktariyana. 2020. Kupas Tuntas Penelitian Pengembangan Model Borg & Gall. *Jurnal PKM Ilmu Kependidikan*, 3 (1): 46-55.