

Developing an Interactive E-Module for Writing Procedure Texts Based on a Multidisciplinary Approach

A THESIS

Submitted to English Language Teaching Department of *Tarbiyah* and Teacher
Training Faculty of *Syekh Nurjati* State Islamic Institute Cirebon Partial
Fulfilment of the Requirements of an Undergraduate Degree



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ABSTRACT

Tsalisa Roudhotul Jannah. 2008103103. Developing an Interactive E-Module for Writing Procedure Texts Based on a Multidisciplinary Approach

There is a current demand for interactive learning. The growing number of electronic modules has brought many advantages for the educational process. Electronic modules that are interactive assist both independent and in-person student learning. Teachers and students can expect electronic modules to be very helpful, which will facilitate students' comprehension and acquisition of English subjects, particularly procedure text writing skills. A multidisciplinary approach is utilized to enhance the cross-disciplinary nature of English language materials. The objectives of this study were to determine students' needs for electronic modules and to describe how electronic modules as learning media can support the development of writing modules based on a multidisciplinary approach. This research, which was intended to be a research and development (R&D) method with the Hanafin and Peck model, involved several stages, including the analysis, design, and development phases, as well as expert judgements. The researcher employed interviews and observation to acquire data. The results show that existing modules are not adapted to students' needs, students are still used to that unattractive printed media, teachers teach conventionally, and there is no material update or teacher creativity. Thus, the researcher created interactive electronic modules with attractive images, audio, video, and displays that are easy to learn and using Flip PDF Professional. The e-module contains several activities integrated with engaging learning platforms such as Padlet, Wordall, and LearningApps. The creation of an interactive electronic module that suits the needs of students is expected to improve students' writing skills, especially in writing procedure texts.

Keywords: *interactive e-module, writing, procedure text, multidisciplinary approach*

APPROVAL
DEVELOPING AN INTERACTIVE E-MODULE FOR WRITING
PROCEDURE TEXTS BASED ON A MULTIDISCIPLINARY APPROACH

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Assalamu'alaikum Warahmatullahi Wabarakatuh

After guiding, analyzing, briefing, and correcting the writing of Tsalisa Roudhotul Jannah with regiter number 2008103103 entiteld “**DEVELOPING AN INTERACTIVE E-MODULE FOR WRITING PROCEDURE TEXTS BASED ON A MULTIDISCIPLINARY APPROACH**”, we have opinion that her thesis can be offered to be presented to the English Language Teaching Department, *Tarbiyah* and Training Faculty, *Syekh Nurjati* State Islamic Institute Cirebon.

Wassalamualaikum warahmatullahi wabarakatuh

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LETTER OF AUNTHENTICITY

Bismillahirrahmanirrahim

I acknowledge that this thesis entitled **“DEVELOPING AN INTERACTIVE E-MODULE FOR WRITING PROCEDURE TEXTS BASED ON A MULTIDISCIPLINARY APPROACH”** is really my own writing with quotations from trusted sources and references by using acceptable scientific method of writing. I have written this letter of authenticity in accordance with the truth. I am sincerely responsible for any risks that will happen in the future if it is proven to offend the ethics of scientific writing

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DEDICATION

This thesis is proudly dedicated to my departed father, Mr. Awamil, May he rest in peace. To the amazing woman in my life, my mother, Mrs. Siti Munawaroh. Also to the kind-hearted man, my stepfather, Mr. Agus Sugiono. Thank you for loving and praying for me wholeheartedly. This offering is also for my first sister, Farhatul Fuadah, who has been praying for me in the distance of my hometown. My deepest gratitude to my second brother, Faizal Bawafi, who always provides meaningful support for me. Then not forgotten to my uncle, Mr. Ainur Roziqin, and my aunt, Mrs. Siti Aisyah, who have helped me at the beginning of the lecture, the help is very valuable to me.

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MOTTO

“Some things are up to us and some things are not up to us”

-Epictetus-
(Echiridion)

**“처음부터 즉시 능숙해지는 사람은 없습니다. 모두 적응할 시간이
필요합니다.”**

“Tidak ada yang langsung mahir sejak awal - semua orang perlu waktu untuk menyesuaikan diri”

-Hong Du Shik-
Hometown cha cha cha

**“挑戦するときは失敗するかもしれないが、挑戦する勇気がないときは間
違いなく失敗する.”**

“Kau mungkin gagal ketika mencoba, tetapi kau sudah pasti gagal saat tidak berani mencoba”

-Vinsmoke Sanji-
One Piece

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The title of my thesis is **DEVELOPING AN INTERACTIVE E-MODULE FOR WRITING PROCEDURE TEXTS BASED ON A MULTIDISCIPLINARY APPROACH** is submitted to fulfill one of the requirements for achieving the graduate degree at the English Language Teaching Department of The Institute for Islamic Studies (IAIN) *Syekh Nurjati* Cirebon.

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PREFACE

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The research is entitled “**Developing an Interactive E-Module for Writing Procedure Texts Based on A Multidisciplinary Approach**”, which is submitted to the English Language Teaching Department *Tarbiyah* and Teacher Training Faculty *Syekh Nurjati* State Islamic Institute Cirebon in partial fulfillment of the requirement of Undergraduate Degree.

The researcher is sure that his thesis is still far from being perfect, so all mistakes and errors in this thesis will be her responsibility, and every suggestion or idea of any kind to make it perfect will be gladly welcome. The researcher hopes Department and all readers in general.

Cirebon, May 2024

The Researcher,
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CHAPTER I

INTRODUCTION

1.1. Background of The Problem

Teachers have less knowledge about making interactive learning media integrated with technology. Teachers' lack of knowledge about technology will certainly have an impact on students' progress during the teaching-learning process. (Sumarno et. al, 2023). The integration of the utilized learning media is essential to the learning methods. An uninteresting teaching media has an impact on students' participation in the classroom. The appropriate media selection influences the attainment of learning objectives (Syahputra & Maksun, 2020, p.428, as cited in Amkas et. al. 2017; Zainiyati, 2017). The use of media that integrates with technology is very helpful for students in learning, such as learning to speak, listen, read, and write in English. Therefore, teachers are required to be able to develop engaging and interactive learning media for students.

The rapid development of technology affects the world of education. After two years of online learning, schools got back to face-to-face teaching as the COVID-19 pandemic started to reduce. The return of face-to-face schools also impacts the use of digital technology in learning (Nugroho et. al., 2023). Furthermore, the number of people using smartphones is growing at a rapid pace, and students also engage in everyday gadget play (Dewi et. al, 2022). Teachers should see this as an opportunity not an obstacle. Such as utilizing their smartphones as learning media that can attract students' attention and help remember information. Electronic media that can be integrated include video, audio, or short films.

Electronic learning media can be included in learning packages which can be known as e-modules. By utilizing e-modules, it is hoped that students can be actively involved in learning. In an earlier study, it was demonstrated (Dewi & Naf'an, 2018) that integrating an e-module into an English for Specific Purposes lesson may significantly boost students' enthusiasm in studying the language. The modules commonly used by teachers are printed

modules or still known as conventional modules. E-modules are learning resources or media which utilize use of technology (Novia et. al., 2022). Through the systematic placement and integrated of multimedia components (animation, audio, sound, and instruction), the material in the e-module becomes more engaging and interactive for students. An interactive e-module is a type of learning media that makes use of technology to give students interesting and active learning experiences. Therefore, the technology-based E-module is user-friendly, interactive, and capable of showing and integrating images, music, video, and animation.

The 21st century should affect the form of learning process. Teachers got a chance to be creative in creating technology-based instruction that satisfies today's requirements (Novia et. al., 2022). This e-module was chosen because e-module development can be used as one of the techniques to solve complex learning problems and also develop education and learning products (Subari, 2022). Thus, it is suggested that the teaching and learning process utilize of the interactive learning e-module. Students may actively engage in the classes through interactive e-modules, which enhances the effectiveness and enjoyment of the learning process. Thus, this kind of engagement is very beneficial for teaching writing procedure text.

English language consists four aspects of skill, which include listening, speaking, reading, and writing. One of the four language skills that students need to learn in order to communicate well in a variety of contexts is writing. Skill in writing is crucial in the process of acquiring a second language, as it is an essential skill for acquiring significant comprehension of the desired language (Kocaman and Maral, 2022). In the aspect of writing, student learn a variety of text (Ismayanti, 2023). One of the text types that students are expected to learn in middle school is procedure text. The procedure text is a type of text that explains how to do, use, or make something. Some argue that a procedural is a text that provides instructions for doing something (Mark and Kathy Anderson, 1997; Widiyanti et. al., 2019). "Procedure text is commonly found in daily life" (p.688), such as in

recipes, manuals, instructions, and directions. However, the topics in procedure texts are generally monotonous. There are many methods that can be used to teach procedure texts, including the multidisciplinary approach.

A multidisciplinary approach is one that involves integrating knowledge and content from different disciplines to enhance students' knowledge and make more varied of learning experience. There are several disciplines where a multidisciplinary approach may be applied, such as education, business, and industry (Razaq et. al., 2020). Through combining different approaches and strategies, it can improve students' learning, helps in their comprehension of the context and goal of the material, foster critical thinking abilities, and assist students in developing a variety of competencies and skills that are necessary in a variety of fields (Plastinina et. al., 2023). Thus, using a multidisciplinary approach to teach procedure texts in English may be beneficial since it can include a variety of methods and approaches that boost student learning and assist in their comprehension of the text's context and objective.

E-learning materials development is an emerging field that aims to provide innovative and engaging learning experiences for students in various disciplines. There are some specific issues of research in this area, such as some clusters. For examples, focus on modules development (Fadillah et. al., 2022; Wati et. al., 2021), e-module integration with learning approach (Asri, Ramadhan, and Asri, 2019), e-module development for specific skills and subject (Qadir and Baihaqi, 2016; Oktalia, Ngadirso, and Supriyadi, 2018; Zaim, Refnaldi, and Elfiona, 2019; Parapat, Sagala, and Ningsih, 2022), developing interactive e-learning (Novia et. al., 2019; Santiana, Silvani, and Ruslan, 2021; Amini and Usmeldi, 2022; sudiarta, Dawiwa, and Dartini, 2022) teacher preparation and training (Asri, Ramadhan, and Asri, 2019), and the strategies for teaching procedure text (Widayanti, Rustyana, Haryudin, 2019; Dayanur, 2020).

Some of the research on learning media above still seems to use printed modules or conventional modules. For current needs, modules

should switch to electronic modules. As stated by (Novia, Zaim & Rozimela, 2022) that Teachers need to develop additional technology-based teaching strategies in addition to using print or book-based resources. Nowadays, a teacher has to be at least five different things: an educator, a motivator, a facilitator, an assessor, and sometimes even a designer. Teachers can sometimes take on the role of learning designers in today's educational environment. In line with curricular objectives, teachers can design and organize electronic materials and build online media. By taking on these multiple responsibilities, teachers will be better able to design engaging and adaptable learning environments that will prepare students for the challenges of today's 21st century.

Furthermore, some of the above researches do not discuss how to use electronic media to teach procedure text with an interactive learning model. In fact, it can be beneficial for students, as it can increase their engagement, motivation and creativity. An integrated approach to learning can help students learn more effectively. This interactive e-module, which is built on integrated learning, gives students the chance to comprehend how instructional materials from different subject areas relate to daily life also the use of integrated learning makes it less difficult for teachers to select how to teach in accordance with the competences expected of the students. (Amini and Usmeldi, 2022). Teachers may build an engaging classroom by combining multimedia components like video, interactive simulations, and online collaboration tools. This not only enables various learning styles but also provides students with the necessary technological literacy to thrive in the 21st century. Interactive learning models facilitate active involvement, enabling students to explore, test, and apply their knowledge to situations from the real world.

Similarly, the content in the e-module includes procedure text. Much of the existing research has not investigated innovative approaches to instructing procedure texts. In the discipline of teaching procedure texts, however, the development of multidisciplinary approaches stands out as a

recent newness. The multidisciplinary approach offers a flexible and adaptable framework for instructing different courses (Al Hassan, 2012), including teaching procedure text. “Multidisciplinary education provides an expansive framework for critical thinking development” (p. 404). A multidisciplinary approach focused on making connections between academic topics rather than studying each one independently (Pathak, 2023). By adopting a multidisciplinary approach, it is easy to integrate elements from different subjects into the teaching of procedure texts. For example, a lesson on creating procedures for conducting science experiments or steps for dealing with climate change can integrate science concepts, language, and writing skills, thus providing students with a comprehensive understanding of the content.

Therefore, important that conventional printed modules give way to electronic versions in order to meet the demands of modern education. This change recognizes the need to include digital resources into the learning process (Subari, 2022), and is in line with 21st-century technical improvements. With the ability to interact with information in a variety of ways and improve their digital literacy, students can learn through more interactive and easily available electronic modules. Considering the changing responsibilities of educators is crucial for dealing with the complexities of contemporary learning. As stated by Harmer cited in (Rindu & Ariyanti, 2017) teachers now play the roles of motivators, facilitators, evaluators, and even designers in addition to being educators. Educators may build vibrant and engaging learning environments that prepare learners for the challenges of the 21st century by taking on these multiple responsibilities.

The criticism highlights how crucial it is to use electronic media in an interactive learning environment while instructing students. It is concluded by recent study (Suganda, 2022) that electronic media has the potential to greatly boost students' motivation, creativity, and involvement. Multimedia elements in interactive e-modules support a learning environment,

accommodate a range of learning choices, and provide students with the key digital literacy abilities needed in the modern world of technology. The demand for a more comprehensive and linked educational framework is highlighted by the request for creative and interesting ways to teach procedure texts, especially using the multidisciplinary approach. The multidisciplinary approach encourages critical thinking and links between academic areas (Cai & Sankaran, 2015), in addition to facilitating an expanded understanding of procedure texts. This method pushes students to apply their knowledge across disciplines and gets students ready for a comprehensive understanding of current events.

These subjects relate to modern educational requirements, ensuring that these methods are in line with technological advancements and the requirements of the 21st-century society. Hence, it is essential to provide students with the necessary knowledge and abilities to be successful in an ever-changing, modern world. Students can enhance their learning productivity through the integration of electronic modules (e-modules), acknowledgement of growing responsibilities, usage of electronic resources, and implementation of innovative instructional methods. Therefore, the aim of this study was to develop an interactive e-module in Middle School that would be based on a multidisciplinary approach for writing procedure texts.

1.2. Identifications of the phenomenon

E-learning materials development is an emerging field that aims to provide innovative and engaging learning experiences for students in various disciplines. The identification of the phenomenon of this research project is as follows:

1. Lack of teacher knowledge about developing interactive e-modules based on integrated learning media.
2. Interactive e-modules not integrating the themes of middle school students' real life.

3. Monotonous teaching materials.
4. A lack of practicum tools in schools.
5. The need for innovative and effective learning modules that are meaningful for students.
6. Difficulties in interpreting the material of procedure text and the need for entertaining, interactive, and innovative learning methods.
7. Interactive e-modules to enhance students' 21st skill needs.
8. Limited ability for systematically organized self-learning materials presented in electronic format.
9. ICT is utilized in the educational process to enhance students' learning capabilities, with one example being the utilization of e-modules.
10. There has been a lack of research that combines e-modules with a multidisciplinary approach.

The lack of teacher experience in creating interactive e-modules based on integrated learning media is a significant issue, as teachers may not have the necessary skills or knowledge to create effective e-learning materials that incorporate various types of media. Additionally, interactive e-modules may not integrate the themes of middle school students' real life, leading to disengagement and lack of motivation to learn. To overcome this challenge, teachers should use a variety of teaching materials and tools to keep students engaged and interested in learning.

Creating engaging and effective learning modules for students is another main problem, indicating the need for more interactive and creative teaching strategies. Conventional methods may fail to maintain students' engagement, hence it is essential to integrate 21st-century abilities like critical thinking, problem-solving, and teamwork into the process of learning. E-learning materials can help students develop these skills in a more effective and engaging way.

The use of ICT in the classroom, particularly e-modules, can enhance students' learning capacities by providing an interactive and engaging learning experience. However, there is a lack of studies adopting a

multidisciplinary approach combined with e-modules, which can offer students an enhanced and complete learning experience. For middle school students, researcher may design a more efficient and interesting learning environment by integrating e-modules withp a multidisciplinary approach.

Teachers often rely on learning materials such as textbooks, but sometimes, the needs of learners in the 21st century cannot be found in the materials. Issues related to materials development include e-module design principles, effectiveness and evaluation, e-module integration with learning approaches, e-module development for specific skills and subjects, strategy to teach procedure text, and teacher preparation and training in developing e-modules. This current research will provide new insights by combining multidisciplinary approaches, ensuring students have a better learning experience.

1.3. Delimitation of The Research

This study just looks at e-modules; it does not examine lesson plans, learning strategies, or anything else. This study will only examine the essential phases of writing instruction. As said earlier, in previous research, very few academics discussed about materials development and additional study on e-module utilize. Therefore, the researcher will only talk about the module in relation to middle school writing method text instruction and learning. Due to the fact that there are still limited learning resources that are especially created by integrating multidisciplinary approaches to real-life learning experiences, as indicated by the issues with learning materials that researcher identify. In addition, as part of language skills, writing is important to be able to express ideas, arguments, opinions, and feelings in writing. Therefore, in the learning process of writing, it should integrate learning materials that specifically focus on the real-life needs around students with a multidisciplinary approach.

1.4. Research Questions

There are two problems that may be defined in this study based on the focus and delimitation.

1. What are the characteristics of e-modules that students need in writing procedure texts based on a multidisciplinary approach?
2. How to develop e-modules for teaching writing procedure text based on multidisciplinary approach in grade nine?

1.5. Aims of The Research

The aims of this research have come from the previously mentioned research questions:

1. To determine the needs of students in writing procedure texts based on a multidisciplinary approach.
2. To determine the development of e-modules for teaching writing procedure text based on a multidisciplinary approach in grade nine.

1.6. Significance of The Research

The current research study provides two important research contributions, one theoretical and the other practical, that are beneficial to material developers, English educators, and future researchers alike.

1. Theoretical Significance

Theoretically, this study provides a new perspective on writing materials based on a multidisciplinary approach. This research also helps other researchers study learning materials, especially writing resources.

2. Practically Significance

a) Material developers

For material developers, this research is expected to be a new media writing material today. Furthermore, the research findings on the development of e-modules for writing skills identified can be used as a consideration for developing writing materials based on a multidisciplinary approach.

b) The English educators

This research aims to provide teachers with valuable insights into the essential knowledge and skills that students should acquire in the digital age. Thus, the research findings on e-module development for writing that have been identified can be used or adapted to consider and prepare the best writing learning materials for English language teaching and learning today.

c) The Future researcher

This research is expected to be a useful reference and guide for those interested in the field of research on writing materials in the digital era. In addition, this study also provides useful information for other researchers who are interested in studying material development.

1.7. Theoretical Foundation

The theoretical foundations of the research are presented in this part. The reader is presented with the underlying theories related to the research issues with the theoretical framework. The present study aims to comprehend the associated theories of e-modules, writing skills, and multidisciplinary approach.

1.7.1. The Concept of Learning Media

Learning media, which includes a variety of tools and resources, is essential when deciding how educational experiences are organized. In order to give a thorough understanding of the idea and its consequences for efficient teaching and learning, this theoretical framework draws on important ideas and viewpoints.

1.7.1.1. Definition of learning media

Learning media encompasses a wide range of tools, resources, and platforms that are designed to support and improve the learning process. In both conventional and electronic learning contexts, learning media can have a variety of uses. Learning media

is utilized to facilitate the learning process in order to achieve learning objectives. Learning media includes both physical and electronic resources that educators utilize to enhance students' comprehension of a subject (Puspitarini & Hanif, 2019). As for learning media, (Syahputra & Maksum, 2020) defines it is acts as a tool and approach to interaction among teachers and students. It is expected that the usage of learning media will both encourage students to learn and improve their comprehension of the instructional content.

A tool or piece of material used to carry out processes that help teachers and students complete learning tasks is known as learning media (Prasetyo et al., 2011), although Permendikbud. 65 An essential component of learning planning is the preparation of learning tools, which include lesson plans, assessment tools, learning scenarios, media and resource preparation, syllabus, and learning scenarios. This was noted in the 2013 Standard Process of Primary and Secondary Education. Regarding the significance of instructional content in the learning process, it is anticipated that its utilization would stimulate students to actively engage in their education and improve their understanding of the subject matter. As a result, educational media become an essential foundation for efficient teaching and learning methods. To sum up, learning media are becoming an essential component of instructional methodologies and are also helping to create an interactive learning environment.

1.7.1.2. Principles of learning media

Learning media includes not only the delivery of content but also the design and appearance of teaching resources. The concepts of instructional design are essential in producing learning materials that correlate with academic objectives. As stated by Asyhar (2012)

cited in (Puspitarini & Hanif, 2019) In addition to providing as a tool for learning materials, other purposes as follows:

- 1) Media as a learning resource
- 2) The semantic function is related to the word, term, sign or symbol.
- 3) Manipulative function is the ability of the media to reload an object/event in various ways, according to its conditions, circumstances, objectives, and targets
- 4) Fixative function that is in capturing, storing and recasting an object or event that has long occurred
- 5) Distributive functions of the media used in the learning process can be followed by students in large numbers or unlimited media coverage
- 6) Psychological functions, learning media has the function of attention, affective function, cognitive function, imaginative function and motivation function
- 7) Socio-cultural functions. The use of media in learning can overcome the socio-cultural barriers between students with different customs, habits, environments, and experiences.

While Musfiqon (2012) divides the concept of media use in the learning process into three primary categories, they are as follows (p.56):

- 1) Princip's effectiveness of efficiency. Effectiveness in the concept of learning is the achievement of a learning process in achieving learning objectives. While efficiency is to achieve learning objectives by using time, cost, facilities/infrastructure, and other resources to a minimum;
- 2) Principles of relevance. As a teacher, one should be able to choose the media that is compatible with the objectives, content, learning strategies, and evaluation of learning; and

- 3) Principles of productivity. Practice in the learning process is the goal of optimal goals by utilizing natural resources and human resources are available.

1.7.1.3. Characteristics of learning media

Every learning media has unique qualities linked to the opinions of different organizations. Three characteristics of the media are suggested by Gerlach and Ely, referenced in Aksa (2017), based on how media is utilized instructions learning for determining the environments of learning when teachers are not prepared or less able to do so successfully. According to Arsyad (2002), the third characteristic of the learning media is:

- a) Characteristic of fixative, which refers to the media's capability to capture, archive, maintain, and recreate a particular event or thing;
- b) A manipulative characteristic, namely the ability of media to change an item, an occasion, or a procedure in order to solve issues with time and space;
- c) A media's distributive characteristic allows an event or item to be passed on through space. Students who have experienced about the same things are also given the opportunity to learn about the event at the same time. Upon recording in any kind of medium, the data may be accessed again and at any point in time.

1.7.1.4. Types of learning media

Each learning media possesses particular characteristics. These traits can be determined by the media's capacity to generate emotions in the form of visual, auditory, tangible, taste, and aromatic experiences. As stated from (Hikmah, 2019) There exist three categories of media, namely visual media, audio media, and

audio-visual media. These sorts might be employed in education as teaching tools to facilitate the clear comprehension of the subject for all students.

- a. Visual media, it is a type of media that expresses messages through verbal communication symbol. Such as pictures, board, newspaper or magazine, comics, literary works, computer, and augmented reality media.
- b. Audio media, it is related to the sense of hearing. The message conveyed through audio media is in the form of auditive symbols, both verbal and non-verbal (Sadiman, et. al., 2002). Such as tape recorder, radio, and compact disk.
- c. Audio visual media, it is Anderson (1994) stated that audio visual media is a series of electronic images accompanied by audio sound elements put into the video tape. Such as film, television, and YouTube. Anita (2009) cited in (Puspitarini & Hanif, 2019, p.56) mention, multimedia, such as interactive media, hypermedia, virtual reality, and multimedia kits.

1.7.2. Module

Modules are self-contained educational materials that are specifically created and packaged for individual study by students. Applying modules in learning enables a student with a high learning current to acquire greater capabilities compared to their classmates. Therefore, it is crucial to offer the module in the correct way, employing engaging and clear language, to facilitate students' comprehension of the subject, even in the lack of teacher support. As stated by Prawoto (2012), a module is a written book designed to enable students to study autonomously, either with or without the assistance of an instructor. The module is a self-contained educational resource that comprises a well-structured order of

learning activities, intended to facilitate students in achieving their learning objectives.

According to the Directorate General of PMPTK (2008), a module is an instructional resource that is organized in a systematic manner, using language that is easily comprehensible to students. It is designed to be studied independently, without the need for an instructor. Additionally, modules can be utilized at a pace that aligns with the individual student's learning style. As a teaching material, a module can be said to be good and interesting if it has several characteristics. The characteristics of a good module are (Ditjen PMPTK, 2008):

a. Self-instructional

A module with this feature lets students learn without assistance from others. Modules must have these criteria:

- 1) Contains clear basic competencies
- 2) Learning material is packaged in specific units of activity, making it easier for students to learn.
- 3) The presentation of learning information is supported by examples and illustrations, which enhance clarity.
- 4) There are exercises, tasks or the like to measure the level of mastery of the material.
- 5) Contextual, that is, in accordance with the atmosphere or context of the learner's environment.
- 6) Compiled using communicative and simple language.
- 7) There is a summary of learning material.
- 8) Assessment instruments are available, so that students can carry out self-assessment.
- 9) There is reference information or references that support the learning material.

b. Self-contained

Essentially, all the necessary educational content can be found within a single module. The presence of this trait offers students a chance to get a comprehensive understanding of the subject matter, since the learning material has been integrated into a single coherent unit.

c. Stand alone

The specific characteristics of standalone modules refer to those that can function independently, without relying on or requiring the usage of any other educational resources. This means that students do not need other teaching materials other teaching materials to learn and understand the learning materials in the module.

d. Adaptive

That is the characteristic where the module is adaptive to the development of science and technology. By paying attention to this characteristic, the developed module will remain in accordance with the times and become more flexible. Adaptive modules can be used within a certain period of time.

e. User friendly

Every instruction and information exposure that emerges is beneficial and welcoming to the user, including the ease with which the user can reply and access as needed.

1.7.3. Interactive E-module

E-module is a form of module that is digitized and packaged more interactively. Various types of printed media, including modules, can be transformed into digital or electronic presentations, known as e-modules (Hutahaean, 2019). E-modules is learning media that reduce the use of stacks of printed paper. It has the capability of displaying text, photos, animations, and videos

via electronic devices like computers and cellphones. E-modules, often known as self-study media, contain self-study instructions. E-modules can be populated with content in the form of PDFs, videos, and animations, which facilitate active learning for users.

Learning necessitates engaging interactions that merge educational principles with entertainment to capture students' interest in the learning process. In a previous study, it was stated (Nurhikmah et. al., 2021) that e-modules integrated with technology are engaging instructional materials due to the multimedia components (audio, video, and images) that facilitate understanding, and as a result, this media can add interest to the learning process.

An interactive e-module is a module that integrates multiple interactive elements such as texts, pictures, music, video, or animations. As stated from (Sidiq et. al., 2021) that an interactive e-module is a computer-assisted multimedia that includes visuals or animations together with accompanying content. Generally, the standards for a high-quality interactive e-module according to Asyhar (2012), consist of:

- 1) The display of images and color combinations must be attractive,
- 2) The language used must be clear and easy to understand,
- 3) The material is presented interactively (allowing student participation),
- 4) Contains the need to accommodate different learning styles,
- 5) In accordance with the cultural characteristics of the targeted population,
- 6) In accordance with student characteristics, material, and objectives to be achieved,
- 7) Can be utilized as a substitute for learning materials,
- 8) Can display a virtual learning environment, and

- 9) Contains learning activities that are continuous and intact, not sporadic and fragmentary.

It is expected that creative and innovative teaching methods will be an inspiration to increase student engagement and participation in the learning process. Zaim (2017) states that students have challenges in terms of being involved in classroom activities. Teachers must show greater creativity and innovation during the learning process in the classroom (Fatimah & Santiana, 2017). Unfortunately, teachers still use traditional approaches, including relying on their own teaching methods and textbook content that fail to engage students in the learning process. As a result, teachers anticipate that students will acquire the remaining knowledge independently due to limited time availability. Nevertheless, students cannot improve their understanding of the subject matter individually. They face barriers and experience a decreased drive to learn, which limits the effectiveness of the learning process. The differences can be seen as follows, adapted from Saputro (2009):

Tabel 1. 1 The Differences between E-Module and Print Module

E-module	Print Module
Displayed using a monitor or computer screen.	The display is a collection of papers containing printed information, bound and covered.
More practical to carry anywhere because its shape is not large and not heavy.	Less practical to carry because it is relatively large and heavy.
Using a CD, USB Flashdisk, or memory card as the data storage medium.	Do not use CDs or memory cards as data storage mediums.

<p>Lower production costs. Product replication can be achieved by transferring files from one user to another. E-mail can be utilized for delivery or distribution purposes.</p>	<p>Production costs are higher. Additional costs are required for reproduction and distribution.</p>
<p>It uses resources such as electric power and a computer or notebook to operate.</p>	<p>It does not require any special resources to use.</p>
<p>Durable, contingent upon the chosen media.</p>	<p>It is not durable, as the modules are made of paper that is easily weathered and easily torn.</p>
<p>The script can be organized in a linear or non-linear manner.</p>	<p>The script can only be organized linearly.</p>
<p>It can be equipped with audio, animation and video in its presentation.</p>	<p>The presentation does not support audio and video elements. It only includes illustrations in the form of photos, graphics, or vectors.</p>
<p>Each learning activity can be given a keyword or password that is useful for locking learning activities. Learners must master one learning activity before moving on to the next. Thus, learners can complete learning activities in stages.</p>	<p>No password can be given, learners are free to study each learning activity. So there is a slight weakness in the control of the level of competence that the learner must acquire.</p>

1.7.4. Interactive Learning using E-Module

Interactive multimedia, sometimes known as interactive learning, is the concept of used to describe electronic products and offerings on computer-based platforms that react to user input by displaying text, moving pictures, animation, video, audio, and video games. Many experts have offered different definitions of interactive learning. For example, Hariguna & Akmal (2019) define innovative learning as improving upon current approaches rather than coming up with something completely new. In this instance, students participate actively in a variety of learning activities in the classroom.

A frequent issue with traditional modules is that they often exhaust students easily and make them less interested in learning the topic. The outcomes of learning for students are often impacted by this. The module serves as a valuable tool for acquiring information efficiently, as it allows students to learn at their own pace and independently comprehend the subject, without constantly relying on the teacher's instructions (Sidiq et. al., 2021). The module itself, which is a kind of print media, may be converted into an electronic or electronic visual format known as a "e-module." It is possible to reduce the amount of printed paper stacks used in learning activities by converting a module to a electronic version. Electronic educational modules that use multimedia content and user interaction features to create an innovative learning environment are known as interactive e-modules. These e-modules, which are often viewed online, provide students with a more engaging and interactive experience by going beyond conventional simple information. Some expert defined what are the interactive learning using e-module means is:

- a. Interactive e-modules, as described by Kurniawan (2015), are multimedia files that include two or more different types of media (text, audio, graphics, pictures, animation, and video) and are displayed on a portable device with the participation of users.
- b. An e-module is a learning resource that comprises materials, techniques, constraints, and assessments that are methodically and aesthetically structured to accomplish competences in accordance with the curriculum, according to Laili et al. (2019).
- c. Syahputra & Maksum (2020) additionally expanded this concept, defining an e-module as instructional resources that are given in an electronic format and are methodically organized. These materials may include audio, video, animation, and instructions to enhance user interaction with the software.

Based on the many explanations provided by the experts above, we can determine that an interactive electronic module is, in the digital age, interactive e-modules are an effective form of instruction that combine flexibility, interaction, and rich multimedia content to create an efficient and engaging learning environment. They are essential in enabling modern, technologically advanced education because they give students a flexible and engaging environment.

Electronic learning materials known as interactive e-modules are those that effectively combine a variety of multimedia components, including text, voice, graphics, photographs, animation, and video. These modules, which are made for portable devices, put an emphasis on user engagement and promote active involvement through interactive elements and practical tasks. According to Chaeruman (2014), the creation of interactive e-modules includes a number of characteristics that determine their purpose, including the following: (1) self-paced; provides independent learning at any time and place in line with the current

situation and learning pace of the individual (3) self-contained; includes all learning activities; (4) modular/chunking; analyzed and thoroughly discussed; and (5) self-instruction; self-learning includes learning activities. These previously mentioned characteristics together enhance the efficacy of these electronic learning materials, conforming to the changing conditions of modern education while satisfying the unique requirements of learners.

Furthermore, interactive e-modules may be utilized in classes that are offline or online. The utilization of interactive e-modules in education enhances students' engagement in the learning process by providing anytime, anywhere accessibility and employing appropriate tools, without forcing unnecessary challenges on students (Nufus et al., 2020). The teacher uses the interactive e-module, which contains written, video, and graphic descriptions of the subject matter, as a learning tool. To keep students' interest, the interactive e-module is paired with teaching strategies and tests that are highly realistic. As such, students have greater freedom in selecting and expanding upon the content they wish to study and become competent in when interactive e-modules are combined with visually appealing presentations.

1.7.5. Flip PDF Professional Application as learning media

Flip PDF Professional is a piece of software that turns PDF files into digital publications, making it easier to create interactive flipbooks. The lifelike page-turning animation, which replicates the feeling of reading a book, is a standout feature. Flip PDF Professional is a software program that enables the construction of e-modules that may be converted into forms like as .exe, .app, .fbr, and .html. (Parapat and Ningsih, 2022). In addition, Khairinal et. al. (2021) stated that Professional pdf flip software is an application that converts PDF digital flipping page publications, enabling the

creation of interactive learning content with many supporting features. Anybody may use professional flip pdf to develop instructional materials and enhance their learning process. Its user-friendly interface makes it very accessible to all.

Using a professional flip pdf as electronic book media, which is essentially a variation and combination that includes multiple elements in the form of electronic images, recorded voice narrations, text, video, and video, is one way educators may utilize writing abilities in learning. Based on the understanding of Gones et. al., (2022) Flip PDF Professional is a software that allows users to incorporate many forms of animated material into the flipbooks. By utilizing drag-and-drop or click functionality, users may easily integrate various multimedia elements such as YouTube videos, hyperlinks, animated text, images, audio, and flash content into the flipbook. Anyone may effortlessly create remarkable flip books.

As mentioned, flip pdf professional lets developers create flipbooks with page editors and other features from pdf files. With the help of Flip PDF Professional, anybody can create engaging and user-friendly books by exploring with hyperlinks, animations, images, videos, and YouTube material.

The advantages of this professional flip pdf application are (Khairinal, et. al., 2021):

- a) Publication that is interactive. It is possible to make the flipbook more active and beautiful by including films, images, and links, among other things;
- b) Multiple options such as templates, themes, scenarios, backdrops, and plugins are available to personalize our ebook.;
- c) Text and audio can both be supported by an electronic book; and
- d) Flexible output formats, including HTML, exe, zip, mobile version, and burn to CD; these formats are also supported.

1.7.6. The type of text

In English language learning in junior high school, several text materials are studied which include narrative, recount, descriptive, report, and procedure. Each type of text has different characteristics and purposes. All types of texts are important to learn so that students can develop their English language skills effectively (Rao, 2019). Some of the text types studied in junior high school include:

- a) Narrative is usually used to tell fictional or non-fictional stories, while recount is more focused on retelling an event. Narrative text is a type of text that consists of three parts: orientation, complication, and resolution (Noviani et. al., 2015).
- b) Descriptive texts describe an object or place in detail, while reports provide information about a topic in general. Descriptive text is a type of text that describes a person, object, or place in detail so that the reader can imagine it as if it were real. This text aims to describe and express the characteristics of the subject being described (Puspitasari, 2021).
- c) Recount text is a type of text that focuses on retelling an incident or event that has already happened. The purpose of recount text is to provide information about the event in a chronological and clear manner (Harris et. al., 2014).
- d) Whereas procedure is used to explain the steps to perform an activity or process. A procedure text is a type of text that explains how something is achieved through a sequence of actions or steps. It is important to have a good understanding of vocabulary, punctuation, grammar and other language features when writing procedure texts. Students often struggle with writing procedure texts, especially when they have to rely on their imagination and experience (Salmiati, 2015).

All of these text types are important to learn so that students can develop their English language skills well. Some other text types are also studied in middle school. Some other types of texts are also studied in junior high school. In this study, the researcher focuses on procedure texts, especially on students' writing skills.

1.7.7. The concept of writing

Writing is a linguistic ability that involves expressing thoughts or feelings through written communication. Some individuals are passionate about writing, as previously said. After that, the text provides a comprehensive definition of the concept of writing.

1.7.6.1. Definition of writing

Writing is a complex and diverse activity that covers several characteristics, such as its meaning, its different forms, and the process of writing. Various linguists have provided diverse definitions of writing. Writing is a component of a larger activity that emphasizes other aspects, such as practicing language, performing, or speaking (Harmer, 2007). Writing is the act of expressing language via the use of signs or symbols in a written form. Writing is frequently seen as challenging by certain individuals. As noted by Elbow (1998), writing requires both ability to generate words and ideas from inside oneself, as well as the skill to evaluate and select the most appropriate ones.

On the other hand, as stated by Olson (2023) that Writing may be described as a standard set of markings or signs that express the spoken expressions of a language. Writing makes words accessible. While speech is temporary, writing is substantial and, in contrast, everlasting. Both spoken communication and written expression rely on the key frameworks of language. Furthermore, Tarigan (2008) defines writing as "a language skill that enables

indirect communication, without face-to-face interaction with others." Tarigan (2008, p.81) defines writing as the act of using visual symbols to represent a language in a way that can be understood by those who are familiar with the language and the visual representations.

Based on the explanation above about writing, the researcher can underline that what is said to be writing is an ability of conveying words by use of symbols in the form of text. It is a comprehensive and varied activity that necessitates the capacity to generate phrases and ideas from inside. Writing is permanent and allows indirect communication without face-to-face engagement. It is a linguistic ability that facilitates indirect communication and plays a vital role in language proficiency, implementation, and verbal expression.

1.7.6.2. The important of writing

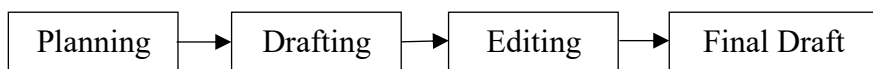
Writing is essential in many disciplines. Within an academic setting, various writing assignments, such as descriptive and argumentative essays, can have distinct influences on the growth and development of language. According to Harmer (2004) there are some importance of writing. Those are:

- 1) Writing motivates students to prioritize accurate word usage as they engage in the process of writing, stimulating the creation of well-structured thoughts and the resolution of thinking obstacles that arise throughout the writing process.
- 2) Writing is frequently employed as a method of strengthening previously conceived language. They employ their writing prowess to document their acquired knowledge during the learning process.
- 3) Writing is often beneficial as a means of preparing for another activity.

- 4) Writing can serve as an essential component within a broader activity that emphasizes other aspects, such as language proficiency, role-playing, or verbal communication.
- 5) Writing is sometimes employed in tasks that include questionnaires. Proficiency in writing is crucial for successfully completing a questionnaire test. During the test, students are required to provide their responses in written format.

1.7.6.3. The process of writing

The writing process is the preliminary stage that surrounds the act of writing. Writing involves seeking for words to communicate ideas, pre-writing, drafting, rewriting, editing, and publishing (Mohammed, 2023). According to Harmer (2004), there are four components involved in the writing process. The four stages involved in the writing process are planning, drafting, editing (which includes both correcting and revising), and the final draft. The sequential phases of the writing process are as follows:



a. Planning

During the planning phase, students need to consider three primary factors. Prior to writing, it is essential for the writer to determine the desired objective and the specific material to be included in the text. The second aspect is the ability to effectively organize paragraphs and consider different language styles, such as professional or casual tones. Lastly, one must take into account the content organization of the composition, namely the arrangement of the facts, ideas, or arguments that have been chosen to be included (Harmer, 2004).

b. Drafting

It refers to the earliest revision of a written composition. At this stage, it is crucial to allocate appropriate time to students, since they should prioritize the generation and arrangement of ideas above perfecting grammar, punctuation, or spelling (Harmer, 2004).

c. Editing

During the editing process, it is essential for the instructor to carefully review the students' drafts to identify any ambiguous or confusing words or sentences, as well as any writing errors. Upon identifying the errors, proceed to update the document. By doing this, the mistakes may be minimized (Harmer, 2004).

d. Final draft

The stage represents the final version. Upon completion of all stages, the students are expected to create the final version. The final version may change significantly from the initial draft, which was created earlier. This occurs due to the numerous alterations in the editing procedure (Harmer, 2004).

1.7.8. The concept of procedure text

Procedure text is a kind of writing that offers clear guidance on how to successfully carry out an activity or procedure. Following that, the publication provides a broad exposition of the concept of procedure text.

1.7.7.1. The definition of procedure text

Writing that explains how to do something is known as Procedure Text. To explore the concept of procedure texts as general factual texts that guide readers to perform specific actions, as discussed by Knapp and Watkins (2005) and cited in Batara (2023). The planned steps included in a procedure text are essential for the reader to achieve the desired result safely and effectively.

Examples of procedure texts include recipes for cooking, instructions for assembling furniture, and guides for operating machinery.

Various types of texts, including descriptive text, recount text, and procedure text, are utilized to enhance students' writing abilities. The researcher utilized procedure text to create an e-module that is based on a multidisciplinary approach. According to the research conducted by Ameliah et al. (2019, p. 48), it is stated that "Procedure text is a type of text that is utilized to guide the creation of something through a series of steps." For instance, the stages in the procedure text explain how to create fruit juice, fried rice, and coffee. It would be beneficial for students to have the opportunity to effectively communicate their knowledge through the composition of procedure texts. The purpose of a procedure text is to provide instructions on how to do something or create something in a specific format. This typically includes outlining the objectives, listing the necessary materials, and detailing the steps or methods involved.

From what has been explained by the experts above, the researcher can conclude that procedure texts guide readers through a specific action, providing essential steps for a safe and effective outcome. Students can improve their writing skills by incorporating procedure texts into their writing. The multidisciplinary approach also helps students communicate their knowledge effectively through the integration of procedure texts.

1.7.7.2. Characteristics of procedure text

The many genres each have their own unique characteristics, which provide readers with a distinct perspective on the overall meaning of the text for which the reader is reading. Here are stages to construct a procedure text (Nilam, 2021):

- 1) The very first statements that outlined the objective These titles have the potential to be the most exceptional headings for a paragraph or content.
- 2) The amount of supplies required to carry out the procedure. Here is the list.
- 3) The sequential process that needs to be followed.
 - a) Numbers can be represented using ordinal terms: first, second, third.
 - b) The sequence might be displayed. Employed a transitional term such as: next, current, after, soon.
 - c) Steps often commence with the instruction: Press, such as

1.7.7.3. The elements of procedure text

There are some elements in the procedure text according to Linda Gerot (in Nilam, 2021):

1. Social function

This document provides a detailed account of how something came about by following a series of steps in order.

2. Generic structured

Similar to other genres, a procedural text also consists of a generic structure and specific language features. Generally, a procedural text consists of several essential components, including objectives, a list of necessary resources, and a sequential series of actions.

a) Aims.

This part was title of text that showing what writer may like to inform to readers.

b) Materials.

This part described all material that was needed to entire procedure

c) Steps.

In these parts showed the ways that people need to do when completing some procedures

Knapp and Watkins (2005) outline that the procedural text typically consists of three main components: the aim, the materials, and the stages. 1) Objective: the main goal of following the instructions. 2) Materials: Required ingredients and equipment for following the instructions. 3) Process: A sequential instruction for achieving the main goal.

1.7.7.4. Language features of procedure text

According to Knapp and Watkins (2005) there are 4 language features of procedure text.

- 1) Use of Imperative (Cut, boil, don't mix)
- 2) Use words that tell the reader to command
- 3) Use of action verb (turn, put)
- 4) Use simple present tense

The use of sequences should be considered crucial. Arrangers such as "then," "next," and "after this" show an ordered progress of events or phases in a process. Sequences frequently occur near the beginning of a phrase. Once the essentials of procedure text are comprehended, it is crucial to utilize an ordered manner to ensure clarity in every stage of the process. Students may conclude that procedural texts do not necessitate a meticulous arrangement, as the steps are presented in a logical sequence of events and the reader's prior knowledge will aid in understanding the order.

1.7.9. The concept of multidisciplinary approach

A multidisciplinary approach refers to a methodology that incorporates diverse academic disciplines, merging multiple viewpoints and approaches to tackle a research challenge. Subsequently, the theoretical framework provides a thorough exposition of the idea of multidisciplinary approach.

1.7.8.1. Definition of multidisciplinary approach

A multidisciplinary approach is integrating several disciplines at once when studying a single topic. A multidisciplinary approach is a curriculum integration method that emphasizes the varied viewpoints that distinct academic fields can contribute to the comprehension of a particular theme, subject, or issue. A multidisciplinary approach examines the same subject through a combination of multiple disciplines (Nathani, 2021). In this type of learning, the same idea is seen from different angles in more than one field. It helps them see things from different points of view and learn things in new ways. For example, a student who has taken English and science classes may also studies to major in history.

A new and old way to teaching languages, and that is the multidisciplinary approach. Around the 1920s, it was introduced into the area of education as well as other fields, and it has recently garnered attention in the United States as an alternative to, or as an extension of, a separate topic curriculum (Akins & Akerson, 2002; Goodlad, 2000; Perkins, 1991). "Educators who prioritize a multidisciplinary approach typically maintain the integrity of individual subject matter while integrating different fields through the integration of curriculum organized around overarching ideas, concepts, problems, or projects that leverage connections" (Akins & Akerson; Mansilla, iller, & Gardner, 2000; Ross & Frey, 2002).

In the context of this study, the term "multidisciplinary" refers to the process of understanding a single topic, problem, or concept by utilizing several of distinct or related areas or disciplines. In addition to combining content with knowledge, second language acquisition increases with the involvement of more than two disciplines. This is due to the fact that students learn language most effectively when there is an emphasis on relevant,

meaningful content rather than on the language itself. Natural language acquisition takes place in context; natural language is never learned apart from its meaning; and multidiscipline instruction provides a context for meaningful communication to take place (Met, 1991, as cited in Bashoum).

It can be concluded that the multidisciplinary approach is a methodology that integrates diverse academic disciplines to tackle research challenges. It has gained attention in the United States as an alternative to separate topic curriculums. Multidisciplinary teaching involves understanding a single topic by utilizing multiple disciplines. This approach helps students learn language effectively by emphasizing relevant content rather than the language itself. Multidisciplinary instruction provides a context for meaningful communication, enhancing second language acquisition and enhancing the understanding of language in various fields.

1.7.8.2. Learning based on multidisciplinary approach

Teachers are required to have the ability to use a variety of learning strategies that are in agreement with the characteristics of interactive learning in order to successfully implement interactive teaching. Drake and Reid (2018) present a number of distinct learning methodologies, some of which are the constructivist approach, inquiry, experiential learning, personal relevance, student choice, and differentiated instruction.

Students are given the opportunity to actively investigate and discover scientific topics and principles in a manner that is comprehensive, meaningful, and authentic through the utilization of a learning technique that employs a multidisciplinary approach. All of this can be accomplished both individually and in groups. This method of education establishes a significant amount of emphasis on putting the concept of learning by doing into practice.

According to Rusman (2009), students will be able to have an understanding of the principles that they find through first-hand experience and apply them to other concepts that they are already familiar with. The provision of a learning environment that allows students to acquire learning experiences that can successfully connect concepts from a variety of fields of study is one of the most important factors that contribute to the success of learning through a multidisciplinary approach.

1.7.8.3. Characteristic of multidisciplinary approach

Multidisciplinary approach combines information and teaching methods from multiple fields. Instead of studying one subject, students in a multidisciplinary approach learn about many. As cited in (Author, 2023) the important characteristics of multidisciplinary approach:

- 1) Integration of disciplines: The purpose of a multidisciplinary approach is to create a deeper comprehension of a subject or problem by bringing together knowledge from a variety of academic fields.
- 2) Interconnected Learning: Students are exposed to a variety of teaching approaches and points of view, which helps students develop a more comprehensive and linked understanding of the topic at concern.
- 3) Collaborative Learning: An approach that considers many disciplines usually fosters collaboration between students and teachers who come from a variety of fields. The development of a more diverse set of skills and the sharing of ideas are both encouraged in this setting that encourages collaboration.
- 4) Real-world Problem Solving: The goal of the multidisciplinary approach is to provide students with the abilities necessary to manage difficult, real-world situations that may demand a

diverse approach. This is achieved by drawing on ideas from each of the several disciplines.

- 5) Flexibility: Students are able to personalize their education to their interests and professional objectives by picking courses from a variety of fields, which is made possible by multidisciplinary approaches, which are frequently flexible.

1.8. Previous Studies

Taking into consideration the subject matter that is the focus of this research, there are several types of studies that have been conducted on this subject:

1. The first previous study from (Fadillah et. al., 2022) this research focuses developed learning modules to write self-introduction, using qualitative methods and research design. Modules, which include printed, audiovisual, or computer-based materials, are evaluated by an expert with a Master's degree in English Teaching, which shows good quality. This module received a score of 21 out of 21, indicating good quality. However, this research differs in that it focuses on the development of electronic media rather than print media.
2. The previous second study (Wati et. al., 2021) explored the development of learning modules using project-based learning. Validation of learning modules using Project-Based Learning (PJBL) is carried out at secondary schools in Indonesia. The results showed that the module was feasible and effective, with students scoring between 85-100 very well and 74 well. This research follows the early stages of analysis and design, followed by a formal evolutionary process. Research results show that the product of a project-based learning model developed has a potential effect on student learning outcomes. These modules are independent, complete, and effective in improving student learning outcomes. The modules are practical, easy to read, and understandable by students. In

this research also deals with modules but applies a multidisciplinary approach to it.

3. The study by Arosyad and Jazeri (2021) focuses on developing English e-modules using a multicultural and contextual approach to teaching and learning. The results reveal that the English E-Module design is based on learning media needs and portrays different cultures contextually. Media experts validate product efficacy at 99.5%, and topic experts validate subject effectiveness at 93.25% and 80.5%. The English E-Module, designed to improve learning outcomes, was significantly affected by the results. This study will first show how to construct a digital learning substance utilizing flip pdf professional before applying it to learning.
4. Murdianto, Aunurrahman, and Astuti (2021) seek to create a constructivist learning e-module in their next research. The smartphone-based e-module analyzes data qualitatively. The study had four phases: Define, Design, Develop, and Disseminate/Deploy. The 3.77-scoring e-module was self-instruction, stand-alone, adaptable, and user-friendly. Students were more engaged and constructed in English class when learning descriptive literature. This study found that e-modules can improve students' descriptive text scores. The Minimum Completeness Criteria (KKM) was 75, with an average of 79.04. Researchers created multidisciplinary procedure text e-modules.
5. In a 2022 study by Novia, Zaim and Rozimela, interactive learning utilizing the E-Learning Module was examined for teaching English to Senior High School pupils. An interactive learning module increases students' enthusiasm in learning English, scores by 2.5 points, and learning outcomes. The survey also indicated that multimedia and interactive learning tools stimulate students to learn anytime, anywhere. Results show that E-Learning Modules can customize cultural learning experiences and handle the growing amount of information. The study emphasizes the need of interactive learning in education, especially for Generation 4.0, who are tech-savvy from birth. The results indicate that

an E-Learning Module can enhance students' English learning experience. The researcher wants to design a procedure text writing module employing flip pdf professional.

6. Next previous study by Astri, Ramadhan, Astri (2019) developed interactive e-modules employing a professional flipping approach. PDF application builds flat side space materials contextually. This method seeks to help students grasp flat-sided geometry, especially cube and beam submaterials. E-learning must be contextual to improve student learning. Interactive electronic modules can be practical by assessing student and teacher questionnaire replies. Practicality ranges from 85.01% to 100.00%. Students' cube and block submaterial knowledge and understanding increased, with a minimum completion rate of 75%. The normalized gain value (N-gain) indicates contextual e-module effectiveness, with medium and high categories. In this study, the same thing will be done with a different approach, namely a multidisciplinary approach in teaching writing procedural texts.

Most of the previous studies mentioned above are related to materials development from different perspectives focusing on developing teaching materials for specific target needs, writing materials, and learning materials with different approaches applied. To deal with student book issues, the best option is to create interactive e-modules that adapt to student needs and engage them in the learning process. Interactive e-modules are essential to support students who are studying independently at home. Research on creating interactive e-modules using a multidisciplinary approach for junior high school students has not been conducted yet. Therefore, this research will develop e-modules that meet the needs of students for teaching writing.

1.9. Frame of Thought

Referring to the issue formulation, theory, and related study findings above, a variety of elements, such as students, teachers, media, and teaching methods, affect how well students learn. This is a result of the many learning

styles that students possess. Thus, before beginning the teaching and learning process, it is essential to understand the needs of the students in order to choose the appropriate material and develop effective teaching methods.

Learning resources and learners themselves are the essential elements for the occurrence of the learning process. The way in which learning materials and media are used in the classroom is depending upon the choice of techniques and media that are appropriate for the particular needs and learning setting. Today's technology is not being fully utilized by the instructional materials already in use. Learning resources must be able to effectively develop students' writing abilities while teaching English, particularly when it comes to writing skills, which are one of the most challenging subjects. Writing procedure texts are one type of teaching material used to improve writing abilities in junior high school students.

In addition to the rapid developments in knowledge and technology. Additionally, learning materials have recently evolved from traditional media to digital resources that students may access via computers, the internet, and multimedia without being constrained by time or space. This indicates that distant learning makes use of internet media. One kind of online learning material is Flip PDF-based online content.

To attract students' interest in writing procedure texts, a multidisciplinary approach is applied. This approach can be beneficial for students as it presents a new learning experience. A multidisciplinary approach is an approach that involves integrating knowledge and content from various disciplines. Teaching procedure texts in English using a multidisciplinary approach can enhance students' learning experience by combining various techniques and methods. The research process is described as in the diagram below.

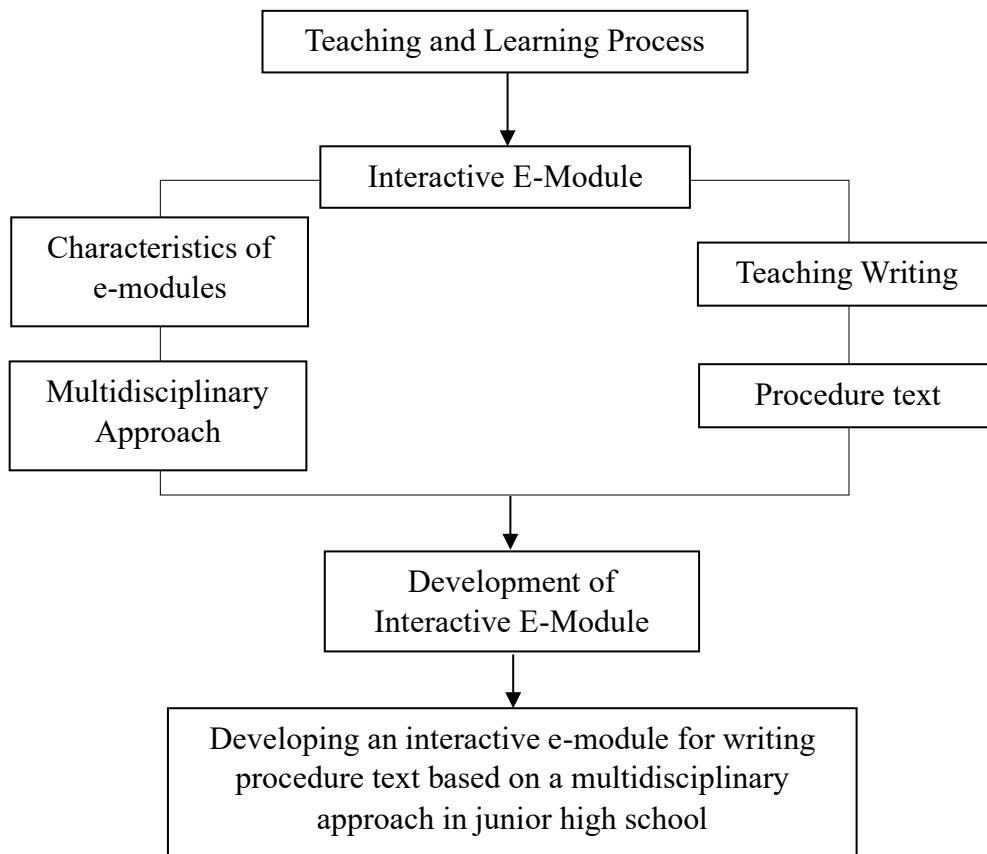


Figure 1. 1 Frame of Thought in Developing Interactive E-Module

1.10. Research Method

1.10.1. Research design and steps of the research

This research uses a qualitative methodology because there is no numerical data. Qualitative approaches do not use numerical data in decision-making instead through narrative or verbal (Lodico et. al., 2006). This study is categorized as a research and development or Research and Development (R&D). It is an industry-based development model in which research findings are used to the creation of new products as well as processes, which eventually go through a demanding field test, evaluation, and revision process until they achieve the required requirements for quality, profitability, or other factors (Gall, Borg & Gall, 2003).

The R&D method is a research method that produces innovation by either creating a new product or developing an existing product to be more attractive in accordance with the learning objectives of a particular subject matter (Muqdamien et. al., 2021). Researcher use research and development approaches relevant to the organize of research being conducted in order develop a learning media product that aims to involve interactive students in teaching and learning activities.

Research and Development (R&D) Steps, Borg and Gall (2003, p. 570-571) suggest that “there are 10 research and development steps, including: 1) Research and Information Collection; 2) Planning; 3) Preliminary Product Development; 4) Preliminary Field Testing; 5) Revising Main Product; 6) Main Field Testing; 7) Revising Operational Product; 8) Operational Field Testing; 9) Revising Final Product; and 10) Disseminating and Implementing.”

However, this research design and development project might need to be completed in phases due to the length of the research, research funds, and researcher capabilities. There only had four stages chosen, which were chosen based on the project's time allocation and the needs of the researcher. This research adopt the design model from Hanafin and Peck (Reigeluth, 2013).

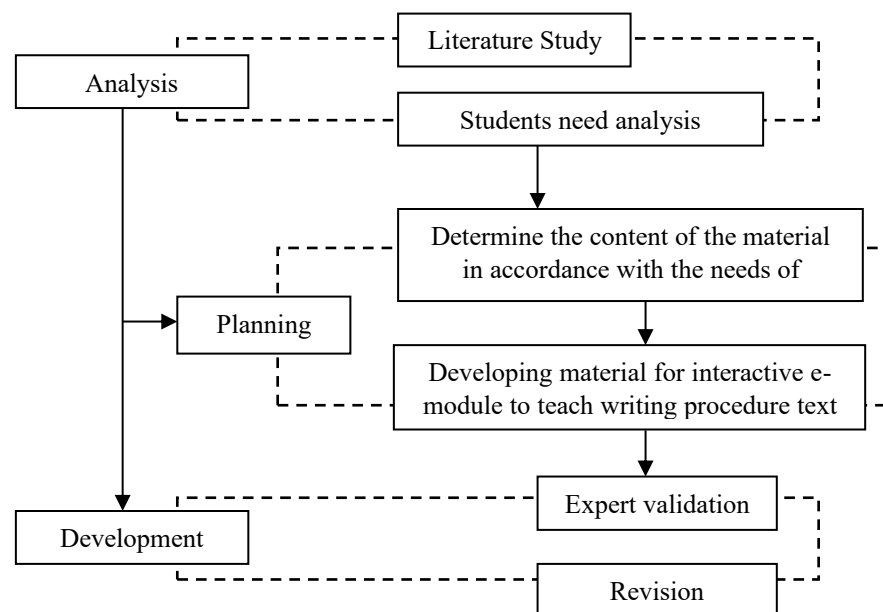


Figure 1. 2 Research Design

The following steps are included in the process of researching and developing interactive e-module design:

- 1) Research and information collection. This step is intended to collect information from various sources related to research. This includes a literature review, observation, and interviews. In this step, a literature review is carried out to obtain data about the characteristics of the guidelines. Then, information about the needs of students by conducting interviews with teachers and students is also collected in this step. Thus, the data results were analysis as the basis for developing an interactive e-module.
- 2) The planning stage is a plan to develop an interactive e-module according to the criteria needed to be done. Planning is intended to develop what kind of e-modules are needed to make learning interactive.
- 3) In the development stage, this step involved developing an interactive e-module for writing skills using a multidisciplinary approach. In the development using a multidisciplinary approach, the material on text procedures incorporates several other disciplines.
- 4) Validating the developed E-module. This step included the evaluation of the developed interactive e-module. The e-module were evaluated by the validator to assess the appropriateness of the e-module. The validation of the product can be achieved through validator assessment. Validator assessment was carried out by an expert that was experts in the field of study.

1.10.2. Sources and types of data

- a) Sources of data

The collection of data must be appropriate to the research issue. The type of this study was qualitative research. A data source of qualitative research can be retrieved through collected data, such as a

documentation, interviews, observation, audiovisual records, and physical artifacts (Creswell, 2012). Primary and secondary data sources represent the two kinds of data sources utilized during this research. Researcher can get primary data directly from firsthand sources, whereas secondary data is gathered from previously present sources.

b) Types of data

In this research and development, the type of data described is qualitative. Instead of looking at statistical data, researcher choose to use qualitative data in order to provide an explanation of how to create electronic modules for instructional needs. As stated by dabbs in Berg in Salim & Syahrummy (2012) that the qualitative approach indicates that the meaning of quality is essential to the nature of an object.

1.10.3. Data collections techniques

In order guarantee appropriate validity, three data collecting approaches were employed in this study. The researcher used observation, interviews, and study of document as the methods of gathering data.

1.10.3.1. Observation

Observation is a data collecting strategy that involves observing and recording all events that occur. This observation strategy involves directly observing an object, circumstance, scenario, or activity (Sugiyono, 2017). Furthermore, observation is a process that starts with observing and then progresses to systematic, practical, objective, and reasonable observations of many types of events in real or artificial circumstances (Kristanto, 2018). In the current research, researcher observed students as they learned English utilizing the learning media given by the teacher. Observation is used to determine what type of learning media the teacher may supply.

1.10.3.2. Interview

The researcher chose interviews to acquire data from teachers, specialists, and students in this study. Nazir (2005) defines an interview as “the process of getting information for research purposes in the form of questions and answers done, in private interaction between the interviewer and the respondent by using a tool called an interview protocol”. Interviews are sometimes used to gather research data. Personal interviews with interview guides. This method is used to study English teaching and learning in the classroom, interactive learning media, student responses to English lessons, and other research topics.

The researcher performed semi-structured interviews with students to gather data for this study. The "interviews involve semi-structured and generally open-ended questions that are few in number and intended to elicit the views and opinions of the participants" (Creswell, 2012, p. 23) Interactive learning using digital media was discussed in the interview.

1.10.3.3. Study of document

Document analysis is a method of gathering data that entails a systematic review and evaluation of pre-existing documents or records relating to the research subject (Creswell, 2012). Documents include many different forms, including textual, visual, or auditory materials, such as books, articles, images, films, and audio recordings. An examination of documents can yield historical, contextual, and factual insights that can bolster or supplement other types of data collection, such as interviews, surveys, or observations. An examination of the text can also uncover fresh insights, perspectives, or topics that help enhance comprehension of the study problem. This method is applied to gather data that previously existed in document references. Documentation-derived data is utilized in research as supplementary and corroborating proof for the research plan.

1.10.4. Instruments of the research

One important part of research with the R&D method is developing research instruments. Research instruments are indispensable in every stage of this research both during the exploratory study, the development of the conceptual model to the model trial and its effectiveness test (Prasetyo, 2012). Although many instruments are available produced by previous researcher, there are times when researcher must develop their own research instruments.

First, the researcher will conduct observations in an English class. The observation was conducted in the natural environment of the subject, without any attempt to control or planned manipulation of the subject's behavior. This was done in order to obtain representative data from naturally occurring behavior (Hasanah, 2017). Second, researcher interviewed several students and teachers to find out what kind of learning media had been used in learning English. Third, researcher conducted a document study to support the data that had been collected previously.

1.10.5. Data analysis techniques

In order achieve the research objectives, the descriptive qualitative analysis used in this study provides a thorough and accurate description of the data collected from various sources. Sugiyono (2013) states that data is gathered through a systematic process of searching, breaking down, organizing, synthesizing, compiling into patterns, choosing which data are important and should be studied, and drawing conclusions that are easily understood by oneself and others. The data are gathered from observations, questionnaires, interviews, and documentation.

1.10.5.1. Data reduction

The process of choosing, narrowing down, streamlining, abstracting, and changing data into a written field note or transcript is known as data reduction. First, the researcher conducted a summary analysis of the data, selecting the most significant elements, concentrating on those, searching for themes and patterns, and eliminating extraneous information (Miles &

Huberman, 1994). Data reduction was carried out after obtaining data from the results of the teacher and students interview. After that, the data was sorted and focused on the important things from the findings needed.

1.10.5.2. Data display

A data display is an assembly of information that allows for inference and action taking. The display of information arranges and organizes the data in a relationship-based structure that simplifies understanding. Brief descriptions, infographics, links between categories, flowcharts, and other visual aids can all be used to communicate data in qualitative research. Since the data collected during the qualitative research method is typically in narrative form, simplification without reducing thing is necessary. This stage is done to set up the collection of information and enable the possibility of drawing conclusions. Miles and Huberman in this case (in Sugiyono, 2011, p. 249) stated that "the most frequent form of display data for qualitative research data in the past has been narrative text".

1.10.5.3. Conclusion drawing/verification

Making inferences and confirming them is the third phase in the processing of qualitative data, as defined by Miles and Huberman. The first conclusion is still preliminary and subject to change in the event that strong evidence is not found to support the next round of data collection. The results presented are credible, nevertheless, if the initial conclusions are supported by accurate and consistent data when researcher go out to the field to gather further information.

1.10.6. Research timeline

Tabel 1. 2 Timeline of the Research

No	Activities	Time Allocations
1	Permission to conduct research in school	1 week (1st week of February)

2	Creating a literature review as the primary data source and looking for research references	1 week (2st week of February)
3	Making data collecting instruments (interview and questionnaire)	1 week (3rd week of February)
4	Collecting secondary data for participant selection (questionnaire for students)	1 week (4th week of February)
5	Data sorting and analysis	1 week (1st week of March)
6	Making Chapter 2	2 weeks (2nd and 3rd week of March)
7	Making Chapter 3	2 weeks (4th week of March and 1st week of April)
8	Developing a product	2 weeks (2nd and 3rd week of April)
9	Making Chapter 4	2 weeks (4th week of April and 1st week of May)
10	Validating the product	1 week (2nd week of May)
11	Making a conclusion	1 week (3rd week of May)
12	Research finalization	1 week (4th week of May)
Approximate		4 months

CHAPTER II

THE STUDENTS NEED OF E-MODULE IN WRITING PROCEDURE TEXTS BASED ON A MULTIDISCIPLINARY APPROACH

This chapter covers what students need from student e-learning media resources through a multidisciplinary approach. This chapter also summarizes the researcher's conclusions in this study, which are based on the information gathered from the teachers concerned and direct interviews with students. To find answers about the research being conducted. This chapter includes a discussion of the first research question, "What are the characteristics of e-modules that students need in writing procedure texts based on a multidisciplinary approach?" The researcher collected data from field interviews with English teachers and ninth grade students. To facilitate data collection in this study, the researcher labeled the students as S1, S2, and S3. Furthermore, interviewing a respondent from the teacher concerned, who became the subject of the study labeled T1. Using a multidisciplinary approach, the needs of electronic learning media for students will be examined in the following section.

2.1. Research findings

Creating learning media, especially writing skills, is one of the abilities that a teacher must have. Currently, teachers still use printed books as the main learning resource. Educators who continuously use textbooks will feel bored. Supposedly, with the development of technology, teachers can utilize various digital applications and platforms to enrich students' learning experience. However, many teachers are still reluctant to adopt technology in the learning process. This is because they do not have enough knowledge on how to integrate technology into the curriculum or because they feel uncomfortable with the use of technology. Despite having adequate facilities, teachers cannot design and produce online-based learning materials to avoid boring learning.

Currently, learning materials are still published in the form of printed books. Meanwhile, the presentation of online learning content is still limited.

In fact, with the rapid development of technology, the representation of digital media in learning is very important to help students' understanding process more realistically. In addition, students' different ways of learning require a varied and innovative approach in presenting learning materials. Their imagination will develop so that it will stimulate students' interest in learning and increase their creativity. Therefore, the use of digital media in learning is a must for educators in the current era.

Researcher have found ways to teach writing in class so that it can boost students' creativity and innovation. By sharpening students' creative abilities and encouraging students to develop their own abilities. For example, researcher can create learning modules that contain writing exercises tailored to students' interests and level of understanding. In addition, researcher can also provide constructive feedback and individual guidance to students to help them improve the quality of their writing.

Tabel 2. 1 The Result of Students' Need Analysis in Writing

No	Student Need Analysis Result	
1	The necessities of students	<ul style="list-style-type: none"> ✓ Provide concise and easy-to-understand content. ✓ Highlight subjects related to curriculum requirements. ✓ Ensure that subjects meet the criteria of modern high schools and Generation Z students. ✓ Mobile phones can access the topic content. ✓ An educational video with the topic information should be provided.
2	The lacks of students	<ul style="list-style-type: none"> ✓ Having trouble remembering vocabulary ✓ Comprehending textual information ✓ Composing written messages ✓ Identifying verbs apart
3	The desires of students	<ul style="list-style-type: none"> ✓ To gain the skill of writing sentences correctly

		<ul style="list-style-type: none"> ✓ Learning must to be linked to music and ✓ Add enjoyable and soothing educational activities.
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As stated by Kaharuddin & Pariabti (2023) interactive e-modules can improve middle school students' writing skills by giving them a way to interact directly with the material, play simulations, and practise writing skills by answering questions within the module. Interactive parts in e-modules can help students understand ideas better and get better at thinking critically. Students can learn more joyfully by using electronic media since it allows them to interact with the content in a way that is more like playing a game than traditional study methods. Increased interest and involvement in the learning process may result from this. In summary, the integration of electronic media into education is imperative for educators to meet the needs of contemporary learning settings and to support students' learning in an efficient and attractive manner.

2.1.1. Accessibility

The use of electronic media in education can provide wider accessibility to students with diverse learning styles. With wider accessibility through the use of electronic media, students can engage and be interested in the learning process. The integration of electronic media into education is essential for educators to meet the needs of contemporary learning settings. In an interview T1 said that *"So, in addition to helping to divide the use of paper used, the electronics of this module gives students the opportunity to learn independently."* It explains the importance of the use of electronic media in education to provide broader accessibility to students. Students can study whenever and wherever they want with the help of electronic modules, free from the constraints of print media or classrooms. It also allows students to

be involved and interested in the learning process, as well as giving them the opportunity to learn independently.

One of the students interviewed by S3 said, "*Help, I think it's simpler.*" In this case, what I mean is about ease of access if learning is using e-modules. The S3 statement is crucial to digging students' views on the use of electronic media in education. The statement emphasizes that e-modules can enhance student involvement in learning and provide simpler access facilities.

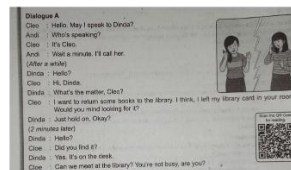


Figure 2. 1 accessibility

Researcher saw that the picture included a QR barcode that made it easier for students to learn independently. The inclusion of QR barcodes there includes easy access for students to learn without being limited to the classroom. Thus, the use of technology in education can have a positive impact on the learning process of students. Thus, it can be concluded that e-modules can be an effective solution in improving the quality of learning in today's digital age.

2.1.2. Illustration

Illustration is the easiest and most effective learning medium in helping students understand complex concepts. With the use of e-modules equipped with illustrations, students will be able to understand the learning material more easily. As T1 says, "*It's like a video yes, so we do learning with the application of illustration in the classroom. With that stimulus, children feel enthusiastic about learning.*" It suggests that the use of illustrations or videos in e-modules can boost students' learning interest and help them understand the material better. As S1 says: "*As if there was a video*

discussing the steps of writing." S2: "Maybe you need a video, for example, a clear voice to speak English." S3: "Clear video showing examples of his steps" From the above view, it can be seen that the use of visual media such as video in e-modules can enrich the learning experience of students and make it easier for them to understand difficult concepts.

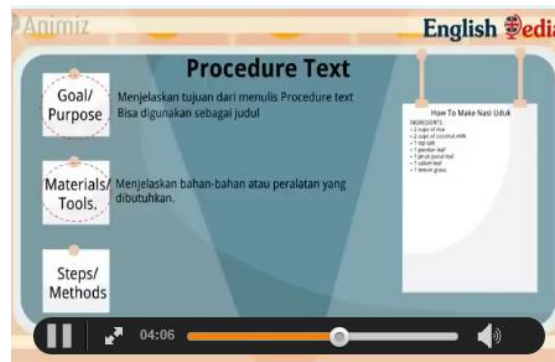


Figure 2. 2 Illustration

Using visual media can also help students remember information better than just using text. The visual media is described in Figure 2.2 of the e-module. Researcher see the use of visual media, such as video, will help educators in facilitating student learning processes more effectively. The researcher also noted that the need for the use of visual media in learning is increasing with technological advances, and a need for learning that is more interactive and attractive to students. Therefore, the development of e-modules that utilize visual media such as video is expected to make a positive contribution in improving the quality of learning. From all this it can be concluded that the use of illustration in learning is an important and relevant thing to apply in the world of education today. It can help increase student interest and understanding of the learning material delivered.

2.1.3. Visualization

E-module is a learning medium that has clear instructions and can make it easier for students to understand the learning material independently. With the presence of visualizations in e-modules, such as drawings, animations, quizzes, students can learn interactively and more interestingly, thereby increasing their learning motivation. As T1 says: *"When creating e-modules for children who are still sitting on the high school bench, they still tend to love the animations, images, and colors that are eye contact."* From this explanation, it can be concluded that visualization in e-modules is essential for improving student understanding of the learning material. With the presence of images, animations, and quizzes, students can learn interactively and more interestingly so that their learning motivation also increases. T1 also stressed that high school children prefer animations, pictures, and eye-catching colors in their e-modules. So did one of the students who said S2: *"I'm easier to understand the material when there's interesting images and animations in the e-module."* It shows that interesting visualization can help students in understanding the learning material better. In addition, e-modules that are equipped with exciting visualizations can also help students remember information better and strengthen their understanding of the learning material. The use of images, animations, and quizzes in e-modules can also improve the learning effectiveness of students at the high school level.



Figure 2. 3 visualization

An interesting visualization of that is depicted in Figure 2.3 which shows how e-modules can be presented more attractively through the use of relevant images and visualization. Then students will be more motivated to learn and understand the material well. In conclusion, the application of visualization in e-modules can provide a more exciting and interactive learning experience for students, thus avoiding boring learning models. Teachers can also optimally utilize visualization to create a more effective and enjoyable learning environment for students at the junior high school level.

2.1.4. Interactive learning

Interactive learning models have already been done by some teachers and the results are very positive for students, thus avoiding boring learning models. Using this method can get students involved in the learning process. In today's era, interactive learning is not only done in the classroom, but can now be done online. As T1 says, *"Now that interactive learning is not just done in a room or in a classroom, but now it's through online media learning."* On this statement T1 has already done interactive learning in the classroom. However, in previous statements, T1 has never used live online media learning during classroom teaching. With the advancement of technology, interactive learning is not only limited to the classroom but can also be done online. Although T1 has been doing interactive learning in the classroom, the use of online media is still something new in his teaching experience. It shows that an educator needs to continue to develop skills in using technology to remain relevant in the learning process in today's digital age. As S3 says about interactive learning in the classroom, *"That's great, I can keep an explanation from the teacher."* While S2 argues, *"the E-Module pack is the same as learning in classroom is good, so it can be more varied."* From their statement they pointed to the need for interactive learning in the classroom. They

agreed that a combination of teacher exposure and the use of technology in learning could provide a more enjoyable and effective learning experience. S2 also added, *"If there's an interactive gadget, so it's more exciting to learn."* The statement marks a student's need for more attractive and technology-based learning methods.

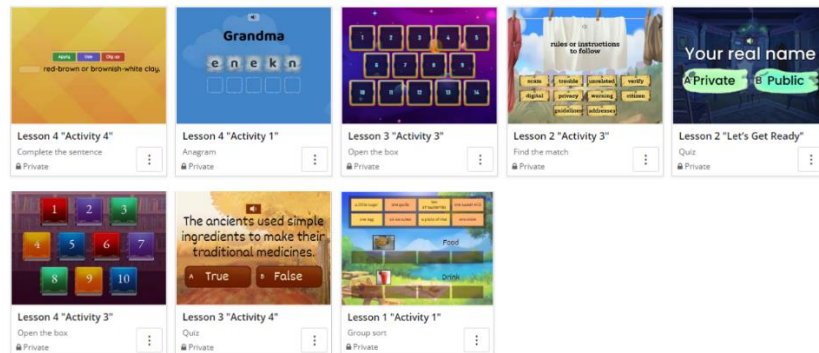


Figure 2. 4 wordwall material

It shows that the integration of technology into learning can increase student interest and involvement in the learning process. Considering the opinions of some students, the researcher used the Wordwall website as a medium to provide a more interactive and enjoyable learning process. The website provides materials that are designed to be learned while playing. The website also allows students to participate in quizzes and games to test their knowledge and keep them engaged in the learning process. In particular, the website offers some activities like match-ups, anagrams, group shorts, unjumble, random wheel, and more. The website provides a fun and interactive way for students to reinforce their learning.

Figure 2. 5 LearningApps Material

Researcher also use another website for interactive learning. The website is called LearningApps. It offers a wide variety of interactive exercises, such as quizzes, crossword puzzles, and memory games. The exercises on LearningApps cover a range of subjects and

can be tailored to different levels of difficulty. Researchers create activities in LearningApps that can be written live and get feedback from those activities in real time. The interactive nature of LearningApps allows for immediate assessment and adjustment. This feature facilitates personalized learning experiences for students, especially in writing skills. Students can receive instant feedback on their writing and make improvements as they go. In conclusion, interactive learning, in addition to requiring students in this era, also provides a more enjoyable and effective learning experience.

2.1.5. Multidisciplinary approach in learning processes

A new and old way of teaching languages is a multidisciplinary approach. This approach combines different fields of study to create a richer and more attractive learning environment for improving their writing skills. This method provides an opportunity for students to see the relationships between different disciplines and apply them to real-world problem-solving. As T1 presented in an interview about the multidisciplinary approach, *"It seems that since ancient times, multidiscipline has also been applied because each learning is certain and will relate to or associate with other learning."* However, today, multidisciplinary has become increasingly important in an effort to provide a better learning experience. With a multidisciplinary approach, students can develop the collaborative and critical thinking skills needed to be in the real world. T1 also added, *"It's so good this multidisciplinary approach, sometimes it doesn't feel like it's applied."* With a multidisciplinary approach, students can develop collaborative and critical thinking skills that are highly appreciated in the real world. T1 states that sometimes they do not realize that they are learning with a multidisciplinary approach, but admits that this is very beneficial to their development.

While the results of interviews with some students stated that he had never felt the connection between the English language material and other disciplines of science, S2 stated, *"If I don't feel like I've never."* as well as with S3, *"no, I don't."* However, S1 says, *"There was once something that had a relationship with IPA, like how to make a switch."* Interviews with S1 showed that they felt a connection between English subjects and other disciplines, as in the example of how to make switches in science. However, S2 and S3 admit that they've never felt the same thing. Despite this, T1 showed that a multidisciplinary approach still offers significant advantages for student development, even though students may not always be aware of them.

Figure 2. 6 Multidisciplinary Material

To realize that, the researcher embraced themes that were relevant to everyday life and mixed them with a multidisciplinary approach. Among them are Indonesian recipe, digital life, and art. These themes are expected to provide students with a broader and deeper understanding of topics that are relevant and useful in everyday life. The conclusion is that a multidisciplinary approach to education provides great benefits to student development, although not all students are aware of it. Interviews with the students showed that linkages between English subjects and other disciplines can help broaden their understanding and skills. While there are still some who have not experienced it, it shows the importance of continuing to encourage a multidisciplinary approach in the learning process.

2.1.6. Material provider

In this case, researcher provide materials according to the needs of students so that learning becomes more useful and interactive. Based on the results of student needs interviews, researcher can

compile relevant learning materials for students. The researcher provided some evaluations to support the student's writing skills. Such evaluations will help students in measuring progress in writing skills. From T1 says that *"If you do, the thing that students need in learning to write is to provide clear and structured guidance for every step in the writing process."* Then T1 added *"presents an interesting design, content that matches the subject matter, interactive features like video discussions or quizzes, easy access."* Based on interviews with T1, researcher can design learning materials that are relevant to the needs of students. In addition, researcher can also provide various evaluations to help students in developing their writing skills. With clear and structured guidance, as well as interactive features such as video discussions or quizzes, students are expected to be able to better understand and improve their writing skills.

Considering the needs of students that have been previously mentioned, the researcher identified several student needs in the development of electronic modules for writing text procedures based on a multidisciplinary approach. These modules will not only focus on improving students' writing skills but also on fostering their critical thinking and analytical abilities. By incorporating elements from various disciplines, such as language arts, science, and technology, students will be able to approach writing tasks from different perspectives and enhance their cognitive skills. The researcher also aims to include interactive elements in the modules, such as quizzes and multimedia resources, to keep students engaged and motivated throughout the learning process.

Student needs in writing procedure text based on multidisciplinary approach for develop electronic module
Visual learning resources based on videos, images, and audio
Interactive learning methods
Provide accessibility and clear instruction
Visual illustrations should be distinctive and colorful.

Provide assistance for creative activities.
Collaborate with other subjects in a simple way.
Real-world examples should be included.

Tabel 2. 2 Students Analysis to Develop E-Module

In addition, the researcher found that the electronic module that students need to learn how to write is T1, which means that *"when there is this learning module, teachers are very helpful in teaching because students can learn independently, can find themselves, and students also want something new."* It becomes a motivation for researcher to be able to develop electronic modules that can help students in the process of learning to write more effectively and independently. To sum up, electronic modules can greatly enhance the learning experience for students and provide them with the tools they need to succeed in writing.

2.2. Discussion

Based on the research results related to students' needs for electronic resources in the era of rapidly developing technology, it is clear that integrating electronic modules into writing instruction is essential for meeting the evolving needs of today's students. The absence of methods and media used by teachers to convey information causes students' lack of understanding and lack of enthusiasm for learning English, according to their opinions regarding the need for learning materials for electronic writing in the classroom. The materials and assignments given by teachers are also considered inadequate in terms of presentation and attractiveness, so students are less motivated to learn and write English. To satisfy the needs of the students and boost their enthusiasm for learning and writing in English, the researcher created interactive electronic learning materials. "By generating interest and engagement with a variety of engaging and original information, interactive learning resources can raise students'

motivation levels during the learning process" (Puspitarini & Hanif, 2019). In addition to conventional techniques, teachers can significantly increase students' motivation by implementing demanding tactics like games and interactive media. Using technology in the classroom as a medium can also increase students' motivation to learn. As an added requirement, all ninth graders must complete an English writing module available online. An antiquated teaching method that only employs printed books and lecture methods is to blame for the emergence of such a need. In this case, the researcher also got suggestions from the teachers on how to create interesting learning materials and what kind of instructions can attract students' interest in writing.

The module has an appearance that is both interesting and interactive. Educators argue that the material should be given pictures, videos, and sounds that match the learning material in the classroom, rather than just using books and simple illustrations. It is thought to enhance the attractiveness of students and help them understand the material better. According to (Nurhikmah et. al., 2021), the objectives of making an e-module include providing a meaningful learning experience for students, focusing on life skills education, and achieving curriculum goals. E-modules can integrate various media, such as visual, audio, audio-visual, and multimedia, to make learning interactive and engaging. E-modules can also be easily updated and accessed online, making them a convenient and flexible tool for both students and educators.

In order to fulfill the function of the e-module, that is, students can independently learn through e-modules, the instructions used should be clear and easy to understand. This will help students gain a better understanding of the learning material, especially in terms of writing. Clear instructions for the learning module are essential for students to learn independently. The module should be designed with clear learning objectives, easy-to-understand language, and structured in a way that allows students to study without constant guidance from educators. A good

module should also be user-friendly and fulfill the five-module characteristics, including having clear instructions, being self-contained, stand-alone, adaptive, and user-friendly (Nisa et. al., 2022). Ultimately, a well-designed module should empower students to take ownership of their learning. By providing clear instructions and a user-friendly interface, students can navigate the module with ease and absorb the material at their own pace. With well-defined learning objectives, students can track their progress and understand what is expected of them. This independence fosters a sense of responsibility and motivation in students, leading to a more effective and engaging learning experience.

In the development of these modules, researcher used a multidisciplinary approach involving various aspects of knowledge and skills. The primary objective is to create learning material that matches the needs and expectations of students. According to (Park & Son, 2010), interactive learning materials enhance the learning experience of students in a multidisciplinary approach by promoting student-centered and collaborative learning. Problem-based learning and the development of higher-order thinking abilities can both be advanced through the use of ICT in the classroom. In the module, researcher incorporate other subjects in a simple way to optimize cross-subject learning. This multidisciplinary approach can also help prepare students to face future real-world challenges. As a result, they are better equipped to face the challenges of the real world and become lifelong learners.

Based on what has been mentioned above, students need electronic modules for their English learning. The results of interviews with students and teachers conducted by the researcher are proof of this. From interviews with ninth-grade teachers and observations of teaching classes, some information was obtained. Some of the barriers faced by teachers during learning are (1) the limitations of teachers in the production of modules, both in terms of quantity and quality. (2) Students' abilities vary in a rapidly evolving era of technology, so a suitable electronic module is required for

all students. (3) Teachers prefer to use conventional learning methods, as they are considered more effective in using time and referring only to important points. (4) Lack of student involvement in learning. (5) The material given during this period has some shortcomings, such as a summary of the material and a set of questions.

Educators often choose conventional teaching methods on the grounds that they are easier to do and require less preparation. In the observations, the researcher discovered that learning still uses traditional methods like lectures and only printed books. These conventional methods often do not maximize student learning potential. So the researcher strives to symbolize interactive material as a fulfillment of the needs of students in the era of rapidly evolving technology. As said by (Alessa & Hussein, 2023), teachers still use conventional methods in teaching, but they are also incorporating modern teaching methods to meet the needs of 21st-century students. This is done to make the learning process more effective and avoid boring air in the classroom.

Based on what was said above, an electronic module could be used as a learning aid that has important features for improving students' ability to write in English. To help students act as they learn, the electronic module is the embodiment of a colorful resource selection that is fully structured, engaging, and filled with a variety of designs. The use of multimedia enhances students' learning experience by motivating them to learn and engaging them with the content, leading to an enhanced learning process (Wong, 2015). Therefore, electronic modules with audiovisual media are one of the best forms of media to use due to their advantages in both sound and image, according to interviews with ninth graders and teachers at the school. Audio-visual media can combine elements of image and sound that will make students more interested in the learning-teaching process. Interactive media is a crucial component of media recommendations that the teacher can use online. Based on this, researcher intend to discuss

students' need to write procedure texts based on a multidisciplinary approach to English writing skills.

1. Visual learning resources based on videos, images, and audio

Audio visual media refers to the use of visual and auditory elements in communication and learning. It includes various forms of media, such as videos, films, and documentaries, that rely on sight and sound to convey information to the audience. Audiovisual media can be used for documentation purposes or as a means of communication, with a focus on enhancing the learning experience through engaging content (Desrianti et. al., 2012). For example, students can watch a video tutorial on how to conduct a science experiment and then write a procedure text based on the steps they observed. By incorporating audiovisual resources into their learning process, students can improve their English writing skills while also gaining a deeper understanding of the subject matter. Audio visual learning is rapidly developing and increasing the use of audio-visual media in the learning process, especially by teachers. Educational media is closely related to technology empowerment in education and education technology (Hilmi, 2017). In another explanation, audiovisual media is a form of educational media that utilizes both sound and visual elements to convey messages (Winarto et. al., 2020). Based on the experts' descriptions, educational media plays a significant role in enhancing the learning process and facilitating understanding, especially by teachers. Additionally, audiovisual media can help engage students and cater to different learning styles. Therefore, it can be concluded that audio and visual media are a type of media that combines basic sound and visual elements that are merged into a single media unit to help teachers explain concepts to students and provide guidance.

Research findings indicate that the use of illustration or audio-visual media in learning is an important and relevant thing to apply in

the world of education today. Visual and audio media can help enhance understanding and retention of complex ideas. According to (Sankey et. al., 2010), visual and audio media can indeed help enhance understanding and retention of complex ideas. Studies have shown that using a combination of verbal and non-verbal approaches, such as visuals and audio modalities, can increase working memory and have a significant impact on how students retain information, ultimately making learning more enjoyable. Incorporating illustrations and audio-visual media in education can cater to different learning styles, making it more inclusive and effective for all students. Additionally, in today's digital age, students are constantly exposed to visual and audio stimuli, making it easier for them to engage with educational content presented in these formats. As technology continues to advance, the integration of visual and audio media in education will only become more prevalent and essential for fostering a dynamic and interactive learning environment.

2. Interactive learning methods

The development of learning media cannot be separated from the role of technology, which is increasingly advanced and rapidly developing. So interactive learning methods will become increasingly important to improve the quality of education. Interactive learning is a learning method that uses interactive media to improve student motivation and learning outcomes. (Anggraini & Asrin, 2021). Interactive learning can also help students develop critical thinking and problem solving skills. Another explanation by (Aminatun et. al., 2022) is that interactive learning is one of the learning methods involving teachers and students in the learning process. With the interaction between teachers and students, learning becomes more dynamic and interesting. Students can be actively involved in the learning process, allowing them to better understand the material being taught. Interactive learning is carried out to achieve certain

goals, as said by Tuma (2021) that the purpose of interactive learning is to enhance students' engagement, participation, and knowledge construction through active interactions and group activities, leading to better learning outcomes. In addition, interactive learning can also improve students' social skills, as they are taught to work together and communicate well in groups. Thus, the use of interactive learning methods is expected to improve the quality of education and create a generation that is better prepared to face future challenges.

The research findings show that students are more interested in interactive learning that engages them than just the lecture or teacher-centered method. Interactive learning, in addition to requiring students in this era, also provides a more enjoyable and effective learning experience. Based on (Sugden et. al., 2021) that interactive learning impacts student engagement by promoting interaction between learners and instructors, as well as between learners and content. Utilizing interactive methods such as games, challenges, videos, and discussion boards can enhance engagement levels among students. Research has shown that learner-content interaction is crucial for student progress and satisfaction with online courses. Students are more likely to succeed and enjoy their learning experience when they feel connected to the course material. Additionally, fostering a sense of community among students through online discussions and group projects can further enhance the learning experience. When students feel like they are part of a supportive and collaborative environment, they are more motivated to actively participate in and engage with the course material. By incorporating interactive elements that encourage student collaboration and communication, instructors can create a truly immersive and effective online learning environment. This personalized approach to teaching can lead to higher retention rates and overall student success.

3. Provide accessibility and clear instruction

It's crucial to make sure that learning materials are open to everyone and not just those in a classroom when ensuring accessibility. This can be done by providing various access options, such as through digital platforms that can be accessed online, downloadable formats, or the provision of accessibility aids such as alternative texts. Developers must have a basic understanding of accessibility practices and methods in software development to ensure e-modules can fulfill various skill levels and feature real-world, relevant exercises so as to keep students engaged (Prasetya, 2021). Thus, it can be ensured that no one is limited in the opportunity to learn due to accessibility constraints.

In the electronic module, clear instructions are needed for each activity in order to fulfill its function as a self-learning tool. Only providing clear instructions will ensure that students can learn effectively and independently. As stated by (Suantini et. al., 2022) that the instructions for using the electronic module must be clear. Guidelines or clear instructions in the electronic module are essential to ensure that students can learn effectively and independently. The research findings show that teachers recommend using clear instructions in the electronic module. The research findings show that teachers recommend using clear instructions in the electronic module. As stated by Clear & Bertnan (1991) that writing clear instructions can help prevent disappointment in student performance on assignments. It is important to define terms, provide an overview of the procedure, and list necessary tools or concepts for successful completion. Therefore, it is crucial for educators to communicate clearly and effectively with their students.

4. Visual illustrations should be distinctive and colorful

In creating the electronic visuals of the module, it is important to ensure that the illustrations used are not only striking but also have prominent characteristics in order to attract students' attention. By

highlighting fun colors and unique characteristics, illustrations can be a powerful tool for attracting attention and clearly communicating messages to students. Distinctive and colorful visual illustrations refer to images that have unique patterns, colors, and textures that set them apart from others (Ahmad & Fatimah, 2020). Through research, the application of visualization in e-modules can provide a more interesting and interactive learning experience for students, thus avoiding a boring learning model. While colorful and unique illustrations may initially grab students' attention, at some point the focus should be on the educational content being presented, not just on visual appeal. Over-reliance on striking visuals can sometimes detract from the substance of the material being taught. As stated by (Putri et. al., 2022) that examples of visuals in electronic modules can be in the form of flipbook displays with multimedia content such as audio, animation, and learning videos that help students in the teaching and learning process. The utilization of visual examples in instructional settings implies that, when employed effectively, images can convey verbal information and facilitate a more tangible understanding of that knowledge. By incorporating these images into electronic modules, students can be assisted with data organization. Further, comprehension can be enhanced through the integration of visual aids alongside verbal communication. Students consider the words in the book to be more significant due to the illustrations.

5. Provide assistance for creative activities

Assisting students with creative activities is a crucial step in facilitating their creative processes, particularly when it comes to writing and brainstorming ideas. Teaching materials in the form of e-modules should be designed to be student-centered, contextual, and stimulate creativity to support independent learning (Adha et. al., 2023). For example, in language classes, students can create visual storyboards to accompany their written narratives, thus enhancing

their understanding of the material and allowing for more creative expression. Also, providing students with prompts and exercises that encourage them to think outside the box can help them develop new ideas.

Through research, this suggests that the integration of technology into learning to provide creative activities can increase student interest and engagement in the learning process. According to (Al Hanif & Santosa, 2023) that e-modules can enhance project creativity by developing critical thinking through evaluating arguments with facts or evidence, improving communication by explaining ideas persuasively, encouraging collaboration by giving and receiving feedback to find solutions, and enhancing creativity by seeking and using suggestions to refine ideas. In addition, the integration of technology allows for specialized learning experiences, empowering students to explore their interests and passions in ways that traditional methods may not be able to accommodate. To conclude, by incorporating various interactive elements such as quizzes, simulations, and multimedia resources, e-modules provide a stimulating and immersive learning environment that accommodates different learning styles. Overall, the use of e-modules in education has the potential to revolutionize the way students learn and prepare them for the challenges of the 21st century.

6. Collaborate with other subjects in a simple way

Working with other subjects can be essential to creating a rich and meaningful learning experience when developing an electronic module for writing procedure texts using a multidisciplinary approach. In the results of the study, when in dialogue with some students, they realized the connection between learning English and other subjects. This can make students more enthusiastic and interested in the learning process. Teachers across disciplines play a role in literacy instruction, with expectations for students in reading,

writing, speaking, and listening in all subjects (Bunch et. al., 2012). Further exploration of how multidisciplinary approaches impact students' motivation and enthusiasm for learning may shed light on the importance of offering educational experiences in promoting academic success. For example, a science teacher could incorporate English language skills by having students write lab reports or research papers, helping them see the relevance of language in their scientific studies. This approach not only enhances students' overall academic performance but also fosters a deeper appreciation for the importance of writing in their daily lives.

7. Real-world examples should be included

Including real-world examples in learning, particularly in the use of e-modules, can greatly enhance student engagement. By offering relatable examples from everyday life, students can gain a better understanding of how the concepts they learn can be applied in real-world situations. This, in turn, enhances their practical skills when using technology. As a result of the study, the students believed that the material they were learning should be related to their daily lives so that they could understand how to apply those ideas in real life. Real-world examples should be included in interactive e-module to help students understand complex and abstract materials (Fahlevi, 2021). In addition, interactive e-modules have been found to enhance student learning achievement and inspire students to perform better (Firmansyah et. al., 2023). For example, in a physics e-module, using examples like smartphones and GPS systems to explain concepts like electromagnetic waves can help students connect theory to practical applications. This approach not only increases student engagement but also improves their retention and application of knowledge when utilizing technology in their everyday lives. In addition, the inclusion of real-world examples in the interactive e-module serves as a bridge between abstract concepts and real-life experiences, thus fostering

deeper understanding among students. This approach fosters critical thinking skills as students are challenged to analyze how theoretical knowledge translates into real-life scenarios.

Furthermore, incorporating case studies and simulations into the e-module allows students to actively apply their knowledge in a controlled environment. According to (Jeong-Bae, 2010) incorporating real-world examples into writing can help demonstrate cross-disciplinary application. By immersing themselves in these virtual scenarios, students can test their understanding of the material and develop problem-solving skills. Additionally, the interactive nature of the e-module encourages collaboration among students, promoting a sense of community and shared learning experiences. Overall, integrating real-world examples and interactive elements into the e-module enhances the educational experience and equips students with the necessary skills to succeed in a technology-driven world.

Based on the above, it can be concluded that the need for electronic resources for English writing materials based on students' multidisciplinary approach consists of several characteristics of the need. The first is that audiovisual media, which include videos, images, and audio, are valuable resources to enhance the learning experience. It can help students understand and remember complex ideas, cater to different learning styles, and make learning more enjoyable. The second is Interactive learning methods use technology and interactive media to improve student motivation, engagement and learning outcomes. It involves active interaction between teachers and students, encouraging critical thinking, problem-solving skills, and knowledge construction. It uses games, challenges, videos, and discussion boards to increase engagement levels.

The third is accessibility and clear instructions, both of which are important characteristics of learning materials. To ensure accessibility, learning materials should be available in various formats and accessible

through electronic platforms anywhere and anytime. Meanwhile, clear instructions can prevent disappointment in student performance and should include work definitions, procedure descriptions, and necessary tools or concepts. The fourth is that distinctive and colorful visual illustrations are essential in electronic modules as they can attract students' attention and enhance the learning experience. Examples of visuals in electronic modules can include multimedia content such as audio, animation, and learning videos, which help students in the teaching and learning process. The fifth is student-centered and stimulates creativity, where these modules can include visual storyboards, prompts, and exercises that encourage thinking outside the box.

The sixth is that collaborating with other subjects in simple ways can enhance students' learning experience and motivation. By incorporating English language skills into subjects such as science, students can see the relevance of language in their studies and develop a deeper appreciation for writing. This multidisciplinary approach can improve academic performance and promote academic success. Finally, real-world examples should be included in e-modules to increase student engagement and practical skills.

CHAPTER III
DEVELOPMENT OF AN ELECTRONIC MODULE FOR WRITING
SKILLS BASED ON A MULTIDISCIPLINARY APPROACH FOR GRADE
NINE STUDENTS

This chapter answers the second research question, namely, "How to develop e-modules for teaching procedure text writing based on multidisciplinary approach in grade nine?" The findings and discussion in this chapter relate to the development of students' English writing skills by developing an electronic module based on a multidisciplinary approach as a learning medium. In addition, the researcher gathered data from a variety of sources, including English teachers, lecturers, and relevant journals and books. The data collection process involved examining the development of students' abilities through the use of learning modules. Here is a discussion on the development of writing skills in grade nine, using a multidisciplinary approach.

3.1. Research findings

The researcher analyzed the findings in the field, journals, and books related to writing materials in grade nine on the topic of procedure text and student writing skills oriented to the development of electronic modules to improve writing skills. A research study of two type of respondents, three students and a teacher, on the use of multidisciplinary learning modules in schools found that both agreed that the use of electronic modules can significantly improve learning. This can be seen from their enthusiasm in participating in the lesson and the improvement in their writing skills when using the electronic module. Respondents who are aware of the existence of electronic learning modules in schools agree that their use can improve learning effectiveness. As T1 said, *"interactive features such as quizzes or games on the electronic module can make learning more fun and interesting. Children will be very enthusiastic when learning while playing."* This shows that learning methods that involve interactive elements can increase students' motivation and interest in learning. Even in writing skills, students will be more motivated and creative when learning is done interactively. In this writing skill, the researcher used

a multidisciplinary approach to get students involved in various writing activities that are interesting and relevant to everyday life.

Based on the teacher's suggestion about writing learning materials based on a multidisciplinary approach, T1 said, *"It can be done by collaborating with teachers in other subjects to be called multidisciplinary in content. Then, present the content in an interesting and varied way. Also given interactive activities from the concepts of other subjects."* Involving students in discussion or group work, listening and writing, or filling in the blanks in order to support students' comprehension of writing, the researcher also added vocabulary training. As said by T1 regarding the type of information that should be in the electronic module, *"In addition to interesting material, it is also important to use words that should not be difficult for students."* So that researcher can provide vocabulary exercises. In the process, the researcher should develop the writing learning module not only from books but also from various sources. The researcher should also provide interesting information on tasks that are effective for students, such as making students think and involving them in discussions among students.



Figure 3. 1 Display of electronic module for writing skill




The researcher uses learning media development procedures in accordance with those procedures to develop learning media in the form of electronic modules. In the electronic module product specification, there is some content in which there is a table of contents, writing exercises, discussion of material, vocabulary development, and references. **There are forty-eight pages**, consisting of four

topics and one material evaluation. This is intended so that students do not get bored with the usual writing content. The material evaluation includes a variety of activities to keep students engaged.

3.1.1. Development result

For the e-module product's overview of writing procedure text content, several media components are required and prepared for use. The necessary media components include of PDF modules, images, videos with animation, audio, and interactive quizzes. Start with the merging process if all of the mentioned components are ready. Using the professional flip PDF application, the components of interactive educational materials can be merged as needed. The following are the design-stage techniques for interactive e-modules that use professional flip PDF based on a multidisciplinary approach to writing:

Tabel 3. 1 Results of Interactive E-Module Development

No	Section of E-Module	The Display
1	Cover/Title Page	 <p data-bbox="815 1335 1350 1368">Figure 3. 2 Cover Page Design E-module</p>
2	Page of navigation	 <p data-bbox="900 1597 1262 1630">Figure 3. 3 Navigation Page</p>
3	Foreword	 <p data-bbox="959 1883 1204 1917">Figure 3. 4 Preface</p>



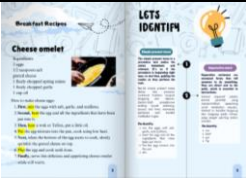





4	Table of contents	 <p>Figure 3. 5 Table of content design</p>
5	Learning goals	 <p>Figure 3. 6 Learning Objectives</p>
6	Pages of multidisciplinary writing material	<p>Figure 3. 7 Learning Content</p>
7	Page of procedure text material	 <p>Figure 3. 8 The material of Procedure text</p>
8	Page of learning activity	 <p>Figure 3. 9 Learning Activity</p>
9	Page of quiz	 <p>Figure 3. 10 Quiz</p>
10	Summary	

		Figure 3. 11 Design of summary page
11	Bibliography	 <p>Figure 3. 12 Bibliography Page Design</p>
12	Writer biodata	 <p>Figure 3. 13 Author Biodata Page Design</p>

The development of the e-modules took into account the needs and preferences of the ninth-grade learners. After the module is covered, the navigation page appears. The interface in this section makes navigating the module easy for both the students and the teacher. The buttons on the page easily open the appropriate page. To prepare students for learning the writing material, the navigation page provides a brief introduction to each topic, making the material more accessible. This keeps students organised and focused while learning. In addition to an evaluation of the materials using a multidisciplinary approach, the ninth-grade writing materials cover four subjects, including recipe, digital life, and art. The writing materials are in line with current topics. The materials will cover current era learning topics, encouraging critical, creative, and collaborative thinking.

The light blue background makes each module topic easy to read. This module has white backgrounds to make the content easier to understand and less distracting. In addition to text and images, audio and video are offered to help students write materials. YouTube videos explain procedure text and animations. YouTube videos give context and examples, making the module more interactive for students. Narakeet.com audio is used, it makes the audio clear and professional. Visual and audio tools accommodate diverse learning styles and promote topics.

The researcher provides the sources used to compile this module. These references lend legitimacy to the research and allow the reader to learn more about the issues. Researcher provide image credits alongside the references to give credit to the owners of the images in the module. Copyright and ethics in the use of visual resources are very important. By doing so, researcher can ensure readers trust and value their material. Image references and credits can also enhance the credibility of the module.

3.1.2. Preparing and Combining E-Module

In this e-module, there is an integration of several websites and apps that aim to facilitate students in understanding the material. In addition, the incorporation of several learning websites will make the learning media interactive between students and teachers. In learning to write text procedures, the integration of other apps is important to be applied in the e-module to complement its function as a medium for learning writing skills. Here are some features with other interactive websites combined:

a) The integration of Padlet for prewriting

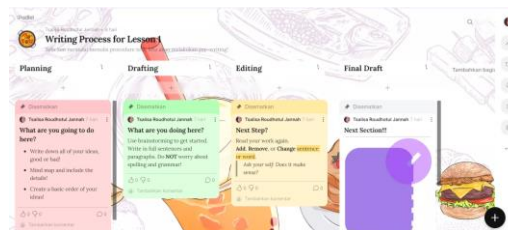


Figure 3. 14 Prewriting Design

In the writing process, Harmer explains that writing goes through four stages. These stages are planning, drafting, editing, and final draft. So that the author includes Padlet as a media component for pre-writing text procedures, as a means of brainstorming and organising ideas before writing. So that the writing results become more structured and well organised. In Padlet, there are features that allow users to add images, videos, and notes to the post so that ideas can be conveyed more clearly and interestingly. Teachers can also give direct feedback or comments on students' writing to provide more

specific feedback and help students develop their writing skills. In this activity, students go through interactive learning with the teacher using e-module learning media.

b) The integration of Google Forms for assignment collection and quiz

After the pre-writing stage, students can submit their work through Google Form individually. Google Forms can be integrated into the learning process for students to submit assignments and take quizzes. This allows for a more organized and efficient way to collect student work. This integration enhances the overall learning experience and encourages student engagement in a digital learning environment.

c) The integration of LearningApps and Wordwall for quizzes

LearningApps and Wordwall are two great tools that can be integrated into the classroom to create interactive quizzes. LearningApps and Wordwall offer a variety of interactive exercises and games that can be used to assess student understanding. By using these tools, educators can enhance the quizzing experience for students and make learning more fun and effective.

3.1.3. Kinds of activity on E-Module for writing

E-Module for writing is an online learning environment designed to help students develop their writing skills through various activities. These activities are designed to provide a comprehensive and in-depth learning experience, helping students develop their writing skills effectively. Here are some of the types of activities contained in the E-Module for writing:

3.1.3.1. Writing content exercise

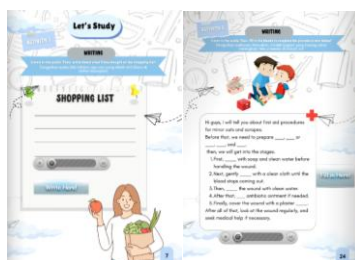


Figure 3. Listen and write exercise

The content must be engaging and relevant to students in order to enhance their writing skills. The first type of exercise is "listen and write down" where students listen to the audio and write it according to the instructions requested. This content exercise is expected to train concentration to listen to and write information accurately. The Google form and LearningApps activity are already available on the side of the "Write Here" button. Students can access these resources to practice their listening and writing skills at their own pace. The Google form allows for immediate feedback, giving students the opportunity to review their answers and correct any mistakes. The LearningApps activity offers a more interactive approach, engaging students in a fun and educational way. Both resources aim to improve students' writing abilities while keeping them actively involved in the learning process.



Figure 3. Fill in the blank exercise

The second exercise is 'fill in the blanks', where students must complete sentences with the correct words. This exercise helps students practice their vocabulary and comprehension skills by choosing the right words to complete the sentences. It also encourages critical thinking, as they need to understand the context in order to fill in the blanks correctly. The 'fill in the blanks' exercise can be a fun and interactive way for students to test their knowledge and improve their writing abilities.

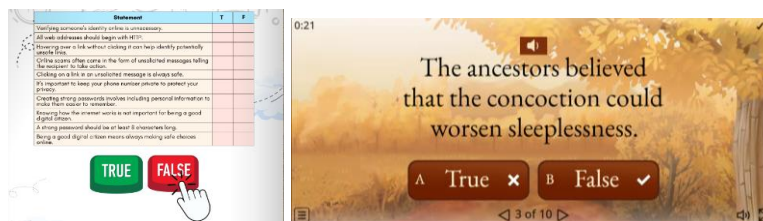


Figure 3. True or false exercise

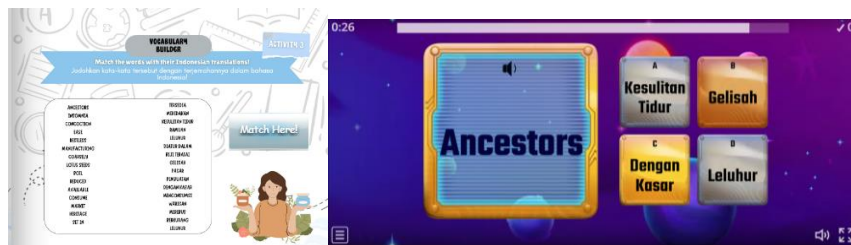
The third exercise in the 'true or false' format is typically used to gauge a student's understanding of the material. After the writer provides the procedure text, students are asked to determine some true or false statements based on the content of the text. This exercise is useful to gauge students' understanding of the material. This exercise challenges students to think critically about the information presented and identify misconceptions. By requiring students to analyze the text and make judgments based on the information provided, the 'true or false' exercise helps reinforce key concepts and encourages deeper learning. In addition, these exercises provide immediate feedback to both students and instructors, allowing for timely clarification and further discussion of confusing or misunderstood points. Thus, the combination of 'fill in the blanks' and 'true or false' exercises creates a well-rounded approach to assessing and reinforcing student learning. This exercise will continue with the next exercise, which is to create a procedure text.

3.1.3.2. Writing procedure text

Procedure text is a type of writing that explains how to do something step by step. This type of text is often used in technical manuals, recipes, and do-it-yourself guides to clearly outline the steps needed to achieve a desired result. It is important to use clear and concise language in procedure text so that readers can easily follow the instructions. When writing a procedure text, it is helpful to start by outlining the steps in a logical order and using bullet points or numbers to make the steps easy to follow. In this exercise, the researcher

supplemented it with illustrations in the form of videos from YouTube. The researcher also provided pre-writing media through Padlet and Google Form to collect procedure text writing tasks with clear and easy-to-understand instructions. In addition, including pictures can clarify the instructions for readers. By practicing writing procedure texts, students can improve their communication skills and become more proficient in explaining complex processes. This approach not only engages students in a more interactive way but also allows them to see real examples of the procedures they are learning. The use of multimedia resources such as videos and images helps cater to different learning styles and enhance comprehension.

3.1.3.3. Vocabulary builder

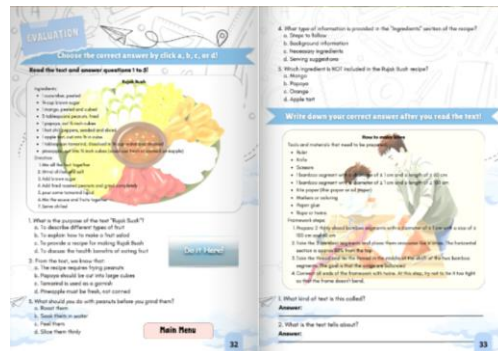


Vocabulary builder

In this activity, students are asked to match words based on their meaning. Furthermore, this practice not only enhances students' comprehension but also fosters the development of their analytical thinking skills, as they engage in game-based activities related to the previously read information. This exercise provides access to the Wall World website, where students are required to complete the exercise by engaging in interactive games. Students can promptly view their results and determine who is the fastest performer. By participating in this vocabulary builder activity, students can strengthen their understanding of the material and improve their overall comprehension skills. Additionally, engaging in interactive games on the Wall World website makes the learning process more enjoyable and engaging for students.

This exercise allows students to track their progress and see immediate results, encouraging them to continue practicing and expanding their vocabulary.

3.1.3.4. Evaluation



Evaluation of the material

The evaluation is a component of the electronic module. The assessment is intended to test the student's comprehension of the information presented in the electronic module. Teachers as well as pupils recognize the importance of assessment in this module. The evaluation assesses students' comprehension and competency in the areas presented. Typically, evaluation components include quizzes, examinations, or other assessment activities that evaluate students' comprehension and competence of the topic. Thus, embedding assessment within the curriculum promotes thorough learning while also allowing for efficient tracking of student development. It also gives helpful feedback to students as well as teachers.

3.2. Discussion

Then researcher found journals and books related to English writing materials using electronic modules. According to (Gunjer and Afnita, 2019) the e-module is expected to provide solutions for students who have difficulty writing and to overcome the limitations of the learning resources that teachers have. E-modules

are more valuable than study groups that use textbooks, as they allow students to explore information from various sources quickly and easily. Developing e-modules based on a multidisciplinary approach is essential for students, as writing activities require material that is close to their environment and daily life. In addition, teaching materials, such as books, print and electronic media, and the environment, play a crucial role in delivering subject matter (Aprijon et. al., 2019). Modules are a valuable tool for independent and enjoyable learning, as they are systematically arranged, involve active student participation, direct reinforcement, and supervision through evaluation strategies. The advantages of e-modules include their small physical size, easy processing, easy distribution, and creative presentation (Charlina et. al., 2022). as well as the ability to track student progress and provide instant feedback. This can help instructors identify areas where students may need additional support or clarification.

Based on these statements, it is clear that technology can greatly enhance the learning experience for both students and teachers. In addition to enhancing student learning outcomes, electronic modules have also demonstrated their effectiveness in positively impacting students. Then the observation found that the English material in the printed book has not been made as interesting as possible to increase their involvement in the learning process. As an example, the layout is not appealing or clear, the module's subject is not engaging enough to serve as writing prompts, the instructions are not sufficiently detailed, and the module's content is only in black and white (as shown in the accompanying pictures). On the recommendation from the teacher during the interview, in developing a writing learning module based on a multidisciplinary approach for ninth grade students, researcher should provide writing module topics that are relevant to real situations, attractive and clear layouts, interesting tasks and exercises (such as inviting students to be active and creative), and vocabulary (from Indonesian to English) to increase students' vocabulary in writing, as well as easy access for students and teachers.

According to Sudjana (2007), the electronic module creation procedure consists of several steps. These tasks involve various aspects such as creating an appealing cover, aligning the subject matter with specific objectives, structuring the

material in an organised way, outlining the steps for student activities, ensuring that these steps effectively meet all goals, identifying the necessary tools for the activities, generating content in PDF format, inserting and editing the PDF file, and, in the end, publishing the material. The feasibility of the e-module was assessed through practicality tests and expert validation (Yuyun et. al., 2022). Next, it is important to outline the programme in detail, which can be divided into the following sections within the dule: Create instructor instructions, assignments, activity sheets, test sheets, answer sheets, and test answer documents for the students.

The results of the need analysis are the basis for researcher to determine what content will be included in the writing learning material. The material covers how many topics on text procedure writing skills will be developed based on a multidisciplinary approach to material mapping.

Tabel 3. 2 Specification of the Product

Units or Topics	Activities	Learning Goals
Lesson 1: Do you know how to make breakfast?	<ul style="list-style-type: none"> • Procedure text material • Writing exercise • Vocabulary builder • Writing procedure text 	<ul style="list-style-type: none"> • Students demonstrate their ability to apply procedure text knowledge practically. • Students identify and evaluate the structural elements of a procedure text on breakfast-making
Lesson 2: Do you know how to use search engines?	<ul style="list-style-type: none"> • Procedure text material • Writing exercise • Vocabulary builder • Fill in the blank 	<ul style="list-style-type: none"> • Students write a procedure text on using search engines. • Students compare and evaluate various search engine procedures to

	<ul style="list-style-type: none"> • Writing procedure text 	identify strengths and weaknesses.
Lesson 3: Do you like making craft?	<ul style="list-style-type: none"> • Procedure text material • Writing exercise • Vocabulary builder • Fill in the blank • Writing procedure text 	<ul style="list-style-type: none"> • Students assess different craft-making procedures based on creativity, craftsmanship, and utility. • Students design and produce their own craft project, showcasing originality and procedural mastery.

In order to provide appropriate material in the e-module, the researcher also tried to investigate students' needs for material development. By understanding the needs of students, researcher can create content that is relevant and beneficial to their learning. This will increase the effectiveness of e-modules in supporting student learning processes. The results showed that some of the students' primary needs, such as material that should be accompanied by audio, video, and animation, are also easily accessible by students using their smart phones. These results were supported by Johari et al. (2014), who argued that teaching aids or learning media have many variations: audio (voice), silent images (visual), moving images (video), animations, aids (trainer), or artificial objects. (mockup). It helps students understand the subject matter, including English. On the other hand, students have some gaps or deficiencies in learning English, especially in writing skills. On the other hand, students have some gaps or shortcomings in learning English. Some of them include difficulty remembering words, a lack of understanding of how to organize words into sentences, difficulty writing English text, and also difficulty distinguishing the use of verbs. Especially in writing skills, Toh and Hocking (2010) stated that "the impression that writing in simple English also extends to simplicity

in vocabulary usage and lack of complexity in the structure of sentences and idioms." A proper approach to learning English is needed so that students can overcome these gaps. In addition, the use of interesting and interactive learning methods can also help students understand the material better.

In this study, the researcher also found some of the students' desires, such as the desire to present English language materials in simple and simple language, to memorize a lot of basic words, to present content with lots of interesting pictures, videos, and sounds, to understand how to write sentences correctly, and also to have relaxed and enjoyable learning activities. Multimedia learning materials, especially through ICT tools like YouTube, can drive learners to help themselves in the language learning process by utilizing various built-in features and multi-mediated language input (Alobaid, 2020). By offering content in straightforward language along with visual aids like images and videos, these tools can cater to the needs of students. Moreover, interactive materials on platforms like YouTube can make the process of understanding sentence structure and grammar rules more engaging and enjoyable for learners.

Expert guidance is quite vital in improving the writing module product. Two professionals have validated this electronic writing learning session. The first expert is a ninth-grade English teacher, while the second is a lecturer. These experts gave useful advice for developing a high-quality electronic writing module.

3.3. Expert validation of the product

To realize a good writing module, expert advice is essential. In this study, there were two experts who validated this electronic writing learning module. The first member was an English teacher who taught in ninth grade, with more than twenty years of teaching experience. Then the second expert is a lecturer. The member holds a Master's degree in English teaching and has been teaching at the university level for about ten years. In addition, she has taught a variety of courses in the Department of English Teacher Education, with expertise including digital literacy, language skills, and English language teaching.

In evaluating products, experts use expert validation instruments. On the instrument, there are two aspects that are assessed, namely, the material aspect consisting of fourteen indicators, and the medium aspect consisting of twenty indicators.

According to Sugiono (2012), the table below shows the guidelines for a good interactive electronic module:

Score	Interval	Qualification
1	$x \leq 1.92$	Bad
2	$1.92 < x \leq 2.64$	Not good
3	$2.64 < x \leq 3.36$	Good enough
4	$3.36 < x \leq 4.08$	Good
5	$x > 4.08$	Very good

Tabel 3. 3 Guidelines for Validation Assessment

In evaluating products, experts use expert validation instruments. On the instrument, there are two aspects that are assessed, namely, the material aspect consisting of fourteen indicators and the medium aspect consisting of twenty indicators. Each indicator is rated as very good (5 points), good (4), fair (3 points), poor (2 points), and very poor (1 point). In determining the maximum score, it is different in each aspect due to differences in the number of indicators. In the material aspect, the maximum score achieved must be 70 points to be considered an excellent product for meeting the criteria. Then, in the media aspect, the maximum score must reach 100 to be considered an excellent product for meeting the criteria. Due to the difference in maximum scores on different aspects, researcher used Table 3.2 to categorize the assessment. By using the calculation **(the sum of the scores / the total number of indicators)** to get the average value, so that it can get an assessment conclusion.

The first aspect that is validated is the material aspect, with a total of fourteen indicators. The first validator results showed a score of 70, so the average score is 5, referring to Table 3.2, the conclusion of the evaluation is categorized as very

good. Next, the results of the second validator showed a rating of 68 points, so the average rating is 4.8, referring to Table 3.2, the conclusion of the assessment is categorized as very good.

The second aspect is the media aspect, with a total of twenty indicators. The first validator results showed a rating of 97 points, so the average rating is 4.85, referring to Table 3.2, the evaluation conclusion is categorized as very good. Next, the results of the second validator show the same assessment of 97 scores, so the average score is 4.85, referring to Table 3.2, the conclusion of the assessment is categorized as very good.

The results indicate that the product is valid for implementation in the English language learning process. However, the expert validation provided some suggestions to revise the materials and media. The following are the suggestions from the expert validation:

1. Material aspect
 - a) Provides learning objectives for each theme
 - b) Independent activity sheets for students
2. Media aspects
 - a) The layout and selection of buttons should be clarified.

CHAPTER IV

CONCLUSSION AND SUGGESTION

4.1. Conclusion

The conclusion of this study regarding the research questions raised are two questions. First, the needs analysis of the characteristics module for learning to write procedure text based on multidisciplinary approach in junior high school. Second, the development process of the module.

Regarding the first research question, it was found that the characteristics of the module for learning to write text procedures based on a multidisciplinary approach include five main components. The first is accessibility. Electronic media in education offers wider access to students with diverse learning styles, allowing them to engage and learn independently, reducing paper use and simplifying access facilities, as well as electronic modules such as QR codes, which increase student engagement and provide a simpler learning experience, making it an effective solution in today's digital era. The second is an attractive illustration. Visual illustrations increase student understanding, interest, and retention of information, and with advances in technology, the development of e-modules that utilise visual media such as video has become an important aspect of education. The third is a clear visualisation. Visualisation-rich E-modules increase students' understanding of learning material by combining images, animations, and quizzes so that students can learn interactively and interestingly, increasing their motivation and making visualisation important for effective learning, especially for high school students who like interesting colours and animations. The fourth is interactive media, active student participation, meaningful interaction with the material, assignments, and problems, constructive feedback that promotes critical thinking and exploration, as well as the use of role-playing, collaborative projects, and online modalities to promote independent learning. The fifth is multidisciplinary material to create a richer learning environment, help students develop collaborative and critical thinking skills that are highly valued

in the real world, and provide a broader understanding of topics relevant to everyday life.

About the second research question, the process of developing the module as the product of this study. Based on the research findings, it can be concluded that the use of electronic modules can significantly improve students' writing skills. The use of interactive features in the modules, such as quizzes and games, increases students' motivation and interest in learning. Involving students in multidisciplinary activities and providing vocabulary training also enhances their writing skills. The development of electronic modules should include interesting and varied content, clear instructions, and interactive activities. The navigation page in the module should provide a user-friendly interface and a preview of the topics covered. The preface should explain the purpose of the module and its relevance to students' learning. The table of contents should provide an overview of the topics covered. The procedure text material should be presented with a clear layout and include multimedia elements such as images, videos, and audio. The writing content exercises should include activities such as listening and writing, filling in the blanks, and true or false exercises to enhance students' comprehension and critical thinking skills. The writing procedure text section should provide clear instructions and examples, as well as multimedia resources to support students' understanding. The vocabulary builder activity should engage students in matching words based on their meaning and provide interactive games for vocabulary practice. The evaluation section should assess students' comprehension and competency in the material. The closing page should include references and image credits to increase the credibility of the module. The development of electronic modules should follow a systematic procedure and involve expert validation to ensure the quality of the product. Mostly, the use of electronic modules based on a multidisciplinary approach can enhance students' writing skills and improve their learning experience.

In summary, the first research question provides an analysis of students' needs in writing procedure texts based on the multidisciplinary approach in

chapter 2. Then, the second research question is the process in developing the electronic module according to the data obtained previously in interviews and observations in chapter 3.

4.2. Suggestions and Recommendations

In taking into consideration the findings of this research, the researcher would like to provide some recommendations to the various stakeholders indicated below.

4.2.1. Suggestions

Due to the limited time available, the whole process of research and development could not be finished. To enhance research efforts, it is important to carry out experiments or undertake product testing. Furthermore, the collection of user input was not conducted. Limited literature prevented the development of a comprehensive research tool. In order to enhance the efficacy of instruments, it would be beneficial to allocate more research efforts towards performing a comprehensive literature study. This research was conducted with a rather limited understanding of the sequence of product development. Examining many sources might be beneficial in ensuring that the reference is used correctly for future research.

4.2.2. Recommendations

The theoretical and practical guidance of the researcher are quite essential. The theoretical purposes of this research are to give relevant information about the interactive electronic module in learning writing procedure text using a multidisciplinary approach to teaching English as a foreign language. The findings of this study will probably be useful as a reference for the creation of electronic learning modules. In practice, teachers are supposed to utilize this study as a medium to teach writing procedure text in English as a foreign language. Practically, this study is

likely to be utilized by students to increase their interest in electronic learning modules and improve their comprehension of learning English as a foreign language. The researcher's suggestions are also presented to teachers, students, and future researchers.

4.2.2.1. For teacher

In the learning process using independent learning, the role of the teacher as a facilitator is very important. Through understanding the analysis of student needs in the development of electronic modules, teachers are expected to be able to help students find ways that suit student needs in the English learning process and provide guidance and advice related to the use of electronic modules. In addition, teachers are also expected to open up management space to increase student independence and learning achievement.

4.2.2.2. For students

Students are expected to be able to improve their learning by using electronic modules after understanding and considering the analysis of student needs related to the use of electronic modules. In addition, it is expected that students can maximize their abilities in the learning process independently and not always depend on the teacher in the learning process.

4.2.2.3. For future research

This research is expected to be a reference for future researchers who will conduct research in similar fields. Future researchers should be able to make improvements and refinements to this research by optimizing and exploring the analysis of student needs for the development of electronic modules to improve student independent learning.

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APPENDICES

Appendix 1 Research Instrument

Developing Interactive E-Module in Writing Procedure Texts Based on Multidisciplinary Approach in Middle School				
Theory	Sources	Indicators	Question for Teacher	Question for Students
Understanding of Interactive Electronic Module (E-module)				
<p>an interactive e-module is a computer-assisted multimedia that includes visuals or animations together with accompanying content (Sidiq et al., 2021, p.1652).</p> <p>E-modules is learning media that reduce the use of stacks of printed paper. E-modules are also called media for self-study because they are equipped with instructions for self-study (Hutahaean, 2019, p.302).</p> <p>E-modules integrated with technology are engaging instructional materials due to the multimedia components (audio, video, and</p>	<p>Sidiq, R., & Suhendro, P. (2021). Utilization of Interactive e-modules in formation of students's independent characters in the era of pandemic. <i>International Journal of Educational Research and Social Sciences (IJERSC)</i>, 2(6), 1651-1657.</p> <p>Hutahaean, L. A. (2019). Pemanfaatan E-Module Interaktif Sebagai Media Pembelajaran di Era Digital.</p>	<ol style="list-style-type: none"> 1. Interactive e-modules are computer-assisted multimedia with visuals or animations. 2. E-modules reduce the use of printed paper. 3. It can display text, images, animations, and videos on electronic devices. 4. E-modules are designed for self-study and include instructions for self-study. 5. E-modules integrated with technology have multimedia components (audio, video, images) that enhance understanding and engagement 	<ol style="list-style-type: none"> 1. Apa yang Bapak ketahui tentang media pembelajaran interaktif? 2. Sebagai media yang mengurangi penggunaan kertas, bagaimana pendapat Bapak tentang penggunaan Interactive E-Module dalam pengajaran? 3. Menurut bapak seperti apa penggunaan multimedia (gambar, animasi, audio, dan video) yang dibutuhkan siswa dalam pembelajaran penulisan teks prosedur? 	<ol style="list-style-type: none"> 1. Apakah apakah kamu pernah mendengar tentang interactive E-module? 2. Jika belajar menulis teks prosedur kira-kira video, audio, dan gambar seperti apa yang kamu butuhkan? 3. Menurut kamu jika belajar menggunakan E-Module akan membantu kamu memahami konsep teks prosedur lebih baik? 4. Menurut kamu adakah

<p>images) that facilitate understanding, and as a result, this media can add interest to the learning process.</p>	<p>Nurhikmah, H., Hakim, A., & Wahid, M. S. (2021). Interactive E-Module Development in Multimedia Learning. <i>Al-Ishlah: Jurnal Pendidikan</i>, 13 (3), 2293-2300.</p>	<p>in the learning process.</p>	<p>4. Dari segi penggunaannya E-module dirancang untuk siswa belajar mandiri, instruksi seperti apa yang dapat membantu siswa dalam belajar menulis teks prosedur? 5. Menurut Bapak bagaimana isi konten yang menarik agar melibatkan siswa dalam proses pembelajaran?</p>	<p>cara agar belajar menulis teks prosedur menjadi lebih menarik? Jelaskan!</p>
Student need of electronic module				
<p>The return of face-to-face schools also impacts the use of digital technology in learning (Nugroho et. al., 2023, p.526). In addition, smartphone users are currently increasing rapidly, and students also play with gadgets daily (Dewi et. al, 2022, p.126).</p>	<p>Nugroho, M. R., Sumardjoko, B., & Fathoni, A. (2023). Development of Science Learning E-Modules Using the Flip PDF Application. <i>Jurnal Paedagogy</i>, 10 (2), 525-535. Dewi, Y. N., Zaim, M., &</p>	<p>1. Impact of face-to-face school return on digital technology in learning 2. Daily use of gadgets by students 3. Smartphone utilization as a learning tool 4. Integration of digital media like video, audio, and short films in education</p>	<p>1. Bagaimana menurut Bapak manfaat penggunaan E-Module dalam pengajaran penulisan teks prosedur? 2. Dari banyak fitur yang disebutkan, menurut Bapak fitur apa yang</p>	<p>1. Menurut kamu apakah ada tantangan dalam belajar menulis teks prosedur? 2. Menurutmu, apakah pembelajaran menggunakan gadgets yang berinteraktivitas ini membantu</p>

<p>Teachers should see this as an opportunity not an obstacle. Such as utilizing their smartphones as learning media that can attract students' attention and help remember information. Digital media that can be integrated include video, audio, or short films.</p>	<p>Rozimela, Y. (2022). Interactive learning using e-learning module in learning English for senior high school: A review of related articles. <i>JELIT A: Journal of Education, Language Innovation, and Applied Linguistics</i>, 1(2), 125-134.</p>		<p>akan berguna dan disukai oleh siswa?</p> <p>3. Dari banyak fitur yang disebutkan, fitur apa yang belum maksimal dalam mengajak Siswa untuk berinteraksi? Berikan alasannya!</p> <p>4. Menurut Bapak, apa saja tantangan yang akan dihadapi dalam menggunakan Interactive E-Module?</p>	<p>meningkatkan keterlibatan dan pemahaman mu?</p> <p>3. Bagaimana pendapatmu mengenai integrasi E-Module dengan pembelajaran di kelas?</p>
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The integration of multidisciplinary approach

<p>A multidisciplinary approach is a curriculum integration method that emphasizes the varied viewpoints that distinct academic fields can contribute to the comprehension of a particular theme, subject, or issue. A multidisciplinary approach examines the same subject</p>	<p>Nathani, P. (2021, July 13). <i>What Is Multi-Disciplinary Approach In Education? Advantages And Disadvantages</i>. MasterSoft, from https://www.iitms.co.in/blog/multi-disciplinary-education-advantages-and-disadvantages.html Accessed</p>	<p>1. Multidisciplinary approach integrates viewpoints from different academic fields to enhance understanding of a theme, subject, or issue.</p> <p>2. It involves combining multiple disciplines to examine a subject.</p> <p>3. Provides a common and flexible</p>	<p>1. Apa yang Bapak ketahui mengenai pendekatan multidisiplin dalam konteks pengajaran?</p> <p>2. Apakah Bapak telah menggunakan metode pembelajaran dengan pendekatan multidisiplin? Jika ya, bagaimana pengalaman</p>	<p>1. Apakah kamu melihat adanya keterkaitan antara mata pelajaran lain dengan pembelajaran menulis teks prosedur?</p> <p>2. Bagaimana menurutmu pendekatan multidisiplin dapat meningkatkan pemahaman</p>
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<p>through a combination of multiple disciplines (Nathani, 2021).</p> <p>The multidisciplinary approach can serve as a common and flexible platform for teaching various subjects (Al Hassan, 2012, p. 404), including teaching procedure text.</p> <p>"Educators who prioritize a multidisciplinary approach typically maintain the integrity of individual subject matter while integrating different fields through the integration of curriculum organized around overarching ideas, concepts, problems, or projects that leverage connections" (Akins & Akerson; Mansilla, Miller, & Gardner, 2000; Ross & Frey, 2002).</p>	<p>on [20 January 2024]</p> <p>Al Hassan, I. B. M. (2012). Multidisciplinary curriculum to teaching English language in Sudanese institutions (a case study). <i>Theory and Practice in Language Studies</i>, 2(2), 402-406.</p> <p>Akins, A., & Akerson, V. L. (2002). Connecting science, social studies, and language arts: An interdisciplinary approach. <i>Educational Action Research</i>, 10, 479-497.</p>	<p>platform for teaching various subjects.</p> <p>4. Maintains the integrity of individual subject matter while integrating different fields.</p>	<p>Bapak? Seperti apa tanggapan siswa?</p> <p>3. Apa manfaat yang akan dilihat dari mengintegrasikan berbagai disiplin ilmu dalam pembelajaran?</p>	<p>mu tentang menulis teks prosedur?</p>
<p>The development of electronic module based on multidisciplinary approach</p>				

<p>This interactive e-module, which is built on integrated learning, gives students the chance to comprehend how instructional materials from different subject areas relate to daily life (Amini and Usmeldi, 2022, p.276).</p> <p>Making e-modules aimed to provide references other than textbooks that are distributed by the government. In addition, e-modules can be used by educators or teachers as a reference to make the new e-modules. It is done so that e-modules are designed in accordance with the development of students, their abilities, interests, and needs so that students are interested in writing</p>	<p>Amini, R. Usmeldi.(2022). Developing the Interactive e-Module Based on Integrated Learning for Primary School Students. <i>International Journal of Information and Education Technology</i>, 12 (4), 272-279.</p> <p>Gujer, H., & Afnita, A. (2019, November). Development of electronic module for description text writing skill based contextual teaching and learning for seventh grade student of smp. In <i>Proceedings of the 2nd International Conference on Language, Literature and Education, ICLLE 2019, 22-23 August, Padang, West Sumatra, Indonesia.</i></p>	<ol style="list-style-type: none"> 1. Integration of instructional materials from various subject areas 2. Emphasis on relating instructional materials to daily life 3. Use of e-modules as alternative references to government textbooks 4. Designing e-modules based on student development, abilities, interests, and needs 5. Aim to engage students and enhance their interest in learning 	<ol style="list-style-type: none"> 1. Menurut Bapak E-module yang seperti apa yang dibutuhkan siswa dalam belajar writing? 2. Menurut Bapak bagaimana cara agar E-module disukai/diminati siswa untuk belajar writing? 3. Menurut Bapak, apa sebaiknya langkah-langkah yang dapat diambil untuk mengembangkan isi konten dalam Interactive E-Module untuk pengajaran penulisan teks prosedur menggunakan pendekatan multidisiplin? 	<ol style="list-style-type: none"> 1. Menurut kamu apakah belajar writing di kelas perlu sesuatu yang lebih menarik? Jika iya, jelaskan seperti apa? 2. Bagaimana tanggapanmu jika pembelajaran di kelas menggunakan E-module? 3. Apakah ada saran atau rekomendasi yang ingin kamu berikan terkait pengembangan Interactive E-Module ini?
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Appendix 2 Transcript Interview

Transkrip wawancara guru

Kode : T1

Tanggal wawancara : 7 Februari 2024

Tempat dan waktu : SMPN 7 Kota Cirebon

No	Question interview	T1
For RQ 1: What are the kinds of e-module that students need in writing procedure texts based on a multidisciplinary approach?		
1	Apa yang Bapak ketahui tentang media pembelajaran interaktif?	Semenjak dulu dan proses lahirnya belajar mengajar itu siswa sebetulnya sudah melakukan proses pembelajaran interaktif. Sekarang itu pembelajaran interaktif itu tidak hanya dilakukan di sebuah ruangan atau di dalam kelas saja melainkan sekarang sudah melalui pembelajaran media online. Interaktif itulah diantara kegiatan pembelajaran yang sangat efektif kita mengembangkannya secara maksimal. Pembelajaran interaktif yang masih dilaksanakan itu kegiatan di kelas melalui penugasan lalu anak dikelompokkan sehingga akan terjadi hubungan interaktif dan dialog yang sangat efektif.
2	Sebagai media yang mengurangi penggunaan kertas, bagaimana pendapat Bapak tentang penggunaan Interactive E-Module dalam pengajaran?	Bagus ya, pendapat Bapak cukup bagus ya pastinya akan terbantu untuk tambahan media belajar anak-anak selain dari buku cetak. Jadi, selain membantu mengurangi penggunaan kertas yang digunakan, elektronik modul ini memberi siswa kesempatan untuk belajar secara mandiri. Namun, mungkin ada beberapa kendala. Tetapi Bapak yakin kalau sekarang ini siswa-siswa sudah bisa mengoperasikan media elektronik dengan baik seperti Hp atau computer sehingga ketika sudah terbiasa, tidak akan terganggu proses belajar mengajarnya.
3	Menurut bapak seperti apa penggunaan multimedia (gambar, animasi, audio, dan video) yang dibutuhkan siswa dalam pembelajaran penulisan teks prosedur?	Berupa video ya, jadi kita melakukan pembelajaran dengan penerapan ilustrasi di kelas. Dengan stimulus itu anak-anak merasa antusias dalam belajar.
4	Dari segi penggunaannya E-module dirancang untuk siswa belajar mandiri, instruksi seperti apa yang dapat membantu siswa dalam belajar menulis teks prosedur?	Instruksi yang jelas dan terstruktur itu sangat penting. Instruksinya tentu harus mudah dipahami kalau perlu disertai dengan contoh yang jelas agar siswa dapat mengikuti langkah-langkahnya dengan baik.

5	Menurut Bapak bagaimana isi konten yang menarik agar melibatkan siswa dalam proses pembelajaran?	Bisa berupa simulasi praktik atau proyek-proyek yang mendorong siswa untuk berkolaborasi dan menciptakan sesuatu.
6	Bagaimana menurut Bapak manfaat penggunaan E-Module dalam pengajaran penulisan teks prosedur?	Jadi, manfaat dari penggunaan elektronik modul ini banyak ya, dari sifatnya yang fleksibel dan kita bisa menyesuaikan konten sesuai kebutuhan.
7	Dari banyak fitur yang disebutkan, menurut Bapak fitur apa yang akan berguna dan disukai oleh siswa?	fitur interaktif seperti kuis atau permainan dalam e-module yang dapat membuat pembelajaran menjadi lebih menyenangkan dan menarik. Itu anak-anak sangat antusias ketika belajar sambil bermain ya.
8	Dari banyak fitur yang disebutkan, fitur apa yang belum maksimal dalam mengajak Siswa untuk berinteraksi? Berikan alasannya!	Sedikit ya fitur yang kurang maksimal. Namun, sebagai contoh fitur tontonan video yang tidak disertai pertanyaan atau interaksi langsung dengan materi itu mungkin yang kurang maksimal.
9	Menurut Bapak, apa saja tantangan yang akan dihadapi dalam menggunakan Interactive E-Module?	Yang mungkin terjadi, ada ya beberapa siswa nanti akan kesulitan dalam mengakses internet, juga motivasi siswa itu sendiri, kemudian ada yang tidak memiliki support baik dari diri sendiri orang tua maupun di lingkungannya.
10	Apa yang Bapak ketahui mengenai pendekatan multidisiplin dalam konteks pengajaran?	Sepertinya semenjak dulu multidisiplin itu juga diterapkan. Mungkin sekarang ada penyebutan istilahnya saja. Karena setiap pembelajaran itu pasti dan akan menyangkut atau mengaitkan dengan pembelajaran yang lain.
11	Apakah Bapak telah menggunakan metode pembelajaran dengan pendekatan multidisiplin? Jika ya, bagaimana pengalaman Bapak? Seperti apa tanggapan siswa?	Bagus sekali pendekatan multidisiplin ini, kadang kala sampai tidak terasa bahwa pendekatan ini diterapkan. Seperti melaksanakan pembelajaran prosedur teks, keterlibatan anak-anak sangat tinggi dalm hal ini dan mereka pun tidak menyadari ketika sekaligus mempelajari bidang studi yang lain, sehingga ini yang dikatakan multidisiplin.
12	Apa manfaat yang akan dilihat dari mengintegrasikan berbagai disiplin ilmu dalam pembelajaran?	Pembelajaran yang dilakukan menjadi banyak ya sumbernya, karena bukan hanya dari materi di buku Bahasa Inggris melainkan bisa juga sumber dari yang lain dijadikan sebagai konten belajar.
For RQ 2: How to develop e-modules for teaching procedure text writing based on a multidisciplinary approach in junior high school?		
13	Menurut Bapak E-module yang seperti apa yang dibutuhkan siswa dalam belajar writing?	Kalau bapak ya, hal dibutuhkan siswa dalam belajar menulis itu seperti yang menyediakan panduan yang jelas dan terstruktur untuk setiap langkah dalam proses penulisan. Kemudian sebaiknya dilengkapi dengan

		contoh-contoh dan latihan-latihan interaktif yang membuat siswa untuk praktik secara langsung.
14	Menurut Bapak bagaimana cara agar E-module disukai/diminati siswa untuk belajar writing?	<p>Ketika membuat e-modul untuk anak yang masih duduk di bangku SMP, mereka masih cenderung menyukai animasi, gambar, dan warna-warna yang eye-contact. Mungkin bisa dengan memperhatikan beberapa hal ini ya, seperti:</p> <ul style="list-style-type: none"> • Desain yang menarik • Isi konten yang sesuai dengan materi (sesuai dengan jenjangnya) • Fitur interaktif seperti diskusi video, kuis, atau dengan permainan. • Kemudahan akses juga penting ya untuk siswa • Lalu gunakanlah kata-kata yang sekiranya tidak menyulitkan siswa
15	Menurut Bapak, apa sebaiknya langkah-langkah yang dapat diambil untuk mengembangkan isi konten dalam Interactive E-Module untuk pengajaran penulisan teks prosedur menggunakan pendekatan multidisiplin?	<p>Bisa dengan kolaborasi dengan guru di mata pelajaran lain untuk bisa disebut multidisiplin dalam suatu konten. Kemudian, penyajian konten dengan cara yang menarik dan bervariasi sih. Juga diberi aktivitas interaktif dari konsep-konsep mata pelajaran yang lain. Lalu di evaluasi terus-menerus untuk isi kontennya untuk memastikan bahwa pendekatan multidisiplin tidak cuma berwujud teori tetapi praktik nyata.</p> <p>Kalau ada modul pembelajaran ini guru sangat terbantu dalam hal pengajaran karena anak-anak bisa belajar secara mandiri. Lalu disesuaikan Bahasanya sesuai Tingkat jenjangnya masing-masing.</p>

Transkrip wawancara siswa

Kode : S1, S2, S3

Tanggal wawancara : 7 Februari 2024

Tempat dan waktu : SMPN 7 Kota Cirebon

No	Question Interview	S1	S2	S3
1	Apakah apakah kamu pernah mendengar tentang interactive Elektronik modul?	Gatau deh, kayaknya belum pernah denger.	Enggak pernah denger yang namanya "interactive Elektronik modul", kayaknya itu kayak modul digital yang bisa diapa-apain gitu ya?	Iya, pernah dengar. Itu kayak belajar online yang kan? Kalo interaktifnya gatau deh.
2	Jika belajar menulis teks prosedur kira-kira video, audio, dan	Pastinya butuh yang jelas dan gampang dimengerti.	mungkin butuh video yang ada contohnya, suara yang jelas kalo	Video yang jelas yang ngasih contoh langkah-langkahnya

	gambar seperti apa yang kamu butuhkan?	Seperti ada video yang membahas langkah-langkah menulis.	ngomong pake Bahasa Inggris, dan gambar yang menarik kak.	
3	Menurut kamu jika belajar menggunakan interactive E-Module akan membantu kamu memahami konsep teks prosedur lebih baik?	Kayaknya iya. Soalnya kalo ada interaksi gitu, bisa lebih aktif belajarnya, dan mungkin lebih gampang ngerti.	Kayaknya iya deh. Kalo bisa main-main gitu sama modulnya.	Membantu kak, lebih simpel aja menurutku.
4	Menurut kamu adakah cara agar belajar menulis teks prosedur menjadi lebih menarik? Jelaskan!	Mungkin bisa ditambihin pake game atau quiz yang seru.	kayak ditambihin game kak biar seru.	Mungkin bisa lebih menarik kalo bikin permainan atau kuis yang nyambung sama materinya.
5	Menurut kamu apakah ada tantangan dalam belajar menulis teks prosedur?	Kalo kita belum terbiasa nulis teks prosedur, bisa aja bingung gimana cara nulisnya.	Mungkin kalo materinya rumit atau gak jelas, jadi kita bingung mau nulis apa.	Bingung gimana cara nulisnya apalagi kalo materinya susah dimengerti.
6	Menurutmu, apakah pembelajaran menggunakan gadgets yang berinteraktivitas ini membantu meningkatkan keterlibatan dan pemahamanmu?	Pasti bantu meningkatkan keterlibatan dan pemahaman kita.	Iya, mungkin bisa bantu sih. Kalo ada gadget yang interaktif, jadi lebih seru belajarnya.	Iya, pasti bantu banget. Kalo bisa main-main sambil belajar, pasti lebih seru dan gampang diinget.
7	Bagaimana pendapatmu mengenai integrasi E-Module dengan pembelajaran di kelas?	Bagus kak, bisa jadi tambahan buat pembelajaran di kelas, jadi lebih lengkap.	Kayaknya pake E-Module sama pembelajaran di kelas bagus juga ya, jadi bisa lebih variatif pembelajarannya.	Bagus sih, Bisa ngelengkapin penjelasan dari guru.
8	Apakah kamu melihat adanya keterkaitan antara mata pelajaran lain dengan pembelajaran menulis teks prosedur?	Ada kak pernah, berhubungan dengan IPA kayak gimana cara membuat saklar.	Kalo aku sih merasa belum pernah ya kak.	Belum kak
9	Bagaimana menurutmu pendekatan multidisiplin dapat meningkatkan pemahamanmu tentang menulis teks prosedur?	Menurutku bagus sih kak, soalnya kita gacuma focus ke satu Pelajaran aja gitu,	Kayaknya bakal membantu buat cepet ngerti apa itu teks prosedur kak.	Mungkin jadi lebih nyambung dan gampang ngertiin. Karena ga cuma fokus di satu pelajaran aja.

10	Menurut kamu apakah belajar writing di kelas perlu sesuatu yang lebih menarik? Jika iya, jelaskan seperti apa?	Perlu kak, mungkin bisa belajar sambil bikin kelompok diskusi gitu.	Iya, perlu. Kayak ngadain kontes menulis yang kreatif.	Iya, perlu. Kalo belajar writing di kelas bisa lebih seru kalo ada variasi, mungkin nulis teks nya bisa pake Hp jadinya berkreasi sendiri gitu kak.
11	Bagaimana tanggapanmu jika pembelajaran di kelas menggunakan E-module?	Menurutku bagus. Soalnya, bisa jadi lebih interaktif dan ngasih variasi pas belajar.	Kayaknya aku butuh e-module di kelas kak karena lebih simpel dan fitur-fiturnya membantu pemahamanku banget.	Bagus sih, jadi bisa lebih asik belajar dan bisa langsung coba-coba sendiri.
12	Apakah ada saran atau rekomendasi yang ingin kamu berikan terkait pengembangan Interactive E-Module ini?	Saran sih, mungkin E-Module bisa dibuat lebih seru lagi dengan nambahin fitur-fitur yang bikin pembelajaran jadi lebih menarik. Dan pastinya, materinya jangan yang susah.	Saya lebih suka modul yang bergambar menarik dan animasi yang bagus juga kak. saya sepertinya terbantu dengan adanya fitur itu.	Tambahin feedback langsung kak.

Appendix 3 Link of The Product

Embed: <https://online.flipbuilder.com/dzsab/jmbk/index.html>



Appendix 4 Validation Form

LEMBAR VALIDASI UJI EKSPERT
 Tujuan digunakan untuk menilai dan menilai aspek keahliannya "Developing an Interactive E-Module for Writing Procedure Text Based on a Multidisciplinary Approach".

Petunjuk:
 1. Rubrik yang diberikan menjadi acuan penilaian dengan cara member tanda (1) pada kolom yang tersedia.
 2. Makna point validasi adalah sebagai berikut:
 1 = Sangat Kurang Baik 2 = Cukup Baik 3 = Baik 4 = Sangat Baik 5 = Sangat Baik

Tabel Penilaian

1. Ahli materi		Kriteria	Skala Penilaian				
No	Aspek		1	2	3	4	5
1	Aspek pembelajaran	Kesesuaian dengan tujuan pembelajaran Mendukung materi yang diajarkan Kedalaman cakupan materi Membuat keajaiban yang menarik Menyebutkan konsep, prinsip atau teori yang berkaitan dengan materi yang diajarkan Kedalaman bahasa yang digunakan Penggunaan media yang menarik Kedalaman yang memadai	✓	✓	✓	✓	✓
2	Aspek konten	Mengaitkan materi yang disajikan dengan menggunakan gambar yang sesuai Terdapat contoh-contoh yang berkaitan dengan kehidupan sehari-hari Kesesuaian gambar untuk memperjelas materi Kesesuaian audio untuk memperjelas materi Kesesuaian video untuk memperjelas materi Jumlah Kuantitas X Skala	✓	✓	✓	✓	✓

2. Ahli media

No	Aspek	Kriteria	Skala Penilaian				
			1	2	3	4	5
1	Aspek tampilan	Pemilihan font Pemilihan ukuran huruf Penggunaan spasi huruf Keterbacaan teks Tata letak (layout) Kesesuaian warna latar belakang dengan dengan teks Konsistensi yang konsisten antar halaman	✓	✓	✓	✓	✓
2	Aspek pengaturan	Tampilan multimedia siswa dengan media Kemudahan navigasi Kondisi dan pemilihan menu Kemudahan penggunaan Kegunaan fitur-fitur yang ada Efisiensi gambar Efisiensi video Jumlah Kuantitas X Skala	✓	✓	✓	✓	✓

Aspects for revision: []

Comments/Suggestions: []

Cirebon, April 2024
 Validator,
 Ahmad Rizki MTA
 NIP. 198405072019031003

LEMBAR VALIDASI UJI EKSPERT
 Tujuan digunakan untuk menilai dan menilai aspek keahliannya "Developing an Interactive E-Module for Writing Procedure Text Based on a Multidisciplinary Approach".

Petunjuk:
 1. Rubrik yang diberikan menjadi acuan penilaian dengan cara member tanda (1) pada kolom yang tersedia.
 2. Makna point validasi adalah sebagai berikut:
 1 = Sangat Kurang Baik 2 = Cukup Baik 3 = Baik 4 = Sangat Baik 5 = Sangat Baik

Tabel Penilaian

1. Ahli materi		Kriteria	Skala Penilaian				
No	Aspek		1	2	3	4	5
1	Aspek pembelajaran	Kesesuaian dengan tujuan pembelajaran Mendukung materi yang diajarkan Kedalaman cakupan materi Membuat keajaiban yang menarik Menyebutkan konsep, prinsip atau teori yang berkaitan dengan materi yang diajarkan Kedalaman bahasa yang digunakan Penggunaan media yang menarik Kedalaman yang memadai	✓	✓	✓	✓	✓
2	Aspek konten	Mengaitkan materi yang disajikan dengan menggunakan gambar yang sesuai Terdapat contoh-contoh yang berkaitan dengan kehidupan sehari-hari Kesesuaian gambar untuk memperjelas materi Kesesuaian audio untuk memperjelas materi Kesesuaian video untuk memperjelas materi Jumlah Kuantitas X Skala	✓	✓	✓	✓	✓

2. Ahli media

No	Aspek	Kriteria	Skala Penilaian				
			1	2	3	4	5
1	Aspek tampilan	Pemilihan font Pemilihan ukuran huruf Penggunaan spasi huruf Keterbacaan teks Tata letak (layout) Kesesuaian warna latar belakang dengan dengan teks Konsistensi yang konsisten antar halaman	✓	✓	✓	✓	✓
2	Aspek pengaturan	Tampilan multimedia siswa dengan media Kemudahan navigasi Kondisi dan pemilihan menu Kemudahan penggunaan Kegunaan fitur-fitur yang ada Efisiensi gambar Efisiensi video Jumlah Kuantitas X Skala	✓	✓	✓	✓	✓

Aspects for revision: []

Comments/Suggestions: []

Cirebon, 6 Mei 2024
 Validator,
 Wawan Sibaraka, S.Pd
 NIP. 198710231992021002

Appendix 5 Observation Sheets

Penyempurnaan Observasi Pelaksanaan Pembelajaran yang Efektif dan Efisien


Nama guru: WAWAN SIBARAKA, S.Pd.
 Tanggal: 12 Februari 2024
 Persepsi: Dengan menggunakan (X) pada kolom yang telah disediakan!

No	Aspek	Persepsi	
		Ya	Tidak
Penggunaan Media Pembelajaran			
A. Penyelesaian Materi			
1	Diisi menggunakan media digital untuk menyelesaikan materi pembelajaran	✓	
2	Materi diajarkan dalam bentuk yang menarik, menarik, menarik, dan menarik yang sesuai	✓	
3	Penggunaan gambar, diagram, atau grafik dalam materi digital yang meningkatkan ketertarikan siswa	✓	
4	Materi diajarkan dengan menggunakan media digital yang menarik	✓	
B. Keterlibatan Siswa			
5	Guru menggunakan metode pembelajaran yang bervariasi	✓	
6	Pada saat ini, guru sering menggunakan pertanyaan yang menantang untuk meningkatkan ketertarikan siswa	✓	
C. Kesesuaian Materi			
7	Materi yang diajarkan melalui media digital sesuai dengan kurikulum dan kompetensi dasar pembelajaran	✓	
8	Materi multimedia yang relevan dengan konsep yang diajarkan	✓	
9	Penggunaan media digital meningkatkan partisipasi siswa untuk menyelesaikan pembelajaran	✓	
D. Penggunaan Alat Bantu			
10	Guru menggunakan alat bantu untuk meningkatkan ketertarikan siswa	✓	
11	Penggunaan alat bantu seperti proyektor, papan tulis elektronik, dan tablet meningkatkan partisipasi siswa	✓	
12	Siswa diberikan kesempatan untuk menggunakan alat bantu digital untuk menyelesaikan pembelajaran	✓	

Aspects for revision: []

Comments/Suggestions: []

Appendix 6 Kartu Bimbingan Skripsi



KEMENTERIAN AGAMA RI
INSTITUT AGAMA ISLAM NEGERI (IAIN)
SYEKH NURJATI CIREBON
FAKULTAS ILMU TARBIYAH DAN KEGURUAN
 Alamat : Jl. Perjuangan By Pass Sunyaragi Telp. (0231) 481264 Faks. (0231) 489926 Cirebon 45132
 Website : www.iaincirebon.ac.id E-mail : info@iaincirebon.ac.id

KARTU BIMBINGAN SKRIPSI
SEMESTER GASAL/GENAP TAHUN AKADEMIK 2023/2024

Nama : Tsalisa Roudhotul Jannah	Pembimbing I : Prof. Dr. Hj. Huriyah, M. Pd.
NIM : 2008103103	Pembimbing II : Nur. Antoni E.T., S.S., M. Hum
Jurusan : Tadris Bahasa Inggris	
Judul Skripsi : Developing an Interactive E-Module for Writing Procedure Texts Based on a Multidisciplinary Approach	

Pembimbing I				Pembimbing II			
Per temuan	Tgl/Bln/Th	Materi Bimbingan	Paraf	Per temuan	Tgl/Bln/Th	Materi Bimbingan	Paraf
I	11/01/2024	Research Method	[Signature]	I	20/1/2024	Instrument of Research	[Signature]
II	5/02/2024	Instrument of Research	[Signature]	II	30/1/2024	Revisi instrument	[Signature]
III	21/02/2024	Bab I	[Signature]	III	10/2/2024	Chapter I dan II	[Signature]
IV	8/03/2024	Bab II	[Signature]	IV	10/3/2024	Revisi chapter 1 & II	[Signature]
V	22/04/2024	Chapter III	[Signature]	V	19/3/2024	Revisi chapter II	[Signature]
VI	29/04/2024	Chapter IV	[Signature]	VI	22/3/2024	Chapter III	[Signature]
VII	7/05/2024	Revisi	[Signature]	VII	25/3/2024	Revisi chapter III	[Signature]
VIII	13/05/2024	Acc Munagasayah	[Signature]	VIII	2/4/2024	chapter IV	[Signature]
IX				IX	27/4/2024	revisi chapter IV	[Signature]
X				X	30/4/2024	revisi	[Signature]
XI				XI	5/5/2024	full draft	[Signature]
XII				XII	17/5/2024	ACC	[Signature]

Pembimbing I,

[Signature]
 (Prof. Dr. Hj. Huriyah, M. Pd.)

Pembimbing II,

[Signature]
 (Nur. Antoni E.T., S.S., M. Hum)

Mengetahui
 Ketua Jurusan Tadris Bahasa Inggris

[Signature]
 (Dra. Hj. Amroh Umaemah, M. Pd.)

Catatan :

- Setiap pelaksanaan konsultasi dalam rangka penyusunan skripsi, kartu ini harap diisi dan ditandatangani oleh pembimbing
- Jumlah bimbingan minimal 8 (delapan) kali pertemuan dengan kedua pembimbing

Appendix 7 Surat Keputusan

SURAT KEPUTUSAN
DEKAN FAKULTAS ILMU TARBİYAH DAN KEGURUAN
INSTITUT AGAMA ISLAM NEGERI (IAIN) SYEKH NURJATI CIREBON
Nomor : 0508 /In.08.F.1/PP.00.9/1/2024

TENTANG
PEMBIMBING PENYUSUNAN SKRIPSI MAHASISWA
FAKULTAS ILMU TARBİYAH DAN KEGURUAN IAIN SYEKH NURJATI CIREBON
DEKAN FAKULTAS ILMU TARBİYAH DAN KEGURUAN

Menimbang : a. bahwa dalam rangka menunjang kelancaran pelaksanaan penyusunan skripsi mahasiswa Program Sarjana Fakultas Ilmu Tarbiyah dan Keguruan IAIN Syekh Nurjati Cirebon perlu ditunjuk Pembimbing Skripsi;
b. bahwa Saadara yang namanya tercantum dalam Keputusan ini dipandang mampu dan memenuhi syarat untuk menjadi Pembimbing Skripsi mahasiswa Fakultas Ilmu Tarbiyah dan Keguruan IAIN Syekh Nurjati Cirebon.

Mengingat : 1. Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional;
2. Undang-undang Nomor 14 Tahun 2005 tentang Guru dan Dosen;
3. Peraturan Pemerintah RI Nomor 60 Tahun 1999 jo Nomor 17 Tahun 2010 tentang Pengelolaan dan Penyelenggaraan Pendidikan Nomor 66 Tahun 2010 tentang Perubahan Peraturan Pemerintah Nomor 17 Tahun 2010;
4. Peraturan Pemerintah Republik Indonesia Nomor 19 Tahun 2005 tentang Standar Nasional Pendidikan;
5. Peraturan Pemerintah Republik Indonesia Nomor 37 Tahun 2009 tentang Dosen;
6. Peraturan Menteri Agama Republik Indonesia Nomor 11 Tahun 2013 tentang Organisasi dan Tata Kerja IAIN Syekh Nurjati Cirebon;
7. Peraturan Menteri Agama RI Nomor 36 Tahun 2014 tentang Statuta IAIN Syekh Nurjati Cirebon;
8. Panduan Pendidikan Program Sarjana (S1) Tahun Akademik 2022/2023.

MEMUTUSKAN

Menetapkan :
Pertama : Terhitung mulai 17 Januari 2024 mengangkat :
1. Prof. Dr. Hj. Huriyah, M.Pd
2. Nur Antoni E.T

Sebagai Pembimbing penyusunan Skripsi mahasiswa tersebut di bawah ini :
Nama : Tsalisa Roudhotul Jannah
NIM : 2008103103
Program Studi : Tadris Bahasa Inggris
Judul Skripsi : Developing interactive E-Module in Writing Procedure Text based on Multidisciplinary Approach

Kedua : Kepada Pembimbing diberikan honorarium sesuai dengan ketentuan yang berlaku.

Ketiga : Keputusan ini berlaku untuk Semester Genap terhitung mulai tanggal 2 Januari - 31 Maret 2024, dengan ketentuan apabila terdapat kekeliruan dalam penetapan ini akan diadakan perubahan dan perbaikan sebagaimana mestinya.

KUTIPAN Keputusan ini diberikan kepada yang bersangkutan untuk diketahui dan dilaksanakan sebagaimana mestinya.

Ditetapkan di : Cirebon
Tanggal : 17 Januari 2024
a.n. Dekan
Wakil Dekan Bidang Akademik
Dekan Fakultas Ilmu Tarbiyah dan Keguruan
Institut Agama Islam Negeri Syekh Nurjati Cirebon
Dr. Atiqah Syamsi, M.Pd.1
NIP. 19840413 201101 2 010

Tembusan :
1. Ketua Jurusan Tadris Bahasa Inggris;
2. Dosen Pembimbing untuk diketahui dan dilaksanakan.

Appendix 8 Surat Pengantar Penelitian

KEMENTERIAN AGAMA REPUBLIK INDONESIA
INSTITUT AGAMA ISLAM NEGERI
SYEKH NURJATI CIREBON
FAKULTAS ILMU TARBİYAH DAN KEGURUAN
Jl. Perjuangan By Pass Sunayangi 45132
Telepon (0231) 481264 Faksimili (0231) 489926
Website: info@syekhnurjati.ac.id E-mail: info@syekhnurjati.ac.id

SURAT PENGANTAR PENELITIAN
Nomor : 0508 /In.08.F.1/PP.00.9/1/2024

Dekan Fakultas Ilmu Tarbiyah dan Keguruan Institut Agama Islam Negeri Syekh Nurjati Cirebon, menerangkan bahwa yang namanya tersebut di bawah ini :

Nama : Tsalisa Roudhotul Jannah
Tempat/Tgl. Lahir : Gresik, 14 November 2002
NIM : 2008103103
Smr dan Proram Studi : VIII/Tadris Bahasa Inggris
Alamat : Jl. Evakuasi Gg. Nahkoda II Karyamulya Kesambi Cirebon

Akan Melaksanakan penelitian dalam rangka penyusunan Skripsi yang berjudul:
Developing Interactive E-Module in Writing Procedure Text based on Multidisciplinary Approach
Penelitian ini dilaksanakan selama 3 (Tiga) bulan mulai tanggal 19 Januari - 31 Maret 2024
Teknik pengumpulan data :
1. Dokumentasi
2. Observasi
3. Wawancara

Demikian disampaikan, dan kepada yang berkepentingan harap menjadi maklum atas perhatian dan bantuan saudara, kami ucapkan terima kasih.

Cirebon, 17 Januari 2024
a.n. Dekan
Wakil Dekan Bidang Akademik
Dekan Fakultas Ilmu Tarbiyah dan Keguruan
Institut Agama Islam Negeri Syekh Nurjati Cirebon
Dr. Atiqah Syamsi, M.Pd.1
NIP. 19840413 201101 2 010

Appendix 9 Surat Izin Penelitian

PEMERINTAH DAERAH KOTA CIREBON
DINAS PENDIDIKAN
SMP NEGERI 7 KOTA CIREBON
Jl. Ciremai Raya No. 65 Telp. (0231) 487961 Kota Cirebon 45141

Cirebon, 16 Januari 2024

Nomor : 421.2/020.2/SMPN.7/2024
Lampiran : -
Perihal : *Izin Penelitian*

Kepada
Yth.
Wakil Dekan Bidang Akademik dan Kelembagaan IAIN Syekh Nurjati Cirebon
Di
Cirebon

Dengan hormat,
Menindaklanjuti surat dari IAIN Syekh Nurjati Cirebon, Nomor : 0009 An.08/F.1.1/PP.009/1/2024 tanggal 16 Januari 2024 tentang permohonan izin Penelitian skripsi maka Kepala SMP Negeri 7 Kota Cirebon, dengan ini memberikan izin untuk melakukan kegiatan Penelitian skripsi di SMP Negeri 7 Kota Cirebon kepada :

Nama : TSALISA ROUDHOTUL JANNAH
NIM : 2008103103
Jurusan/Semester : Tadris Bahasa Inggris
Judul Skripsi : "*Developing Interactive E-Module in Writing Procedure Text based on Multidisciplinary approach.*"
Waktu Penelitian : 17 Januari – 31 Maret 2024

Demikian surat ini kami sampaikan atas perhatiannya kami ucapkan terima kasih.

Mengetahui,
Kepala Sekolah

Dra. Euis Sulastri, M.Pd
NIP. 19680511 199802 2 001

Appendix 10 Surat Selesai Penelitian

PEMERINTAH DAERAH KOTA CIREBON
DINAS PENDIDIKAN
SMP NEGERI 7 KOTA CIREBON
Jl. Ciremai Raya No. 65 Telp. (0231) 487961 Kota Cirebon 45141

SURAT KETERANGAN TELAH MELAKSANAKAN PENELITIAN
Nomor : 421.2/146/SMP.N.07/2024

Yang bertanda tangan di bawah ini Kepala SMP Negeri 7 Kota Cirebon :


Nama : Dra. EUIS SULASTRI, M.Pd
NIP : 19680511 199802 2 001
Pangkat / Gol : Pembina Tk. I / IV B
Jabatan : Kepala SMP
Unit Kerja : SMP Negeri 7 Kota Cirebon

Menerangkan dengan sesungguhnya :

Nama : TSALISA ROUDHOTUL JANNAH
NIM : 2008103103
Prodi : Tadris Bahasa Inggris

Benar nama tersebut diatas telah melaksanakan penelitian Skripsi di SMP Negeri 7 Kota Cirebon dengan judul Penelitian "*Developing Interactive E – Module in Writing Procedure Text Based on Multidisciplinary Approach.*"

Demikian Surat Keterangan ini kami buat untuk dapat dipergunakan sebagaimana mestinya.

Cirebon, 13 Mei 2024

Dra. Euis Sulastri, M.Pd
NIP. 19680511 199802 2 001

Appendix 11 Dokumentasi Wawancara



Appendix 12 Dokumentasi Observasi



SURAT PERNYATAAN

Saya yang bertanda tangan dibawah ini:

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Dengan ini menyatakan bahwa saya siap melaksanakan seluruh persyaratan yang diwajibkan untuk memenuhi syarat bebas pustaka.

Pernyataan ini saya buat dengan sebenar-benarnya, apabila tidak sesuai dengan pernyataan, maka saya siap menerima sanksi sesuai dengan peraturan yang berlaku.

Cirebon, 14 Juni 2024
Yang menyatakan,



(TSALISA ROUDHOTUL JANNAH)
NIM. 2008103103