Research Article

Developing fun e-modules for engaging English learning in primary school

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Abstract: Teaching material modules in English for primary school can be easily obtained as it is already included in the digital era. However, finding appropriate ones for the instructional process for learners whose internet connection is difficult remains low. Therefore, this research aims to produce a valid and feasible English E-module as a learning medium. The ADDIE approach is used, which stands for analysis, design, development, implementation, and evaluation. The study tested validity by material, media, and language validators to determine the quality of the media developed. The results of this study are that the overall average validation of material is 77.2%, media validation is 78.5%, and language validation gets 87.5% with the "Excellent" category. Next, to determine the feasibility of the English E-module researchers analyzed English teachers and students of grade 5A. Results obtained from English teachers got 81.5% and from 5A students got 88.4% with the "Excellent" category. The English E-module as the learning media developed has been valid and feasible. Thus, English teachers for primary school and EFL learners may take advantage to make use of the module. Other researchers should add more skills such as listening by providing audio files and using different levels for the next study.

Keywords: ADDIE approach; e-module; English learning; online learning; teaching material development

1. Introduction

The use of technology is one of the suitable alternatives to be used for the learning system during the pandemic Covid-19. The pandemic has shifted pedagogical methods, prompting teachers to adopt online learning strategies and increase the reliance on mobile technology devices for digital learning. Despite the many difficulties in implementing, teachers must quickly adapt and be able to continue learning properly as well as ensure students can receive the material correctly (Duraku & Hoxha, 2020).

Modifications occur in learning methods, it is transformed into a more flexible approach where teachers act as mentors, facilitators, and motivators who must inspire and motivate students to always participate and learn (Onyema et al., 2019). Many platforms or applications that support online learning such as Google Classroom, Google Meet, YouTube, Edmodo, Zoom, WhatsApp, and many other applications but generally schools in Indonesia use those platforms (Bina et al., 2021; Geubrina, 2021; Samala et al., 2022). Onyema et al. (2020) state that teachers and students should optimize the use of technology in online learning to improve digital skills, increase interest, competence, confidence, creativity, and prepare them for the future.

SD Negeri 01 Wonomulyo, Poncokusumo, Malang Regency, East Java, Indonesia is one of the schools implementing online learning to avoid the spread of Covid-19. However, in its implementation, there are many obstacles experienced, not only by students and teachers but also, by parents. They need time to adapt to this new system in education. Green (2016) says that online learning takes longer in preparation than face-to-face learning. Some of the problems that occur during online learning on the students' and parents' factors are students do not have their smartphones. In addition, the inability to buy enough internet quota to do online learning from various platforms. Simamora (2020) states that internet quota is one of problems faced by students in accessing online learning media. If problems come from students, then this is a new challenge for teachers. The lack of mobile phones and internet quotas makes students unable to access online learning

platforms that are convenient to use. Teachers must choose apps that do not need a lot of internet quota like WhatsApp. Through WhatsApp, students may access content they have obtained easily at a time that suits them (Alahmadi et al., 2023).

In fact, the English teacher in SD Negeri 01 Wonomulyo, Poncokusumo, Malang Regency, East Java, Indonesia has difficulty in making the proper teaching materials for students due to the problems mentioned before. Thus, online learning only uses "WhatsApp Group" and material explanations are delivered through "voice note". Assignments are given from a student worksheet book titled "Modul Pembelajaran Bahasa Inggris untuk SD/MI Semester 1 Kelas 5". The book consists of opaque sheets of paper so that the drawings on the book are colourless. Another way to give an assignment, the teacher usually sends a picture containing a handwritten from the teacher. In Indonesia, unvaried learning media can make students bored and not interested in learning English. Similar condition is also true in Thailand, as stated by Wiphasith et al. (2015) that most students there are not yet aware of the apparent benefit of mastering English proficiency as members of global society which eventually make them easily get bored and experience difficulty in learning along with lack of motivation to learn English. According to Darmaji et al. (2019), the use of technology as a learning media can be one of the solutions to make the learning process more interesting.

Spatioti and Pange (2023) also suggest this need for alternative instructional method utilising technological empowerment by way of e-learning to cope the demand of dynamic global citizen. In addition to teaching method, Evenddy et al. (2021) also mention the importance of its materials. They state that at present teaching materials used by conventional instructional approach are still paper-based, which they believe may affect students' mindset to have diverse manners and make some become unhappy. Losi et al. (2023) clearly discriminate textbook and electronic module in merely its packaging, which is paper-based and digital. This makes e-module simpler and therefore more portable with ease.

Other mode of unvaried learning media can make students bored and not interested in learning. According to Darmaji et al. (2019), the use of technology as a learning media can be one of the solutions to make the learning process more interesting. One example of technology-based media is the e-module. E-module stands for electronic module which means this module can only be accessed through electronic devices such as mobile phones, laptops, or computers. The use of e-modules in learning can facilitate students because in e-modules there are clear learning objectives, learning materials, worksheets, and students can learn independently (Citrawathi et al., 2016). E-modules encourage students to read more, be more motivated, and be enthusiastic to learn (Purwanti et al., 2023), and they are more effective than a printed book (Astalini et al., 2019). E-module can be accessed anytime and anywhere and it is visible use for learning (Munir et al., 2022; Serevina & Sari, 2018) that can help improve students' English competency (Rahman et al., 2022) especially when it is associated with learners' everyday life (Anstey, 2017; Munawaroh et al., 2023; Tawfik, 2017).

There have been limited studies concerned on the use of e-module for primary school in limited access of internet. For example, e-module design research for the staff at Besilam village to improve the staff's proficiency in English showed the design and development of E-module was very feasible, very practical, and effective to use (Dewi et al., 2019; Losi et al., 2023). Therefore, this research is still needed to conduct and it intends to help students and teachers in the online learning process not only during pandemic Covid-19 and endemic but also for English language distance learning. The objectives of this research are, (1) to describe the process of developing English e-module for 5th Grade Students, and (2) to produce a valid and feasible e-module used as a learning resource by students.

2. Materials and Methods

This study used the research and development (R&D) method with the ADDIE approach from Branch (2009) and Aldoobie (2015). Shakeel et al. (2023) depict that in the

year 1975 at Florida State University, was the initial commencement of the ADDIE model to become prominent. In that it facilitates access to pedagogical stakeholders, particularly of creators, developers, practioners and instructors to focus more on its process of achieving resourceful and in effect educational conducts. Alodwan and Almosa (2018) justify the excel of ADDIE Model particularly with computerized material in that bottom-up (of lower level) and top-down (of higher level) language processing skills can both be boosted. As a consequence, they believe that ADDIE Model facilitates material presentation to be in rational arrangement. There are five stages in the ADDIE approach model, including (1) Analyze; (2) Design; (3) Development; (4) Implementation; and (5) Evaluation. Those steps are elucidated as in Figure 1.
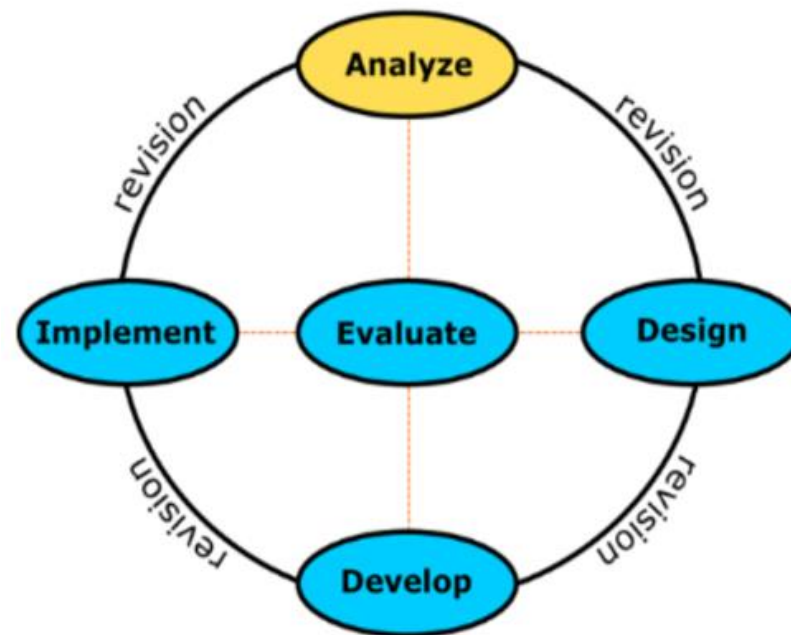

Figure 1. ADDIE Model suggested by Branch, (2009)

2.1 Analyze Stage

In the first stage, there are three ways in carrying out the analysis, such as need analysis, identifying problems, and task analysis (Trisiana & Wartoyo, 2016). Throughout this preliminary stage of ADDIE, Aydin et al. (2023) mention about creating complete comprehension of the instructional design, in which reflection is done to implement specific method to education material scheme as well as finalising the content and modes of delivery. In the need analysis, the researchers were analysing the students and teachers' need regarding to English class during pandemic Covid 19. It was done through interview to the english teachers, students, vice headmaster, and stakeholders including parents. Besides, observation was done by observing teaching learning activities using WhatsApp. For identifying problems, the researchers concluded the results of interview and observation. For task analysis, the collection of procedures to determine the content in teaching material. The procedure contains the details of the task and the contents of the teaching material included in the teaching material. The material specified must be in accordance with the Standard Competence and Basic Competence that have been set out in the revised "Kurikulum 2013". The development of teaching materials carried out by researchers focused on two materials namely "Describing People" and "Sport".

2.2 Design Stage

The second stage is design, in this stage, the results of the analysis become guidelines for researchers to determine the learning media that is suitable for the needs of students, in this study researchers decided to design e-modules. The e-module was designed

systematically and specifically as a result of teaching-learning objectives can be achieved. In addition, Siew and Chin (2018) state that constructing teaching objective is done in two steps, namely: a) needs analysis, and b) learner and context analysis. After going through the analysis stage, the researchers continued to the second stage namely design. Bulkani et al. (2022) mention that the stage of designing uses the results of the analysis as the basis, resulting in the creation of a model (in the form of e-module) which bring in essential proficiencies, signs, materials to suit students' need. Hew et al. (2023) suggest standard and common framework for developing and measuring goals that is of five SMART key elements comprising of: specifc, measurable, achievable or assignable, realistic, and time-related. This initial design was collected into a document called blueprint which was arranged clearly and in detail. Sohil and Sohail (2022) postulate the importance of course design in that it facilitates teachers' teaching style to better match students' need as well as their learning style resulting in higher learning achievement.

2.2.1 Material and Topics

The module material designed by the researchers consists of two units and 37 pages. Unit one contains "How to describe people" eight hours time allotment for four times meetings. It aims to (1) give simple response, (2) ask and give information about describing people, and (3) read simple texts loudly. The topic of this unit is divided into four learning materials. Learning Material 1 contains (1) Describing Someone's Appearance, (2) Describing Someone's Personality, (3) Describing Someone's Feelings. It is followed by Activity 1, to arrange the letters into a word, and Activity 2, to match the words to its meaning. Learning Material 2 includes (1) The Kinds of Physical Appearance, which is followed by Activity 3, to write down vocabularies and translate into Bahasa Indonesia and Activity 4, to answer questions based on learner's physical appearance and choose one the correct answer. Learning Material 3 covers grammar notes about (1) How to Arrange Simple Sentence, (2) Comparative and Superlative Sentence. It is followed by Activity 5, to describe the picture with a simple sentence, Activity 6, to fill in the blank with the correct answer. Learning Material 4 consists of Competency Test Chapter 1 which use (1) multiple choice test format, (2) fill in the blank with to be "am-is-are" or to be "have-has", and (3) Answer these questions correctly.

Unit two contains "What Sport Do You Like?" eight hours time allotment for four times meetings. It aims to (1) give simple response, (2) ask and give information about sport, and (3) read simple texts loudly. The topic of this unit is divided into four learning materials. Learning Material 1 contains (1) Kinds of Sport, (2) Kinds of sport equipment. It is followed by Activity 1, to match the sport with the equipment correctly!, and Activity 2, to find the vocabulary about sport. Learning Material 2 includes (1) How to arrange a sentence using present continuous tense, which is followed by Activity 3, to complete the sentences with present continuous form of the verbs in brackets and choose the correct answer. Activity 4, to a write the-ing form of verbs and translate into Indonesia. Learning Material 3 covers how (1) to arrange a sentence using simple past tense, (2) how irregular verb is used in present continuous tense. It is followed by Activity 5, to change the verb into simple past form, and Activity 6, to arrange the words into a sentence. Learning Material 4 consists of Competency Test Chapter 2 which use (1) multiple choice test format, (2) arrange the words into a sentence, (3) re-arrange the letters into a correct vocabulry and translate into Indonesi, and (4) change the sentence into Present Continuous and Simple Past Tense.

2.2.2 Research Instruments

Instruments in the forms of questionnaire were designed after the design process of English E-module learning media was completed. The researchers developed research instruments that included a validation questionnaire for material, media, and language expert validators used to measure the feasibility of learning media, as well as questionnaires used for English teachers and student response questionnaires used to measure the level of practicality of learning media.

Material expert validation assessment contains two aspects, i.e., content eligibility and performing. The content eligibility covers seven indicators and four indicators for performing (see Table 3). Assessment by media experts consists of seven indicators of assessment divided into three aspects of assessment, namely, content eligibility, media effectiveness, and media quality (see Table 4). Meanwhile, the language expert validation assessment comprises six indicators which cover three aspects including language conformity, language fluency, and unity of ideas (see Table 5). To gain Feasibility of developed English E-module as learning media by the researchers, questionnaires which covered eight indicators (see Tables 6 and Table 7) were completed by two English teachers and twenty-seven primary school students.

2.3 Develop Stage

The third stage is development, the activity in this stage is module validation. Feng and Sangsawang (2023) postulate that at this phase, pedagogic subject matter and technological aids are enriched to better match requirements of the designer. Inclusive are digital materials creation, preparing needed multimedia supplies as well as the collaboration as stated in the school curriculum. The development stage is the realization of products that have been designed in the previous stage. The product is an e-module in the format "Pdf" entitle "Fun with English E-module". The activity in this stage is module validation. Module validation is an assessment activity carried out by experts or practitioners on the initial product. Three experts assessed the product, including material experts, linguists, and media experts. The material should be valid since material has a crucial role in the teaching and learning of languages (Musilawati et al., 2023). The validators were lecturers from the English Education Study Program, Universitas PGRI Kanjuruhan Malang. Assessment, suggestions, and feedback from validators would be a foothold in improving the product and therefore the e-module produced is appropriate, effective, easy to use, and solve the problems.

2.4 Implement Stage

The fourth stage is implementation. The e-module at this stage is in the form of ready to use product as stated by Artha et al. (2020) meaning that earlier on it has passed quality assuring session by course developer aiming that all elements are ready to apply suitably and as targeted. When needed, product correction is conducted based on professionals and apparatus assessment to suit the estimated goals. They do initial instrument assessment validation by the lecturer, to ensure that the product can be used reliably and feasibly. After the e-module was declared valid, implementation was carried out to the English teacher and students. This implementation aimed to obtain responses, reactions, comments from students and teachers about the e-module. The e-module was used in the learning process. Product implementation was carried out in one class of 37 students. The module was used in three meetings, one of the researchers acted as a teacher who taught students online through WhatsApp groups. The material on the module focused on two materials, namely "Describing People" and "Sport".

2.5 Evaluate Stage

The last stage is evaluation. The purpose of this evaluation is to find out the feedback from students and teachers about the practicality of the module. Hamid et al. (2021) state that in this stage, assessment is done twice prior to and after implementation to both the teaching process as well as its product quality. Detection is done to uncover drawbacks and troubles during the creation of e-module, later on revisions are made accordingly. After knowing the results of the questionnaire given to the students and teachers, the researchers were able to deduce the level of efficiency of the e-module. For data analysis, researchers used the Likert scale on all questionnaires. Furthermore, the results of the questionnaire were calculated using the formula to have the percentage result from the number of gain score divided by the ideal score and multiplied by 100% (Serevina & Sari,

2018) as seen in Formula 1. Subsequently, the percentage was taken in the interpretation rating scale adapted as in Table 1 (Suarman et al., 2018).

$$R = \left(\frac{\sum gain\ score}{\sum ideal\ score}\right)\ x\ 100\% \tag{1}$$

Table 1. Interpretation Rating Scale adapted from Suarman et al (2018).

Score	Interpretation
00 – 25	Not good (Bad)
26 – 50	Not good enough (Not good)
51 – 75	Good
76 – 100	Excellent (Very good)

3. Results

The main results to be presented in this study are the results of the development of the English E-module using the ADDIE approach and the results of product validation and feasibility tests. This is an exposure to the initial design of the product that has been adapted to the stages of the ADDIE development model.

3.1 Analyze stage

The result on the analyze stage was divided into three sections, namely, need analysis, identifying problem, and task analysis. In the need analysis result, the development of learning media is based on an analysis of the needs of teachers and students in learning. The need expected by teachers is the existence of learning tools or media that can facilitate the continuity of online learning that is more interesting and make students do not get bored easily. The need that is expected by students is the existence of learning media that can help students to increase vocabulary and of course easy to use in online learning that does not require a lot of internet quota and memory in the student's mobile phone.

In the identifying problems result, the lack of enthusiasm of students is due to the lack of innovation in the learning media used by teachers. This causes students to be lazy in learning and doing assignments, therefore regularly only 27 out of 37 students submit assignments. While in the task analysis result, the English E-module learning media has been adapted to the Standard of Competency and Basic Competencies in the Curriculum 2013. This learning media in the form of electronic books that can be accessed through mobile phones consists of two materials with colorful book designs and interesting images. This electronic module is structured in such a way as to adapt online learning to grade 5 of primary school students.

3.2 Design stage

The result on the design stage was seen from English E-module design and Research instrument design. From the English E-module design, the researchers adjust the learning media to the content of materials that correspond to English learning in the material "Describing People" and "Sport" for 5th grade elementary school which also refer to the standard of competencies and basic competencies. In designing this English E-module learning media, the researchers designed it using Canva application. The media was designed for each page with an A4 paper size like a representative module. From research instrument design, the researchers design a research instrument that includes a validation questionnaire for material, media, and language expert validators used to measure the feasibility of learning media, as well as questionnaires used for English teachers and student response questionnaires used to measure the level of practicality of learning media.

3.3 Develop stage

The result on the stage of development was divided into two sections, namely, (1) English e-module and research instrument design, (2) expert validation which were elucidated as follows:

3.3.1 English e-module and research instrument design

For English E-module design, the researchers conduct preparation and re-checking on the developed learning media. English E-Module learning media is arranged based on the instruction of material, the first material about "Describing People" and the second material is "Sport". After being systematically compiled, the researcher rechecked it intending to avoid typos or other minor errors. Then the English E-Module learning media is saved in PDF format with a file size of 12.8 MB. With this format, students and teachers will easily open this e-module anywhere and anytime. File sizes that are not too large will not consume memory on the student's phone.

After the media product is completed, for research instrument design, the learning media is given to the expert validator of materials, media, and language. Data in the form of assessments obtained from validators used by the researcher to measure the validity of learning media as well as inputs obtained from validators will be used by the researcher as considerations for the improvement of English E-Module learning media that the researcher developed. Then the next stage, the researchers make improvements or revise the product so that the learning media following the assessment and input provided by the validator (Table 2).

Table 2. Examples of Product Before and After Revision from the Expert Validators

Expert Validators	Before	After
1. Material		

Expert Validators	Before	After
2. Media		
3. Language		

3.3.2 Expert Validation

Validation tests are conducted by media experts, material experts, and linguists to determine the feasibility level of the English E-Module learning media. The exposure of validation results is explained as follows:

3.3.2.1 Material Expert Validation

Validation by material experts is done to know the assessment of material experts as the basis for media improvement that researchers have developed. Assessment of material experts consists of two aspects including the feasibility of content and presentation. Assessment obtained from each aspect is in Table 3.

Table 3. Material Expert Validation Assessment

No	Assessed aspects	Indicator	Score	
			Score earned	Expected score
1	Content eligibility	Materials developed following teaching and learning to 5th grade elementary school students	6	8
		The material developed leads students to know the different types of adjectives associated with describing people and sport	5	8
		The materials developed are relevant to the learning objectives to be achieved	6	8
		Basic competencies to be achieved are suitable for 5th grade elementary students	6	8
		The material developed contains vocabulary related to describing people and sport	6	8
		Well-developed tasks from the easiest to the most difficult	6	8
		There is a good balance between tasks in one unit and tasks in the next	7	8
2	Performing	The materials developed to encourage students to know the content of learning media	6	8
		Developed materials stimulate student involvement / participation in self-learning	6	8
		Material developed systematically / logically clear / logical flow	6	8
		Developed materials are easy to learn	6	8
		Total	66	88
		Percentage of Overall Average	75% (Excellent)	

Based on Table 3, it can be explained that English E-Module learning media obtained a total percentage value of 75%. Thus, the English E-Module learning media is declared valid with the category "Excellent". The advice obtained from the first validation test given by the material expert is to pay more attention to the Basic Competencies that must be achieved by students, some materials must be changed because it is less contextual with the student's condition. In Unit 1 and Unit 2 material experts provide advice that is not much different. Validator states that the English E-Module learning media is valid to be applied with revisions.

3.3.2.2 Media Expert Validation

Media validation tests by media experts are conducted to obtain assessments on learning media as a basis for revising and improving the quality of media products that have been developed by the researchers. Assessment by media experts consists of seven

indicators of assessment. Based on the assessment obtained from each indicator are in Table 4.

Table 4. Media Expert Validation Assessment

No	Assessed aspects	Indicator	Score	
			Score earned	Expected score
1	Content eligibility	The module developed is the appropriate learning media to make students easier	3	4
		Modules developed are usable learning media for individual and group	3	4
2	Media Effectiveness	Modules developed are effective and efficient learning media to be used	4	4
		Developed modules contain varied designs and ideas	3	4
3	Media Quality	Can be maintained and managed easily	3	4
		Easy to use and simple to operate	3	4
		On target and acceptable to the goal's wishes	3	4
		Total	22	28
		Percentage of Overall Average	78.5%	

Based on Table 4, the validation assessment from media experts can be explained that English E-module learning media obtains a percentage value with a total of 78.5%. The English E-Module learning media is declared valid by obtaining an "Excellent" level of validity. The advice given by media experts on validation tests is that the variety and completeness of materials in the module should be improved. Validator stated that the English E-Module learning media was valid to be applied with revisions.

3.3.2.3 Language Expert Validation

Language validation tests by linguists are conducted to obtain an assessment of the language used in the development of this English E-module learning media. The results of the assessment will be used as a basis for revising and improving the accuracy of the language used in the media that has been developed by the researcher. Based on the assessment obtained from each indicator are in Table 5.

Table 5. Linguist Validation Assessment

No	Assessed aspects	Indicator	Score	
			Score earned	Expected score
1	Language Conformity	Languages used according to students' abilities	7	8
		The instructions on the module can be understood by students easily	7	8
		The language used in the e-module is easy to understand	7	8
2	Language Accuracy	Materials developed using correct grammar and spelling	7	8
		Language selection does not result in a double interpretation	7	8
3	Unity of ideas	Materials developed in one unit according to each other	7	8
		Total	42	48
		Percentage of Overall Average	87.5%	

Based on Table 5, which is a validation assessment from linguists, it can be explained that the English E-Module learning media obtained a percentage value with a total of 87.5%. The English E-Module learning media is declared valid by obtaining an "Excellent"

level of validity. The advice given by linguists in the validation test is that the image in unit 1 about someone's feelings is further sharpened to make it easier for students to know the feelings depicted. In unit 2 the linguist's validator suggests shortening the language used in the module as well as the text size being too small due to the length of the sentence used. Validator states that the English E-Module learning media is valid to be applied with revisions.

3.4 Implement stage

In the implementation stage, the researchers implemented English E-Module learning media to 37 students of grade 5A at SD Negeri 1 Wonomulyo as test subjects. Implementation was carried out by applying English E-Module learning media to English language learning with "Describing People" and "Sport" materials. After the application of learning media was completed, the researchers disseminated questionnaires for students and English teachers to obtain assessments that the researchers use to measure the feasibility of the developed English E-Module learning media.

3.5 Evaluate stage

The researcher evaluates the stages that have been done in the development of English E-Module learning media. From this evaluation step, the researcher knows the achievement of media product development goals.

3.5.1 Feasibility Test

To find out the feasibility of English E-Module as learning media that has been developed by the researchers, the analysis was conducted on English teacher questionnaires and student questionnaires. The results of the teacher's feasibility assessment are presented in Table 6 and the results of the students' questionnaire are presented in Table 7.

Table 6. Response Questionnaire Assessment of English E-Module Learning Media by English Teacher

Indicator	Score	
	Score earned	Expected score
English language teaching is very supported by the e-module	4	4
E-module facilitates the online learning process	4	4
E-modules are difficult to operate as teaching materials in online learning	1	4
The language used in the e-module is clear and easy to understand	4	4
The use of e-modules under the learning objectives to be achieved	4	4
The appearance (writing/illustration/table/image) on the e-module is clearly and attractive	4	4
Presentation of material on e-module creates a double interpretation (ambiguous) for students	1	4
The order in which the material is presented in this e-module corresponds to the indicators that want to achieve	4	4
Total	26	32
Percentage of Overall Average	81.25%	

Table 7. Response Questionnaire of English E-Module Learning Media by 5A Grade Students

Indicator	Score	
	Score earned	Expected score
The look of this e-module is interesting	130	148
This e-module is easy to use	125	148
Text/font on e-module can be read clearly	133	148
The language used in the e-module is easy to understand	128	148
The tasks presented in this e-module are easy to understand	144	148
This e-module makes you more passionate about learning	129	148
Learning with this e-module is fun and not boring	131	148
The use of this e-module makes you easier to remember and understand the material	127	148
Total	1047	1184
Percentage of Overall Average	88.4%	

Based on Table 6 and Table 7, the results of English teacher and student's response questionnaire are 81.25% and 88.4%. The English E-Module learning media was declared feasible by obtaining "Excellent" level of feasibility. This showed that the development of English e-module learning media is feasible for teachers to use as a learning medium and efficient for students in online learning.

4. Discussion

This heading discusses the findings of the research related to data collections and data analysis. It also concerns the development, validity, and feasibility of the English E-Module by means of ADDIE stages. The findings from the analysis stage of this research indicate important considerations and challenges to develop effective learning media to facilitate online learning during the Covid-19 pandemic at SD Negeri 1 Wonomulyo. From the need analysis stage, the teachers expressed the need of learning media that can support the online learning and make the learning activity more attractive for students (Darmaji et al., 2019). It is in line with Citrawathi et al. (2016) stating that it is easier for teachers to attract students' attention during learning. Besides, the e-module used in teaching-learning activity is suggested to be interactive and to look real (Asrial et al., 2020). Yet, according to Saputri et al. (2022), it is necessary to create interesting English e-module learning media during instructional process. Moreover, the challenges faced by the students were limited internet access and gadgets. Simamora (2020) states that internet quota is one of problems faced by students in accessing online learning media. Students also expressed the need for learning media that is easy to use and can help them increase their vocabulary in online learning environments and increase their English proficiency (Rahman et al., 2022). Thus, it is important to consider students' technological proficiency and limited internet access when designing digital learning media . Furthermore, it is also important to integrate interactive elements in the learning media to support students' interest and motivation in the learning process. Therefore, considering these needs and problems, the researchers contemplate that the development of the English e-module can answer the teacher's and student's needs, since e-module can be operated online and offline if it is downloaded first via a mobile phone or computer (Munir et al., 2022).

The design of the e-module includes learning objectives, e-module design, the learning content, and learning activities. The E-module design emphasizes the ease of use for primary school students, as well as the e-module designed by Purwanti et al. (2023) also emphasizes user-friendliness besides paper-based and digital textbook that make it simpler and therefore more portable with ease for electronic module (Losi et al., 2023). Also, Dewi et al. (2022) believe that it aids as learning communication device, in which, the message transferred can be of teacher's encouragement to build up logic, mental and focus processing of the students upon reaching better learning. The learning objectives to be achieved are formulated through comprising SMART, as suggested by Hew et al.

(2023), to ensure that learning objectives are well-defined, measurable, attainable, relevant, and time-bound. The learning contents are "Describing People" and "Sport" for grade 5 of elementary school, which refers to the standard of competencies and basic competencies of fifth-grade students. Meanwhile, the learning activities was set out in the 2013 curriculum. This is in support of Jais et al. (2022), that module materials creation aimed to cope the demanded issues as reflection of curriculum policy. To ensure the validity, feasibility, and practicality of the e-module, the researchers designed the instruments, namely validation questionnaire for material, media, and language expert validators used to measure the feasibility of learning media, as well as questionnaires to measure the level of practicality of the learning media (Musilawati et al., 2023). Unlike Munir et al. (2022), who validated the initial draft for learning materials and design experts, this research designed the validation instruments for material experts, linguists, and media experts.

English E-Module learning media is developed according to the steps of the ADDIE development model. ADDIE stands for Analyze, Design, Development, Implementation, and Evaluation Branch (2009). By using 5 stages that include: (1) Analyze, in this stage teacher and 5A grade students of SD Negeri 1 Wonomulyo needs innovative learning tools or media that can help teachers and students in achieving learning objectives, especially English language learning (Citrawathi et al., 2016; Siew & Chin, 2018). (2) Design, this stage is a stage in the form of planning and designing the creation of English E-module learning media products for online learning, (3) Development, is the stage of developing products following the planning and design that has been made by Aldoobie (2015). After the media product has been completed, the researchers conduct tests on the product, namely validation tests to experts' material validators, media experts, and linguists, and that they have to be valid (Musilawati et al., 2023). This validation is done to obtain an assessment in the form of average results. (4) Implementation, in this stage the English E-module learning media is implemented on 37 students of SDN 1 Wonomulyo, this stage is done to obtain data used by researchers in measuring the practicality of learning media (Musilawati et al., 2023). (5) Evaluate is used to determine the achievement of the development process of English E-module learning media. The average score obtained from the results of the questionnaire given to English teachers was 81.25%. The average score obtained from the results of the questionnaire given to students was 88.4%.

Similar to the previous study conducted by Hew et al. (2023), this study also uses the ADDIE development model because the sequence of stages contained in the ADDIE development model is systematic and simple compared to other development models. There are some differences in the selection of materials and education levels, the e-module developed in the previous study focused only on one material, namely announcements, and was intended for grade 10 vocational students (Aliyah & Rusijono, 2020). While the e-module developed by researcher in this study there are two materials namely describing people and sports intended for 5th grade elementary students. In the module development process, namely in validation instruments, the researcher used three experts, such as material experts, media, and linguists while, in the previous study validation was only done by two experts, namely material and media experts (Munir et al., 2022). Researcher chose to add a linguist because the subjects to be tested are language subjects, where the use of language in the e-module must prove valid and the grammar used is correct and does not create double perception or ambiguity.

This research produced a product in the form of English E-module learning media for online learning at 5th grade elementary school. The advantages of English E-module learning media developed by the researchers are (1) There are two scopes of material in this learning media, namely Describing people and Sport, (2) Having a media quality with a file size that is not too large so that it does not require large space on the student's mobile phone memory, 3) The media is in the form of files so that it can be taken anywhere and can be opened at any time (Serevina & Sari, 2018). (4) The design of the media attracts students' attention because there are many images and colors that correspond to the

characteristics of 5th grade students elementary school which is in line with Wiphasith et al. (2015) who believe that colored images in the form of cartoon characters can be eye and attention catching as well as motivating to students, (5) With this learning media the purpose of online learning in English learning becomes easier to convey because the instructional material was presented in an easier way than that in the traditional method (Alodwan & Almosa, 2018).

Based on the validity assessment given by validators it can be concluded that the validation results from material expert get 77.2%, from linguists get 87.5%, and from media expert get 78.5%. According to the three assessments on the validity level, the percentage of the value obtained is categorized as worthy with an "Excellent" eligibility level. The use of English E-module learning media in online learning can help students in learning English (Rahman et al., 2022). An interesting form of media according to Darmaji et al. (2019) can make it easier for teachers as suggested by Alodwan and Almosa (2018) to attract students' attention during learning, following Citrawathi et al. (2016) learning media can be used in the activity of channeling information or learning materials. In addition, in online learning, e-modules are also very useful for students to learn independently because it can improve students' knowledge (Rahman et al., 2022).

Another study has been conducted by Purnamasari et al. (2020) using the same learning media, that is, e-module. The research was also conducted during the Covid-19 pandemic to know the effectiveness of e-module use in online learning. With the same purpose but the method of research conducted is different from the researcher. In the previous study, the researcher used one group pretest-posttest design in other words the researcher compared the condition of students before using e-module and after using e-module. By using this method, the previous researcher does not need to list the process of creating e-modules in, different way than this study, by using the ADDIE development method researcher must explain the steps of e-module development in detail. The results of previous research mention that there are differences in student learning outcomes before and after using e-modules (Feng & Sangsawang, 2023). In other words, although with different research methods the results obtained are the same, e-module is the most appropriate learning media to be applied in the Covid-19 pandemic because it is very effective and efficient in solving online learning problems over the past year (Dewi et al., 2019; Losi et al., 2023).

In the implementation stage, the researchers verified the English E-Module learning media on 37 fifth-grade students at SD Negeri 1 Wonomulyo. The implementation stage of the present study gained success indicated from the research results. It is in line with the previous studies as suggested by Feng and Sangsawang (2023) add that IT-integrated education is able to boost outcome, experience and also performance in dynamic and better enthusiasm atmosphere. The e-module was used in eight online learning meetings for Units 1 and 2 and conducted by using WhatsApp groups because students can access content easily (Alahmadi et al., 2023). In this situation, one of the researchers acted as the teacher. This implementation was done to gather feedback on the effectiveness and practicality of the e-module, both from students and the English teacher. After the module was implemented, the researchers distributed questionnaires to assess the feasibility of the e-module, gathering responses, and comments to improve the e-module (Dewi et al., 2019; Losi et al., 2023). According to Purwanti et al. (2023), ensuring user-friendliness in the e-module design is vital, thus it is important to obtain direct feedback from the users. Moreover, the SMART framework for learning objectives, as suggested by Hew et al. (2023), ensures that the goals are specific, measurable, achievable, relevant, and time-bound, providing a structured and effective learning experience. By involving students and teachers, the researchers could validate the module's practical application and make sure the e-module accomplishes the SMART framework during the design stage.

Assessment of the practicality of English E-module learning media obtained results that are (1) English teacher questionnaire assessment results obtained a score of 81.5%, (2) the results of the assessment of the response questionnaire of 5A grade students obtained an average score of 88.4%. Based on the results of the assessment, the level of practicality

obtained is categorized as "Excellent". Following the assessment results, during online learning, students can use English E-module learning media without any constraints. It is in line with Saputri et al. (2022) postulated that the use of this media makes the teacher easier to deliver materials in online learning. The content of the material contained in the media is conveyed well, following the usefulness of the learning media according to Darmaji et al. (2019) that the materials on learning are more clearly meaningful so that it can be easily understood by students. Thus, it can be concluded that students can learn using English E-module learning media well.

Based on the explanations and discussions previously, the E-module products produced by the researchers can be used to present the materials easily and facilitate online learning. In line with the previous research conducted by Saputri et al. (2022) who produced an interesting English E-Module learning media for the English language materials by using the Flipbook which really helped young learners improve their English vocabulary (Rahman et al., 2022) since the book is interesting and colorful, therefore, it is necessary to create interesting English e-module as learning media during instructional process (Saputri et al., 2022), Therefore, the English E-Module learning media has a positive influence on learning since it is more effective to utilize than the printed one (Astalini, Darmaji, Kurniawan, et al., 2019). In addition, learning will go well if the teacher uses an e-module as a learning media because the learning will be interesting, interactively, and look real (Asrial et al., 2020). Besides, the quality of student learning can be improved because e-modules facilitate materials that are adapted to the needs of students. The use of e-modules is also flexible because students can open and use e-modules anytime. Furthermore, the use of e-modules in learning not only increases students' independence but also improves learning outcomes in terms of psychomotor, cognitive, and affective abilities (Purnamasari et al., 2020). Undoubtedly, the digital English e-module is feasible to use in the classroom because of its effectiveness, fun, and interest.

5. Conclusion and Implication

The present research and development aims to develop an English e-module on the materials describing people and sports for 5th-grade students. The researchers utilize the ADDIE approach model which consists of Analysis, Design, Development, Implementation, and Evaluation. The purpose of using this model is to test the validity and feasibility of the module. There were two tests in the study: validity test (material, media, language) and feasibility test (English teacher and 5A grader). The results of validity test including material, media, and language showed an "Excellent" category seen from the percentage score sequentially from 75%, 78,5%, to 87.5%. It indicates that the test is considered valid. The media was declared feasible based on the results of the study obtained not only from the English teacher's questionnaire which gained 81.25%, but also from the results of students' response questionnaires which gained 88.4%. Hence, the learning media developed is feasible to be used as an online teaching and learning medium, especially for elementary school English subjects. Since the study was carried out in only one of the elementary schools in Malang Regency, East Java, Indonesia, it is recommended that the other researchers interested in the same topic broaden the subject of the study by adding more participants from different schools in Indonesia. However, at least teachers could adopt the result of the current study to enrich the nuances of teaching English to young learners.

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