



Developing and Implementing CEFR-Based Digital Literacy Resources for Multisensory English Learning

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ABSTRACT

Independent curriculum or merdeka curriculum is the latest curriculum in Indonesia, whose learning is holistic and based on the CEFR level. However, in most cases, learning and teaching still use traditional pedagogy that relies on the left brain and focuses only on grammar, supported by the fact that Indonesia is ranked 81 out of 111 countries in terms of English Language Proficiency. This research aims to develop innovative digital literacy resources for multisensory English learning based on CEFR. This research uses qualitative development with R&D (Research and Development) design with the research step to be carried out (Analyzing, Designing, Developing, and Evaluation). The results show that these digital literacy resources can be applied by teachers for student learning. This research is expected that digital literacy can be further developed for multisensory learning which is beneficial for language learning.

INTRODUCTION

English is an ever-changing language (Yudha, 2023). Indonesia has experienced various curriculum changes; the most recent is the Merdeka curriculum. There are some obstacles or challenges that must be faced. The following are five challenges of the independent learning program for teachers (Djumanto, 2022), which include: a) Getting out of the Comfortable Learning System Zone; b) Do not have experience in the Freedom to Learn Program; c) Limited References; d) Teaching Skills; e) Minimal Facilities and Teacher Quality. Teaching quality here refers to the competence possessed by the teacher. Prof. Utami (on the 5th podcast Ania Lian) said that prospective teachers graduating from educational institutions, especially in English courses, must be proficient in English because if not, they will use Indonesian in teaching.

Today, our way of thinking about learning and education is based on mastery of facts, techniques, and accomplishment of short-term tasks performed in the short term and tested in the short term (A.-P. Lian, 2017). Approaches, learning models, and learning steps in the Merdeka curriculum are more entrusted to teachers to adapt to the complexity and flexibility of teaching materials in important learning outcomes with the characteristics of 21st-century learning (Nugroho & Narawaty, 2022). Furthermore, Nugroho & Narawaty (2022) state that learning English in the Merdeka curriculum is still text-based (genre-based approach). Several main skills are emphasized in the new education reform, such as analytical, critical, creative, and innovative thinking (Ania Lian, 2020). The Merdeka curriculum should use non-traditional pedagogy, a new paradigm, such as holistic pedagogy, exploratory learning, learning-centered, and differentiated learning. According to Julaiha (2022), in student-centered learning, so that students can relate their learning to the student's perspective, the student experience will be more integrated and not ignored. In addition, non-traditional pedagogy must have transformative learning. In her third podcast, Ania Lian (2022) argues that transformative learning is learning that truly focuses on students. In his latest research, Sudimantara (2021) developed a new pedagogy (multisensorial load reduction strategy) that activates the nonverbal components of language (rhythm, intonation, movement, emotion, and aesthetics). This learning device is seen as a multisensory experience because it allows students to process various types of information. Learning to use a multisensory approach is seen as very helpful in improving memory in learning. A study by (Cai et al., 2021) introduced a *verboden* approach, emphasizing prosodic information (intonation and rhythm) to rearrange the learner's perception of the language being studied to facilitate language learning.

The multisensory method is considered to improve students' memory in language learning. The multisensory method also increases student involvement directly because stimuli that enter stimulants to visual, auditory, and kinesthetic sensors are stored deeper and last longer. (Algrni, 2020) mentions visual presentation

techniques including graphic organizers, by displaying pictures, posters, or student work to express learning. Learning resources are tools that can support success in the teaching and learning process in the classroom. There are various learning resources, some of which are electronic (technology-based) and print. In this millennial era, digital technology is widespread, not least in the educational environment.

Digital learning resources, especially English learning, can be accessed online. Research involving 957 digital-based English class students shows that using information technology can encourage students to have autonomous learning where they can accept learning responsibilities as they wish (Juliansyah et al., 2022). In the industrial era 4.0 revolution, digital literacy has become a separate trend in society. As in the scope of education today, the use of digital resources for learning is also increasing. Digital literacy is needed to find, generalize, and analyze digital resources daily (Yashalova et al., 2019). In addition, incorporating digital literacy in English learning materials can foster students' knowledge, skills, and attitudes about digital technology and its use, which are needed to acquire in this era of disruption (Dewanti et al., 2022). Kim & Bae (2020) revealed that using digital devices in language learning can increase students' learning motivation and attitudes. This is because digital tools allow differentiation according to the learner's proficiency or language characteristics and provide immediate feedback and active interaction.

The level of a person's language ability is very important to know because by knowing that level of ability, the provision of language subject matter can be adjusted to the level of each individual. A person's level of language proficiency is also known as the Common European Framework of Reference for Languages (CEFR). CEFR is an international guideline describing the language competence of English language users at various levels (Council of Europe, 2018). CEFR is also a way to describe the understanding of a foreign language. The findings from previous research by Kaowiwattanakul (2021) discuss the role of literature in

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improving students' reading and critical thinking skills. Based on the CEFR C1 level, This study found that EFL students' reading and critical thinking skills increased significantly. The results of this study indicate that although multisensory material not only has a long-term impact on the learning experience, it also makes learning more concrete and enjoyable, making it more memorable. However, this study was only based on the CEFR C1 level. Thus, the author will develop a CEFR-based digital resource for multisensory English learning in this study. (Camilleri & Camilleri, 2017) state that teachers must keep abreast of the latest developments in digital technology. In addition, educators may need regular support, professional development programs, and materials to stay up-to-date with the latest technological developments. For this reason, it is necessary to develop learning resources, especially digital technology sources suitable for students' level of understanding in English or CEFR-Based.

In addition, several problems related to learning English occur in schools in Indonesia, such as minimal quality of teachers, lack of learning resources due to limited references, and dependence on traditional teaching approaches. Learning resources, an important aspect of learning, currently need to be improved. In this millennial era, learning resources are not only from textbooks but are widely available online. Students and teachers must be able to master digital technology skills. As with learning English, many English learning materials can be accessed, such as on the website. However, learning English in Indonesia still uses traditional approaches and learning resources that still need to be updated, even though the current curriculum in Indonesia has been changed to become an independent curriculum (Merdeka curriculum) with student-centered learning methods. Therefore, no research discusses the creation and development of digital learning resources that are studied in depth, especially those based on CEFR, for example, in multisensory English learning in middle schools. Therefore, this research will provide new insights into developing CEFR-based digital resources for multisensory English learning with specific material.

RESEARCH METHOD

This study uses R&D (Research and Development) as a research design because researchers want to know students' English skills, especially in multisensory English learning, and find out how English teachers choose learning resources for English language learning that include a multisensory approach. R&D is a research method used to produce a product, and to test the activity of the product (Sugiyono, 2011). This study uses the ADDIE model as a step in conducting research. The ADDIE model is a five-step linear approach to analysis, design, development, implementation, and evaluation where, after completing a phase, one can move on to the Next phase (Martin & Betrus, 2019). According to Borg & Gall, 2003 as cited in (Gustiani, 2019), (Ratnawati, 2017), and (Atmowardoyo, 2018).

The population of the research is students of middle school. The sample of the study is a student of middle school grade 7. Besides, the teachers of the seventh grade are informants the get data. The data collection technique used by the researcher was testing, documentation, and interviews with teachers and students to know the needs of students and teachers regarding digital learning resources with several questions as an instrument. The researcher analyzed the data. The data analyzed are data obtained through interviews and documentation. The first step is to make an interview transcript. The next step is data reduction. The researcher limits, simplifies, and changes the data at this step by summarizing or paraphrasing the interview transcripts, field notes, and other supporting documents. The next step is displaying the data. Finally, the research data are presented in text, including field notes and interview transcripts. Besides, the researcher conducted a test to know the students' level based on the CEFR test model. The test helps the researcher provide materials based on the student's level and needs.

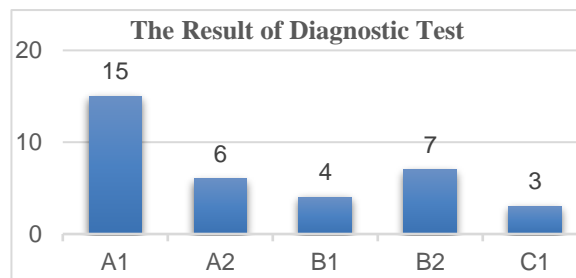
FINDING AND DISCUSSION

Findings

The Result of the Diagnostic Test (Pre-Test)


This pre-test was carried out using a diagnostic test that refers to the CEFR to measure students' literacy levels and at what level they were before participating in learning using this product. The result is as follows:

Table 1: The Result of Diagnostic Test (Pre-Test)



The results of the diagnostic tests above show that the majority of students are at level C1. Therefore, the researcher develops material only based on the test results, namely levels A1, A2, B1, B2, and C1. So, the material that researchers have developed in this digital literacy resource product is in accordance with each student's literacy level. The following table shows that the material in this digital literacy resource product is in accordance with the student's literacy level.

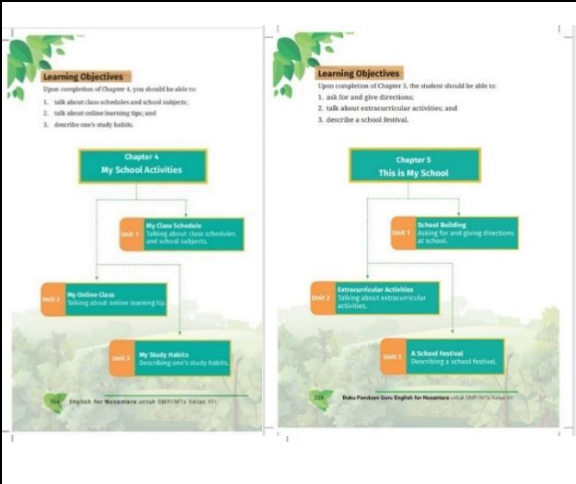
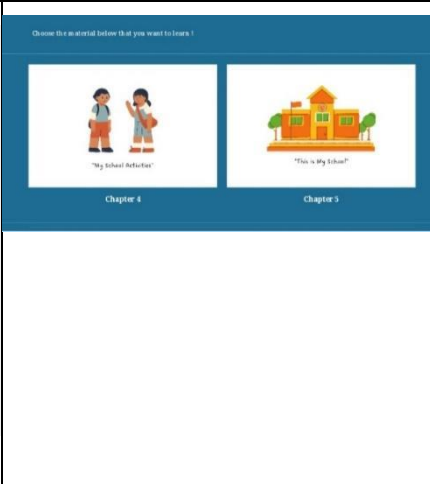
Table 2: Suitability of the Material with the Students' Literacy Level

The Material in The Product	Explanation
 <p>The screenshot displays a user interface for a digital literacy product. At the top, there is a header 'Video about "School"' with a sub-header 'Click the test below according to your literacy level'. Below this, there are five video thumbnails labeled 'Video A1', 'Video A2', 'Video B1', 'Video B2', and 'Video C1'. The thumbnails show various school-related scenes like classrooms, playgrounds, and school buildings. Below the videos, there is a section titled 'Artikel about "School"' containing several paragraphs of text. At the bottom, there is a section titled 'Teks about "Extracurricular"' with a sub-header 'Click the test below according to your literacy level'. Below this section, there are five buttons labeled 'Test A1', 'Test A2', 'Test B1', 'Test B2', and 'Test C1'.</p>	<p>There are three material contents, namely in the form of video, audio, and text, each of which has been adjusted to the literacy level of students based on the results of diagnostic tests; the levels are A1, A2, B1, B2, and C1</p>

Suitability of The Material with The Merdeka Curriculum

Merdeka curriculum uses a book titled "English for Nusantara." The book contains five chapters. However, the material that the researcher developed was only to meet the needs of teachers at the time this research was conducted, namely Chapters 4 and 5. The topic in Chapter 4 is "My School Activities," while the topic in Chapter 5 is "This is My School." The following is a table of the suitability of the material in digital literacy products with the book "English for Nusantara."

Table 3: Suitability of the Material with the Book

The material in the book "English for the Nusantara."	Material in The Product Digital Literacy Resources
	

In addition to the material in the curriculum, the learning process is also by the teaching modules in the Merdeka curriculum. Because in the Merdeka curriculum, the term RPP was changed to a teaching module. The following are The Steps for Learning Activities of Digital Literacy Resources.




The Steps Learning Activity of Digital Literacy Resources

These learning steps are based on teaching modules in the Merdeka curriculum. **Listening:** Students listen to a short video appropriate to the learning material as motivation or stimulation to focus attention. At this stage, students are asked to identify and record appropriate vocabulary to describe the school from the videos they watch. **Exercise:** At this stage, students are asked to answer several simple questions in multiple-choice questions based on the descriptive text presented about the school. This exercise is carried out to know students' understanding of the learning material that has been given. **Writing section:** After practicing answering simple questions, students will be directed to write a simple descriptive text about a room in the school, such as a classroom, paying attention to the language focus, such as the words beside, between, behind, in front of, or across from.

Suitability of The Approach to The Learning Needs of Different Students

Then finally, the researcher uses an approach according to students' abilities in learning. *Based* on the results of interviews with students, they revealed that they tend to prefer Auditory and Visual learning styles or seeing and listening. *However*, some of the students also have a kinesthetic learning style. *For* this reason, researchers use a multisensory approach in learning activities using the products that researchers develop because the concept of this multisensory approach is to cover various kinds of student learning needs in *several* skill areas, such as written (text), visual (images), auditory (audio), and Auditory-visual (video). The following is a table of *the* suitability of the learning material approach used in digital literacy products with student learning needs:

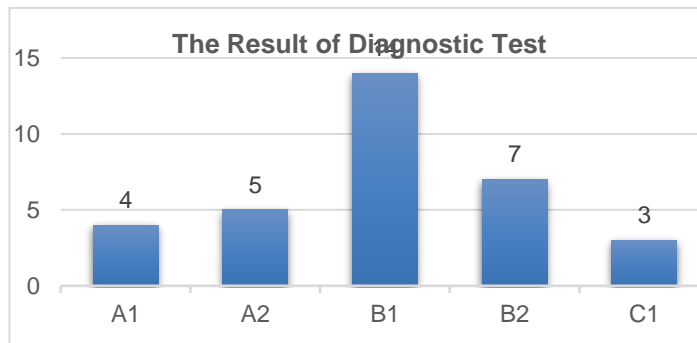
Table 4: Suitability of the Approach to the Learning Needs of Different Students

Material in the Product	Explanation
	<p>This product contains video content. This video content represents auditory-visual in a multisensory approach, which combines visual and auditory sensors. Besides that, this video content can also represent kinesthetic techniques because students can imitate the movements in the video.</p>
	<p>Then there is the audio content. This audio content represents an auditory technique in a multisensory approach.</p>
	<p>Finally, there is visual content that displays pictures or text to read. The content represents visual techniques in a multisensory approach.</p>

The Result of the Diagnostic Test (Post Test)

This post-test is carried out the same way as the pre-test: a diagnostic test that refers to the CEFR. The result is as follows:

Table 5: The Result of Diagnostic Test (Post-Test)



That table displays the diagnostic test results after students use digital literacy resources in learning activities. These results show that student literacy has increased. Of the 35 students, the average is at B1 or intermediate level. This proves that learning activities using literacy resource products can increase students' literacy levels.

The following is a table comparing students' literacy levels before and after participating in learning using digital literacy resource products:

Table 6. Comparison Chart of Pre-test and Post-test

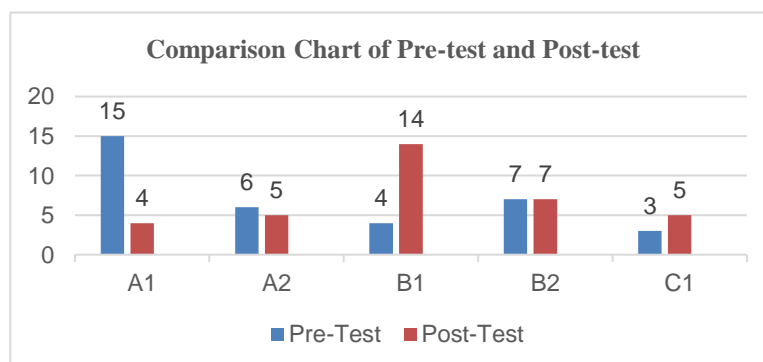


Table 6 above shows a comparison of students' pre-test and post-test results. The pre-test results display data on students' literacy levels before learning to use digital literacy resource products. In the pre-test data, the literacy level of students is still very low; that is, the average is at level A1. At the same time, the post-test results data show that the literacy level of students has increased, namely the average at level B1. This proves that digital literacy resource products developed by researchers can help increase students' literacy levels.

Need Analysis of Teacher and Students

Teacher's Need

The interviews were regarding the criteria for learning media teachers in schools need for English learning activities. The informant is an English teacher at a middle school in Cirebon. Based on the interview results, the teacher said there are several criteria for good digital media for learning.

First, which is easily accessible by students, for example, the website, second, the teacher must properly implement the media and include learning objectives. To answer question A2, the teacher said:

"Media that students can easily access, for example websites that they can read" (T-A2). According to (Sarker et al., 2019) that digital technology used for learning must be easily accessible to students even from remote places, because it will help when taking remote classes.

"In my opinion the criteria are, the media must be implemented by the teacher properly and also includes learning objectives" (T-A2). This is in line with the mentioned in (Sarker et al., 2019) that technology must be integrated at all levels of curriculum development, input learning processes, and includes learning procedures.

Third, the teacher stated that the content presented in digital learning media must be content that is up to date-and has several references. Fourth, the teacher also said that students prefer content in digital media that contains interesting explanatory

pictures or videos, which can make students even more motivated in learning. To answer question A5, the teacher said:

“In my opinion, the content presented must be up to date. Besides that, the reference of the content is not only one so that it varies” (T-A5).

This is in line with the ones mentioned in (Haleem et al., 2022) that digital learning resources to assist students in enhancing their learning experience must be up-to-date teaching materials.

“.....Students also prefer learning content that contains interesting pictures and video explanations” (T-A5). These criteria are in line with those mentioned by (Zaim, 2016) that media consisting of text, images, audio, video, and animation in an integrated manner can help simplify the learning process, allow students to better understand the content of what is being taught, help shape the learning process, and can stimulate interest in the program. Language and thus provide a motivational boost.

Finally, the media must be able to facilitate all students' abilities such as visual, audio, audio-visual or kinesthetic. Because according to the teacher, students have different abilities, therefore as a teacher we must be able to facilitate all of these student abilities. To answer question B6, the teacher said:

“... besides students also have different abilities in terms of capturing information, as teachers we must be able to facilitate all students' abilities both visual, audio, audio-visual or kinesthetic” (T-B6).

According to (Schuler, 2019) that multimodal digital learning can have a positive impact on student learning. Because multimodal learning resources can enhance students' sensory experience (audio, visual, and a combination of both).

Students' Need

This needs analysis was carried out to find out how the criteria for digital resources needed by students. This analysis was conducted to three grade 7 students at a junior high school in Cirebon using the interview method. The students mentioned several criteria for digital learning resources they needed for learning activities.

First, of the three students, they all mentioned that they wanted a digital learning resource that featured a video, be it a video in the form of explaining material or an interesting animated video. This is in line with the criteria mentioned by (Brame, 2016) that by matching modalities by using auditory and visual channels to convey complementary information, for example using narrated animation, it can further foster student motivation. To answer question 4, the students said:

“Animated content and English learning videos” (S1-4)

“Content with videos that speak English” (S2-4)

“Learn video content on YouTube and play content” (S3-4)

Then secondly, the students mentioned that they really needed a translation of the explanation of the material, as well as the vocabulary in the material. In addition, one of the students mentioned that he needed a dictionary to translate a word or sentence that he did not understand. To answer question 5, the students said :

"Explanation and meaning, because what I need when learning English must have a translation" (S1-5)

“I need a dictionary to translate” (S2-5)

“English Vocabulary Translated into Indonesian” (S3-5)

Third, students want an attractive design from digital literacy resources for learning, such as having pictures, colors, and also having sound or audio listening. According to (Setyaningsih et al., 2019) digital-based learning resources are

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important to be applied in the world of education because they can present teaching materials contextually, visually, and aurally in an interesting and interactive way. To answer question 6, the students said:

“Colorful and interesting/unique to learn” (S1-6)

“A colorful design with pictures and sound” (S2-6)

“Picture design, and there is a clear explanation voice” (S3-6)

Finally, because students have different learning styles, the researcher asks questions about what learning styles they have. Because, according to the English teacher at the school, a teacher must be able to facilitate all the different abilities of these students. Of the three students, all of them mentioned that their learning style was audio-visual. This is in line with the mentioned in (Percival & Ellington 1984 ; Warsita Bambang, 2018) that the availability of digital learning resources must make it possible for students to refer to themselves and their ability to meet the needs of learners to study independently. To answer question 7, the students said:

"Audio-visual because seeing and hearing makes me understand what is explained" (S1-7)

“Audio-visual, because you can see the writing and listen to the way it is spoken” (S2-7)

“Audio-visual, because I prefer to see and listen at the same time” (S3-7)

The Design of Digital Literacy Resources

This source of digital literacy is in the form of a website that can be accessed free of charge anytime and anywhere. Researchers created the website design using the Canva application, because the application provides attractive images and is also free to use. This digital literacy resource has several features in it such as Home, Diagnostic Test, Material, Translate, Movement, and Evaluation. In addition, the material contained in these digital literacy resources is in the

form of various types of interesting content for student learning resources, such as text, images, audio and video. The figure as follows:

Figure 1. The Desain of Digital Literacy Resources



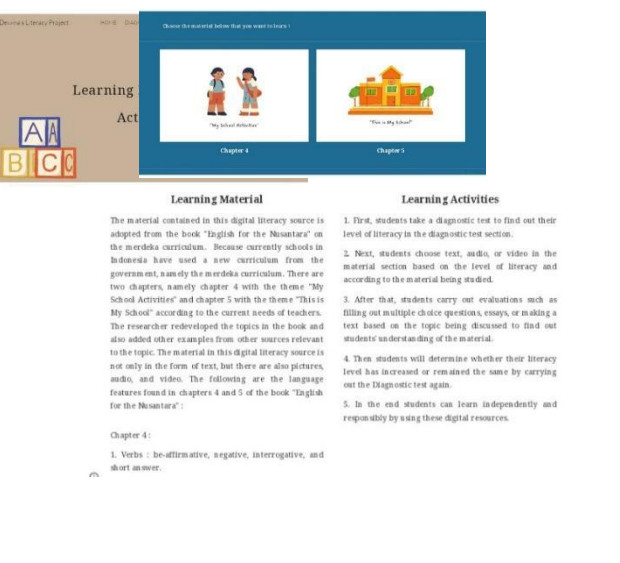


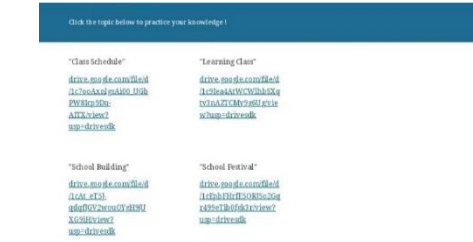
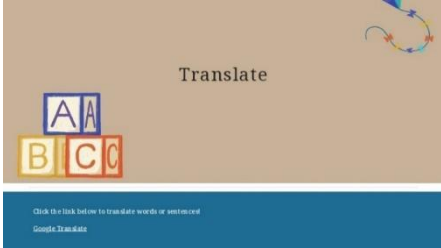

This product focuses on media that provides learning materials with various kinds of content such as text, images, audio, and video. This is in line with the multisensory concept where in a good learning process is to combine two or more sensory strategies to receive or express information. In addition, this product has also been designed according to an analysis of the needs of students and teachers. This product is designed in a very attractive way by presenting colorful pictures, videos explaining the material along with examples, as well as instructions on how to use it easily, so that students can use this digital literacy product with ease and fun.

The Development of Digital Literacy Resources

Researchers develop a product in the form of a website that can be used as a digital-based learning resource. The website has free access making it easier for students and teachers to use it. The parts of the website can be seen in the following table:

Table 7: The Development of Digital Literacy Resources

No.	Pictures	Description
1.	 <p>Researcher Profile</p> <p>The researcher is a student of IAIN Syekh Nurjati Cirebon. She has an interest in multisensory learning, because according to her learning will be more fun if it uses more than one sensor, for example hearing and vision sensors. The researcher herself has an Audio-visual learning style where it is not enough just to see or hear, because according to her it will be easier to understand something by involving both sight and hearing. In this case the researcher is interested in</p> <p>Project Profile</p> <p>Digital literacy resources are learning media for students and teachers that focus on increasing literacy levels for students. This product focuses on media and incorporates pedagogy as student-centred and multisensory learning. In addition to reading, listening, speaking, and writing, students can also make movements as part of learning. The source of the material comes from the book "English for Nusantara" on the merdeka curriculum and from other relevant</p>	<p>This is the view from the main page or home. First, there is a banner with pictures and a description of the contents of the website. The banner is located at the top. Furthermore, there are features available on the web, such as diagnostic tests, material, evaluation, translation, and movement. And finally there is a description of the researcher's profile, and also the profile of the product.</p>
2.	 <p>Diagnostic Test</p> <p>Click the link below to check your literacy level</p> <p>CEFR Level</p> <p>A1 Level</p> <p>According to the official CEFR guidelines, a person at level A1 in English:</p> <ol style="list-style-type: none"> 1. Can understand and use common everyday expressions and very basic phrases intended to fulfill the most basic concrete types. 2. Can introduce himself and others and can ask and answer questions about personal information, such as where he lives, people he knows, and things he does. 3. Can interact with other people in a simple way as long as the other person speaks slowly and clearly and is ready to help. <p>A1 Level</p>	<p>The second feature is a diagnostic test. Inside there is a title banner, then a link for a diagnostic test. In addition, on this page there is also a description of each CEFR level, such as A1, A2, B1, B2, and C1.</p>
3.	 <p>Learning Material</p> <p>The material contained in this digital literacy source is adopted from the book "English for Nusantara" on the merdeka curriculum. Because currently schools in Indonesia have used a new curriculum from the government, namely the merdeka curriculum. There are two chapters, namely chapter 4 with the theme "My School Activities" and chapter 5 with the theme "This Is My School" according to the current needs of teachers. The researcher redeveloped the topics in the book and also added other examples from other sources relevant to the topic. The material in this digital literacy source is not only in the form of text, but there are also pictures, audio, and video. The following are the language features found in chapters 4 and 5 of the book "English for the Nusantara":</p> <p>Chapter 4:</p> <ol style="list-style-type: none"> 1. Verbs : be-affirmative, negative, interrogative, and short answer. <p>Learning Activities</p> <ol style="list-style-type: none"> 1. First, students take a diagnostic test to find out their level of literacy in the diagnostic test section. 2. Next, students choose text, audio, or video in the material section based on the level of literacy and according to the material being studied. 3. After that, students carry out evaluations such as filling out multiple choice questions, essays, or making a text based on the topic being discussed to find out students' understanding of the material. 4. Then students will determine whether their literacy level has increased or remained the same by carrying out the Diagnostic test again. 5. In the end students can learn independently and responsibly by using these digital resources. 	<p>The next feature is material. in this feature there is a page title banner, then there is material developed in the form of digital learning. There are two material topics, namely chapter 4 on "My School Activities" and chapter 5 on "This Is My School" which was adopted from the book "English For Nusantara" the merdeka curriculum. In addition, this page also contains information on learning materials and learning activities.</p>

4.		<p>The next feature is an evaluation. In this feature there is a link to find out the ability of students, in the link there are exercises for multiple choice questions, and also practice writing paragraphs according to the topic of material being studied by students.</p>
5.		<p>Next is the translation feature. In this feature there is a link to enter Google Translate. With this link students can translate a word or sentence that they do not understand.</p>
6.		<p>And finally, there is the movement feature. In this feature, there are videos that are fun and can be used for learning. The video contains music, animation, as well as interesting pictures and is also in accordance with the learning material. The movement video is taken from YouTube.</p>

Discussion

In the first stage of the diagnostic test analysis, the researcher used a diagnostic test from the “EF SET” website. The reason researchers use the website from EF SET is because access to this website is available free of charge online. In addition, this diagnostic test on the EF SET website is the first test that has been aligned with the CEFR. According to (Lemos & Hartati, 2021) The EF SET test is a reading English test with a leveling system aligned with the CEFR and is currently the only test that can measure all English skills from beginner to fluent within the standards required by the CEFR. Therefore, this EF SET website is used by researchers, because it can measure all students' abilities.

The second stage is the analysis of learning materials. The learning materials used by researchers were adopted from the book "English for the Archipelago" in the independent curriculum, because currently in schools already use the independent curriculum. The material in the English for Nusantara book was developed not only to build English competence but also to strengthen the character of students. In addition, the learning outcomes in this book already cover six English language skills which refer to the Common European Framework of Reference for Languages (CEFR). Therefore, the researcher uses references from the book English for Nusantara for the learning materials used in the product.

The third stage is needs analysis. Researchers conduct needs analysis in the form of interviews with teachers and students. The results of teacher and student interviews show that there are several criteria for learning resources needed by teachers and students. First, it is easily accessible to students. This is in line with (Sarker et al., 2019) that digital technology used for learning must be easily accessible to students even from remote places, because it will help when taking remote classes. The second is that digital learning resources must be implemented by teachers properly and include learning objectives, as stated by (Sarker et al., 2019) that technology must be integrated at all levels of curriculum development, input learning processes, and includes learning procedures. Thirdly, according to (Brame, 2016) matching modalities by using auditory and visual channels to convey complementary information, for example using narrated animation, can further foster student motivation. This is in line with the results of interviews that students prefer content to digital learning resources that contain pictures, sounds, and videos explaining the material. and finally, based on the results of interviews with teachers, a digital learning resource must be able to facilitate all student abilities such as: audio, visual, and audio-visual. This is supported by the statement of (Schuler, 2019), which states that multimodal digital learning can have a positive impact on student learning. Because multimodal learning resources can enhance students' sensory experience

(audio, visual, and a combination of both). As a result, multisensory learning can occur and will make students learn better.

Then the fourth stage is design. The design that the researchers did for the digital learning resource product was adapted to the needs of the students and teachers mentioned in the interview results. In the product design stage, researchers use the Canva application to create product designs. Because Canva has free access and provides lots of attractive image designs. The Canva application is free and paid online based which is easy to use, including in designing learning media (Rahmatullah et al., 2020). Therefore, the teaching and learning process can be achieved if learning is designed in an attractive way so that it is used effectively.

The last stage is development. The development that researchers are doing is digitizing learning resources to be used in learning activities. Researchers develop a website from the Google site which is then filled with learning content such as: explanatory videos, text, audio, and pictures related to learning materials. researchers develop learning resources that contain video content, because video content can help students get ideas in text writing skills. In addition, the video content also contains audio-visual elements in language skills. according to (Hastuti, 2020) Videos can be used for language learning considering that videos can provide a large number of combinations of illustrations, sound, motion, narration, emotions and also graphics so that they are more communicative. like you tube can also be used as an effective medium to help students understand the text.

Students still have a low literacy level, because the teacher never classifies students' literacy abilities. According to (Lemos & Hartati, 2021) Based on research, teachers' low English proficiency in the educational process itself is one of the reasons that causes low proficiency among students in Indonesia. As a result, the learning process that occurs becomes less than optimal. Apart from that, (Lemos & Hartati, 2021) also said that another reason an English teacher must fulfill the

standard requirements for the necessary English skills such as listening, speaking, reading, writing is because he or she will use them to communicate with students. So therefore, before carrying out learning activities, the researcher conducted a diagnostic test (Pre-Test). The purpose of the pre-test is to determine the initial abilities of students. By knowing these initial abilities, it will be easier to determine the models and methods to be applied in learning. The results of the diagnostic test (Pre-Test) show that there are still many students who are at a low literacy level, namely at level A1.

Second, the introduction of the CEFR literacy level can be applied in the school context. Seeing the low results of the pre-test that had been carried out on students, the researchers then carried out a trial implementation of digital literacy resource products. The results of the learning process using digital literacy source products can have a positive impact on student learning activities. Evidenced by the results of the post-test which has increased. Students are more interested in learning by using digital sources, because students like creative learning resources, such as pictures, audio and video explanations. One of the qualities of learning is determined by the attractiveness of learning designs that are arranged systematically (Gafur, 2012).

Third, increasing student literacy levels after using digital literacy source products. After testing the use of digital literacy resource products, some students experienced an increase in their literacy level. The results of increasing the literacy level are carried out with a diagnostic test again (Post-test). Post-tests are carried out after the learning process has been completed. Post-test results show that literacy levels can increase after carrying out the learning process using digital literacy sources. The comparison after using the product is that the average student increases to level B1.

From the data above it can be concluded that digital literacy resource products developed by researchers can help increase students' literacy levels. In addition, this

digital literacy resource is suitable for English learning activities, because the material contained in this product is adapted to their literacy level.

CONCLUSION

The development of digital literacy resources in this study was carried out because of the need for innovation. This innovation in developing digital literacy resources is characterized by: (1) the needs of teachers and students for digital learning resources; and (2) the use of digital literacy resources that are compatible with CEFR.

First, the need for teachers and students for digital-based learning resources. The needs of teachers and students in this study are in accordance with the concept of multisensory learning. Because these learning devices can essentially combine multiple learning pathways in the brain together, the opportunities for memory and learning increase. In addition, students learn best when information is presented in different modalities. Therefore, the researchers developed a product that utilizes a multisensory approach as a learning tool by adjusting the needs of teachers and students. Second, the use of digital literacy resources that are compatible with CEFR. The introduction of literacy levels and the CEFR framework can be applied in a school context. Because teachers can find out the level of literacy of students and adapt learning materials to their level of literacy and the abilities of these students. In the implementation carried out in this study, it can be seen that this digital literacy resource product can increase the literacy level of students in schools. This is because the products developed by researchers have been adapted to the literacy level of students. So that students can more easily understand learning material according to their literacy level.

This conclusion shows that an innovation can start at the school context level. The use of an appropriate learning approach can affect the quality of student learning. Strengthening pedagogy takes precedence over digitizing learning resources. Students' understanding of any material will be achieved if the learning tool works

well. The Multisensory Approach is a pedagogy that can be applied to the workings of the human brain so that the transfer of knowledge to students can be achieved and learning increases. So, when understanding can be achieved, the literacy level of students in Indonesia can increase.

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