

Research Article

Using ADDIE Model to develop STORE (Students on Recreation): An Environmental Exploration-Based Learning Strategy in Merdeka Curriculum

Yeni Tristiana*, Senowarsito, Siti Nur'aini

English Postgraduate, Universitas PGRI Semarang, 50232, Indonesia

ORCIDYeni Tristiana: <https://orcid.org/0009-0006-5526-6801>**Abstract.**

English is an international language that all students must learn so they can speak, communicate, and interact with the international community both actively and passively. Unfortunately, many teachers have difficulties in creating a communicative, comfortable, and enjoyable learning and teaching atmosphere. This results in students being less enthusiastic about learning English and feeling bored. This research aims to develop STORE (students on recreation) learning strategy based on the environmental exploration of English language learning in the implementation of the Merdeka Curriculum and to enhance students' well-being using the STORE learning strategy. The research method used was research and development with the ADDIE model (analysis, design, development, implementation, and evaluations). To collect data, the researcher used questionnaires, interviews, and observation instruments. Data were obtained from 64 7th-grade students and three English teachers at SMP Negeri 1 Bangsri. For data processing, researchers used descriptive statistics to analyze learning needs for fun outdoor recreation. Research activities were carried out through the following stages. Initial stage: needs analysis; Stage II: creating a STORE learning plan; Stage III: limited trials and evaluation. Stage IV: Draft revision; Stage V: Design validation; Stage VI: implementation and evaluation; Final stage: dissemination of research results. The research showed that the students' learning motivation had increased. The participants indicated their preference for outdoor learning because they could explore their environment and learn simultaneously. In conclusion, the environmental exploration learning strategy can be applied to enhance students' interest in learning English and also to implement the Merdeka curriculum

Keywords: ADDIE model, environmental exploration, independent curriculum, STORE learning

Corresponding Author: Yeni Tristiana; email: ytristiana24@gmail.com

Published 12 March 2024

Publishing services provided by Knowledge E

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Selection and Peer-review under the responsibility of the ICESRE Conference Committee.

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1. Introduction

Minister of Education and Culture, Nadiem Makarim, introduced the idea of “Merdeka Belajar” with the aim of creating a dynamic and enjoyable learning environment [1]. This concept is embodied in the curriculum of Merdeka Belajar. In Merdeka Belajar curriculum, teachers poses the flexibility to select a diverse range of teaching tools, allowing them to customize their teaching approaches to suit the individual learning preferences and interests of their students. Additionally, the Merdeka Belajar philosophy empowers educational institutions, teachers, and students to embrace inventive and self-directed learning, fostering creativity and independent exploration. [2]. Furthermore, in the context of Merdeka Belajar, the concept of learning freedom entails allowing students the flexibility to engage in their studies at their preferred pace and convenience, without experiencing excessive stress or strict requirements. The focus is on fostering and developing their innate talents. This approach facilitates students in attaining the best possible learning results while actively exploring and refining their passions and skills [3]. Nevertheless, many educators face difficulties in creating a communicative, comfortable, and enjoyable learning environment. This results in students being less enthusiastic learning English which seems boring in the classroom [4].

According to [5] suggests that education, in a broad context, refers to the act of teaching and the provision of learning opportunities, which can occur flexibly in different locations and at any time, whether indoors or outdoors.[6]. Teachers who continue to rely on traditional teaching methods may not effectively meet the requirements of students in the modern era. This aligns with the viewpoint in statement [6] that conventional learning tends to place significant emphasis on teachers and textbooks, often overlooking the potential for the school environment itself to serve as a valuable learning resource. To foster a comfortable and enjoyable learning environment, students require an educational approach that incorporates recreational learning strategies focused on exploring their immediate surroundings.

This research aims to develop STORE (Students on Recreation) an environmental exploration-based learning strategy. The second aim of this research is to tackle the massive use of gadgets among students. The data regarding children’s digital usage is truly eye-opening. In the modern era, children are spending more than seven hours each day engaged with electronic devices and information and communication technology (ICT), whether it’s for educational, communicative, or gaming activities. This pattern may be playing a role in the increasing challenges faced in childhood development [7]. They also spend most time indoors both at home and at school. They need to have outdoor

learning time to have fun learning with their friends and their teachers as well. This concept aligns with the goals of the Merdeka Curriculum, which embraces Ki Hajar Dewantara's educational philosophy, emphasizing happiness in learning and promoting independent learning. In the Merdeka curriculum, the idea of happiness is exemplified by: a. Creating an enjoyable learning experience for students. Teachers and schools are encouraged to establish a positive and engaging learning environment through effective teaching methods, the relevance of course materials to real-life situations, and a supportive teacher-student relationship. b. Fostering student-centered learning, where the teacher serves as a facilitator. In this approach, students actively engage in their learning, both as subjects and objects of learning [8].

There were lots of researches that have been conducted to develop outdoor learning strategies or learning models for students. The first research by [9] entitled "Outdoor Education Model based on Experiential Learning in Character Education for Junior High School students." Based on this research the researcher focuses on students' character education in applying an outdoor education model based on experiential learning. In contrast to earlier research, this study focuses on developing STORE (Students on Recreation), an environmental exploration-based learning strategy in the Merdeka Curriculum. Similar research was also conducted by [10]. Likewise with research [11] Engaging in campus outdoor recreation programs and utilizing their facilities offer numerous advantages to students. These benefits encompass enhanced academic performance, a smoother adjustment to college life, improved mental and physical well-being, reduced stress and anxiety levels, stronger social networks, heightened interpersonal skills, a heightened sense of environmental awareness, and a deeper connection to the natural world.

With the outdoor learning model in the form of STORE based on environmental exploration, it can build students' creativity and activeness due to student-centred outdoor learning. The researcher chose the environmental exploration approach as a learning resource because As referenced in [12], a key approach to achieving these objectives involves enhancing instructional techniques and implementing enjoyable learning models to assist students in their educational journey. Fundamentally, the process of learning is an interdependent connection involving the environment, educators, students, and teaching methodologies. The environment comprises tangible elements that instructors can directly employ to teach the subject matter. Within this environment, students directly encounter physical objects and can engage in direct interaction or connection, thereby preventing feelings of monotony during the learning process. In

addition, the environment significantly influences the growth and development of children. Within their immediate surroundings, students can interact with living organisms and non-living objects, which also includes interactions with other individuals. The availability of diverse learning resources and a multitude of choices within this environment makes educational activities more engaging for students. Moreover, educators find the environment to be a convenient tool for reinforcing and naturally explaining concepts, a perspective supported by research findings [13].

Due to time constraints, at this stage, this article is reporting the process completed thus far. From the total four steps to complete the design, this article explores/reports on the first stage of the steps since this is still ongoing research.

2. Method

This study employed the Research and Development (R&D) approach, with a particular focus on the ADDIE research model. As the name suggests, the ADDIE model encompasses five sequential phases for model creation: Analysis, Design, Development (or Production), Implementation (or Delivery), and Evaluation [14]. However, this research reported on the first step from the total four steps. The stages of this research can be seen from the research flow diagram as in Figure 1.

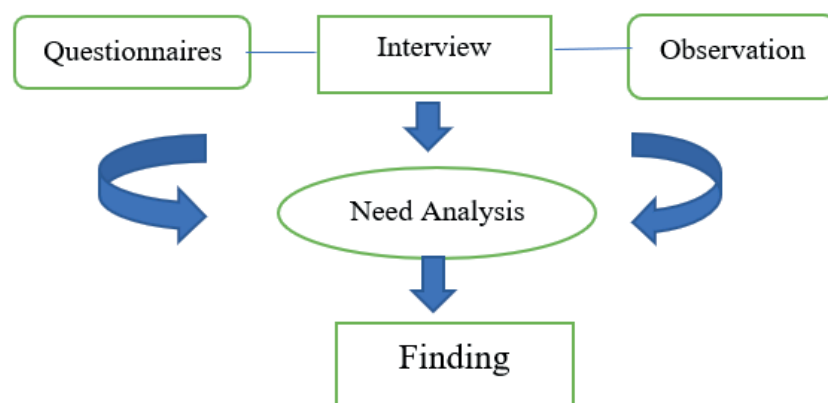


Figure 1: ADDIE Model, Diagram by: Steven J. McGriff.

The explanation of these stages is as follows:

The first phase, Analysis, involves conducting a thorough needs assessment. This includes identifying issues, pinpointing suitable products for the target audience, and brainstorming ideas for the intended product. During this stage, the primary focus is on evaluating the necessity for creating educational materials to meet learning

objectives. Some of the key analyses conducted include performance assessment, student evaluation, an examination of the fundamental principles and learning material procedures, as well as an assessment of the learning objectives [14].

As stated in reference [4], a questionnaire is a written survey document in which individuals agree to provide answers and submit their responses. Within a questionnaire, respondents read and understand the questions, and subsequently provide their responses. According to [15], a questionnaire is a handwritten survey form where respondents agree to give a response and submit their responses. In a questionnaire, respondents learned the questions, comprehended what was necessary, and then answered with their responses. The aim of both the questionnaire and interviews was to assess students' viewpoints regarding STORE, an outdoor learning approach centred on environmental exploration. The questionnaire consisted of a variety of items, encompassing 14 questions that pertained to student perspectives, their learning capabilities, the educational materials used, and assignments. These questions served as indicators of how engaged students were when learning English through STORE (Students on Recreation): An Approach to learning based on Environmental Exploration.

The participants of this research were 64 students from SMP Negeri 1 Bangsri, Jepara Regency. They were taken randomly from 288 students in grade seven. The research was conducted in July 2023.

3. Result and Discussion

3.1. Presenting the Results

The researcher used Google Forms to collect the answers to the questionnaire from 64 respondents. In this study, the researcher employed closed-ended questions. These questions were structured with an attitudinal scale, specifically utilizing the Likert scale, also referred to as a summated rating scale. Within the Likert Scale, respondents were offered five potential response choices: strongly disagree, disagree, neither agree nor disagree (neutral), agree, and strongly agree.[16]. The data from the questionnaire was analyzed by determining the percentage of each student's response to each question. Each of the questions was described in the percentage through the bar chart. The goal was to explore students' perceptions of applying the STORE learning model.

The following bar charts showed how students felt about learning English using STORE (*Students on Recreation*): An Environmental Exploration-Based Learning Strategy.

1. Students' interest

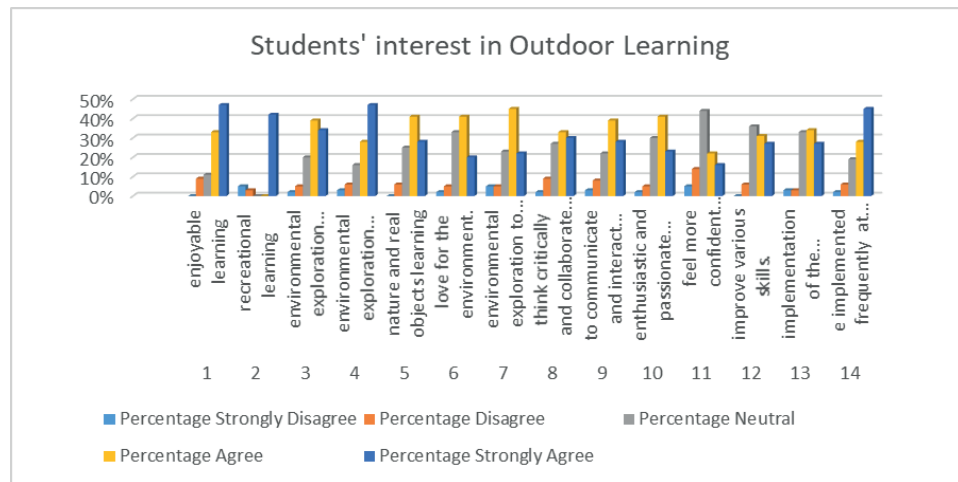


Figure 2: Students' interest.

The researcher discovered that a large number of students had good perception about Environmental Exploration learning strategy based on the results of the questionnaire that was done by the students of SMP Negeri 1 Bangsri. According to the students' feedback, the STORE (Students On Recreation) environmental exploration learning approach was anticipated to boost their enthusiasm. This is confirmed by the responses to questions 2 and 10. Question 1 asked, "I am interested in recreational learning models that make students happy," and the results revealed that 42% of the students strongly agreed, 37.5% agreed, 12.5% were neutral, 3% disagreed, and 5% strongly disagreed. Question 10 inquired, "I feel that the environment-based recreational learning model can enhance students' enthusiasm and passion for learning English."

The findings indicated that 23% of the students expressed strong agreement, 41% agreed, 30% remained neutral, 5% disagreed, and 2% strongly disagreed. Respondents suggested that STORE (Students On Recreation), the environmental exploration learning strategy, was effective and had the potential to enhance the efficiency of English learning activities.

2. Students' Interview

In this study, the researcher conducted interviews with multiple participants to assess their level of enthusiasm for engaging in outdoor learning and implementing the environmental exploration learning approach. The interviews took place on the date of Monday, July 17, 2023, at SMP Negeri 1 Bangsri. The following are the identities of the interviewees. The respondents the informed from Figure 3.

No.	Name	Sex	Age
1.	Afrilian Bagus Ragil Prayitno	Male	13
2.	Aira Sabrina	Female	13
3.	Ameira Zahratusita	Female	13
4.	Denusa Putri N	Female	13
5.	Fernanda Putri F	Female	13
6.	Luna Inas Tsuraya	Female	13
7.	Meiza Calvin X	Male	13
8.	Puspo Ringgit	Female	13
9.	Ramadhita Dyah S	Female	14
10.	Sherina Aurellia R	Female	13
11.	Juliet Airashii N	Female	14
12.	Nadia Aira Nugroho	Female	13
13.	Muhammad Casavano Putra	Male	13
14.	Dimas Aditya Putra	Male	14
15.	Alvaro Ario Cevin Noor Fatihul Ihsan	Male	14

Figure 3: The group of respondents.

The listed names represented the entire group of respondents. The majority of these individuals expressed a positive view regarding the development of STORE (Students On Recreation), the environmental exploration learning strategy. They exhibited increased enthusiasm for learning English as a result.

3. An Interview featuring Meiza Calvin from 7 C

AUD-20230915-WA0000

Researcher
 Good morning, Calvin. How are you today? I'm fine, thank you. Okay. There are many questions I would like to ask you. Yeah. Do you think about our activity having outdoor learning yet? And then class? We explore the environment to explore, and we want to get some benefits. And I would like to know what benefits do you feel?.

Calvin.
 0:29 The benefit is we can explore more of the environment like the object or any subject, and we can and explore all the information from them. Like a tree.

Researcher
 0:52 The view and the objects, right? The big tree. And then the beautiful view of the place. Yeah. Okay. So you think that you can write down and express the ideas you have?

Calvin.
 1:10 Yes. Yeah, I can. and in the description text, we can explore more new 2s nouns and and 1s even more flexible by using any pronouns.

Researcher
 1:24 Okay, that's good. And the last word. We can say that you feel more enthusiastic, right? Yeah. So 2s we have outdoor learning. Yes. Thank you so much, Calvin, for your nice interview. See you next.

Figure 4: The Interview featuring Meiza Calvin from 7 C.

4. An interview featuring Julliet from 7G

5. An interview featuring Inggi 7E

AUD-20230915-WA0001

Researcher

0:00 Good morning, Juliette. Good morning. Yeah. Okay. Today, I would like to ask you some opinions and some experiences that we had several days ago. This is about outdoor learning. 2s What do you think about that?

Juliette

0:18 I think outdoor learning is cool. Because we are not only imagining a certain object but we can feel the outdoor learning so we can explore other things.

Researcher

0:36 Okay, so you feel happy and you have lots of fun and joys in doing outdoor learning. You feel happy right.

Juliette

0:48 Yes. I feel happy.

Researcher

1:10 Yeah. Love you. Express your ideas. Yes, but when we are writing the descriptive text. Yeah. So you can directly see the objects, right? Okay. Yeah, I think that's all. Juliet, for your ideas and your opinions. Thank you so much. See you. Next time we can meet again. Thanks.

Figure 5: An interview featuring Juliet from 7G.

AUD-20230915-WA0003

Researcher

0:00 Good morning, Ingie.

Ingie

0:02 Yes. Good morning, Ma'am

Researcher

0:05 Today I would like to ask you some question dealing with our last activity about having outdoor learning. You still remember? Do you feel enjoyed when having outside learning?

Ingie

0:26 I'm enjoying that. Like I was really happy to share with my friends. Like, Hello. What's wrong? Yeah, this plant is really green and good. Like I can see many things between our learning and I think that's really good.

Researcher

0:43 so it means that when you are learning outside, like in a park or in the rice farm, you can find something real. And then it helps you to understand the materials?

Ingie

1:01 Yeah, when it's going to be like easy things I really like, I really enjoy in outside. But when it's time for material thing like it's really important to learn, I'm going to think I choose the one in class.

Figure 6: An interview featuring Inggi 7E.

3.2. Discussion

Drawing from the outcomes of the questionnaires and interviews administered to the participants at SMP N 1 Bangsri, the researcher observed that a substantial number of students held favourable views regarding STORE (Students On Recreation), the environmental exploration learning approach. According to the findings, four key indicators emerged, students' enthusiasm, students' environmental awareness, and students' learning activities level through the utilization of STORE (Students On Recreation), the environmental exploration learning strategy. Here are some of these indicators:

1. Students' enthusiasm

Based on the questionnaire about students' enthusiasm, most of the students expressed a sense of enthusiasm when it came to learning English through the STORE (Students On Recreation) environmental exploration learning strategy. They

believed that this approach helped alleviate their anxiety, stress, embarrassment, and lack of self-confidence. The findings revealed that 42% of the students strongly agreed, 37.5% agreed, 12.5% were neutral, 3% disagreed, and 5% strongly disagreed. It was evident that enjoyable outdoor learning positively impacted students' overall well-being.

2. Students' environmental awareness

From the data obtained, it is stated that in applying STORE (Students On Recreation), the environmental exploration learning strategy can enhance the students' environmental awareness. It can be seen from the result 20% of the students strongly agreed, 41% agreed, 33% were neutral, 5% disagreed, and 2% strongly disagreed

3. Students' learning activity

The data collected indicates that the implementation of the STORE (Students On Recreation) environmental exploration learning strategy contributes to the improvement of students' environmental awareness. This is evident in the fact that 20% of the students strongly agreed, 41% agreed, 33% were neutral, 5% disagreed, and 2% strongly disagreed. It demonstrates that the use of this strategy positively impacts students' concern for the environment.

4. Conclusion

The study's outcomes indicate that students have a positive perspective on using the STORE (Students On Recreation) environmental exploration learning strategy. They view the learning activities in a favorable light and show enthusiasm, underscoring the advantages of this approach compared to traditional classroom-based learning. In summary, the researcher asserts that students not only accept but also actively support the adoption of the STORE environmental exploration learning strategy. This assertion finds support in questionnaire number 12, which underscores the idea that environmental exploration-based learning can improve a range of skills, such as writing, speaking, reading, listening, viewing, and presenting. Based on the percentages, it is evident that most students find the STORE (Students On Recreation) environmental exploration learning strategy to be beneficial and effective for use in English teaching and learning. The results showed that 27% of students strongly agreed, 31% agreed, 36% were neutral, 6% disagreed, and 0% strongly disagreed. This data indicates that the majority of students believe that this approach is valuable for learning English.

Acknowledgements

Thanks to Universitas PGRI Semarang through LPPM of Universitas PGRI for the DIPA Upgris research grant according to research contract number LPPM : 2/061038/PG/SP2H/PB/2023_PB. Special thanks to my amazing advisors Mr. Senowar-sito and Mrs. Siti NurAini for their patience in guiding me.

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