Educational Games in English Learning Class X Students Department of Electrical Engineering SMK Negeri Sukoharjo

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ABSTRACT

The aim of this research is to utilize educational game learning media to help students have competence in English. Understanding English allows individuals to communicate with people from various backgrounds and cultures. 21st century skills are an integration of knowledge skills and attitudes as well as mastery of ICT development through; critical thinking skills and problem solving skills, communication skills, creativity and innovation skills, and collaboration skills. Through this method students are invited to actively participate in the learning process and train their ability to think critically. The results of the implementation of the use of educational game learning media are expected to be able to develop students' competence in English so that students are able to compete in the world of work. This research stage refers to the six steps in developing the ASSURE model. Analyze learners, State Objectives, Select Methods, Media, and Materials, Utilize Media and Materials, Learner Participation, Evaluate and Revise. Grades are divided into three categories A (Very Good), B (Good), and C (Poor). Educational games are an alternative learning media that can help students have competence in learning English.

Keywords: *educational game, english, assure method*

INTRODUCTION

Education has a crucial role in shaping individuals, society and the future of a nation. In a global context that continues to develop, the importance of education cannot be underestimated. Education is not only a process of transferring knowledge, but also the foundation for growth, character formation and progress of a community. Education provides the foundation of knowledge and skills needed to face the challenges of this modern era. By understanding the importance of education, individuals can develop their full potential, achieve their goals, and participate in building a competitive society. Besides that, education also has a strategic role in forming moral and ethical values. Through learning, the younger generation is invited to understand social norms, appreciate diversity, and develop responsible leadership. This is the foundation needed to create a just, harmonious and sustainable society.

Education is an inseparable and always part of a person's life, because the most important thing in creating human resources is education. Through education, people can be created who have skills that can be used to interact with society and the world of work. SMK (Vocational High School) is a competency-based learning institution, because SMK students are trained, guided and taught various subjects to have skills according to their chosen major. The success of an educational institution lies in the quality of its education, thereby improving the quality of its students. Therefore, the learning process as the basis for the implementation of education must be implemented as well as possible to achieve the desired skill targets. According to Miarso, a learning environment is a tool that can convey messages or information and can stimulate students' thoughts, feelings, attention and will which can lead to the learning process (Rusman, 2012: 160)

In the learning process, teachers must have creativity to make it easier for students to master targeted skills. Because basically every student has the ability to capture what they hear, see and practice. This was revealed in Ki Hajar Dewantara's statement that children live and grow according to their own nature. Educators can only care for and guide the growth of that nature (Kusuma: 2022). However, the creativity that is designed to be utilized by students must still trigger intelligent thinking and various aspects that support students' daily lives and activities so that they can interact with the environment in accordance with the life patterns required in the 12th century today. Based on Law No. 20 of 2003, Vocational High Schools (SMK) are vocational education institutions that provide secondary level education that prepares students to face the world of work/industry in certain fields.

English subjects have a very important role in the education system. English is an international language that is widely used in the worlds of business, politics, science, technology and entertainment. Understanding English allows individuals to communicate with people from various backgrounds and cultures. Many educational and informational resources, such as books, games and public information are available in English. Understanding English will also provide greater access to knowledge and personal development. Globally, English subjects help students to understand economic, political and cultural dynamics at the international level. Learning English involves developing speaking, listening, reading and writing skills. These skills are essential in everyday communication, both in professional and social contexts. Apart from presenting cognitive conflict phenomena, student interaction with the environment is also emphasized in learning so as to help students better understand the material being studied. Piaget (Hughes & Hughes, 2012) found that cognitive development largely depends on how far children will actively interact with their environment. In the classroom, presenting knowledge by encouraging students to discover this knowledge for themselves is done through interaction with the environment and with teaching materials. (Verawati, 2018). According to Piaget, children are born with several sensorimotor schemata, which provide a framework for the child's early interactions with their environment. The child's early experiences will be determined by these sensorimotor schemata. Each experience contains unique elements that must be accommodated by the child's cognitive structure. Through interaction with the environment, cognitive structures will change, and allow continuous development of experience. (Ibda, 2015:29). This shows that cognitive development is a genetic process based on the development of the nervous system. The more experience a child gets, the more adaptations the child will develop.

The process of learning English in schools often faces various challenges that can hinder the effectiveness of learning. Some common problems that often arise among students include; 1) Lack of student motivation. Many students lack motivation to learn English because they find it difficult or irrelevant to their daily lives. This low interest can cause a lack of participation and attention in class. 2) Limited resources. Schools face limited resources, such as a lack of adequate textbooks, audiovisual aids, and access to technology that can support English language learning. This makes the learning process less interesting and less effective. 3) Time limitations. The time allocated for learning English in class is limited, so students do not get enough opportunities to practice and develop their English skills.

These problems require a holistic approach, including updating teaching methods and the use of learning media. Learning English by using educational game media becomes more interesting and fun, thereby motivating students to continue learning. Students will be more involved in the learning process. They will feel more motivated to take part in the game and complete the challenges given. Educational games will help students remember vocabulary, grammar and other English concepts, because repetition in games can strengthen brain connections related to the language being studied. Based on the problems and solutions provided, this research aims to make the learning process more interesting, effective and holistic, so that students not only learn the language but also enjoy the process, increasing their motivation and overall learning outcomes.

LITERATURE REVIEW

Education is an important factor for every country to achieve national development goals. One effort to achieve this goal is to develop education that is integrated with UNESCO's 4 pillars of education. These pillars are the main basis for defining educational goals in each country, and also serve as guidelines for developing educational curricula. The 4 pillars are; 1) Learning to Know (Learning to Know). 2) Learning to Do (Learning to Do). 3) Learning to Live Together (Learning to Live Together). 4) Learning to Be (Learning to Become) (Tebuireng, 2023)

Wong et al., (2020) stated that educational games can be used as a fun and interactive learning medium and can increase student participation and motivation in learning (Rahmanto, et al, 2023). According to Gagne (1970) media are various components in the student's environment that can stimulate learning, media is any physical tool that can convey messages and motivate students in learning (Sadiman, 2003:6)

Trilling & Fadel (2009) stated, "21st Century Skills are integration of Knowledge, Skills and Attitudes as well as ICT mastery developed through: 1) Critical Thinking Skills and Problem-Solving Skills, 2) Communication Skills, 3) Creative Skills and Innovation Skills and 4) Collaboration Skills" (Yulianti: 2021). In this statement it is explained that 21st century skills are an integration of knowledge skills and attitudes as well as mastery of ICT development through; critical thinking skills and problem solving skills, communication skills, creativity and innovation skills, and collaboration skills. In the context of globalization and industrial revolution 4.0, education is also the key to preparing individuals to face rapid and complex changes. Critical thinking, creative and information technology skills are aspects emphasized in modern education to ensure graduates are able to compete and adapt in an ever-changing job market.

According to Ki Hajar Dewantara, it is similar to carvers who have in-depth knowledge about the condition of wood, its types, the beauty of the carvings, and the methods of carving it. That's how a teacher should have in-depth knowledge about the art of educating. The difference is that teachers carve out humans who have inner and outer life. (Kusuma: 2022). Chen & Wang (2018) stated that educational game technology can also help teachers provide more diverse learning that suits students' learning needs. (Rahmanto, et al, 2023). Teacher creativity is very necessary so that students do not get bored when studying from home. Kustari (2020) states that the methods or methods used by teachers in delivering lesson material and the learning media used can influence student interest and make students feel bored. (Kustari, 2021)
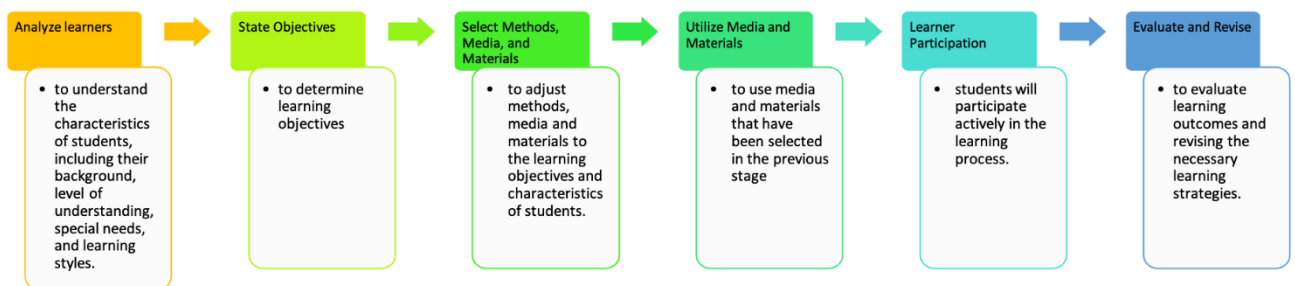
METHOD

This research is qualitative research, and data analysis was carried out through qualitative analysis. Data is collected through written performance tests to determine student abilities. The research method using ASSURE (Smaldino, 2011) involves careful planning and continuous adjustments based on evaluation results. It can be used in a research context to measure the effectiveness of a technology-based learning approach and to assess its impact on achieving learning objectives. Through 6 stages: 1) Analyze learners. The first stage is to understand the characteristics of students, including their background, level of understanding, special needs, and learning styles. This analysis helps teachers adapt learning designs to student needs. 2) State Objectives (Determining Learning Objectives). At this stage the learning objectives are determined. 3) Select Methods, Media, and Materials (Choosing Methods, Media, and Materials). At this stage, methods, media and materials are adjusted to the learning objectives and characteristics of students. 4) Utilize Media and Materials (Utilizing Media and Materials). At this stage is the use of media and materials that have been selected in the previous stage. 5) Require Learner Participation. At this stage students will participate actively in the learning process. 6) Evaluate and Revise (Evaluate and Revise). The final stage is evaluating learning outcomes and revising the necessary learning strategies.

The target object of the research is Class X Department of Electrical Engineering, Sukoharjo State Vocational School, Academic Year 2023/2024. The research was carried out for 6 months, from July to December 2023. Data collection was carried out from September to December 2023. The instrument used was a test to measure students' cognitive abilities.

RESULTS AND DISCUSSION

In the process of learning English using ASSURE, the first stage is a needs analysis. At this stage, student characteristics related to learning methods, knowledge and attitudes are identified. The second stage is determining the learning objectives, the material chosen is English for vocational schools. The third stage is Method, at this stage the media and learning materials that will be used are determined, namely Educational Games. The fourth stage is Utilization of Media and Teaching Materials, steps to utilize technology, media and materials for the success of learning objectives. The fifth stage is student participation in the learning process by utilizing educational game technology. The sixth stage is evaluating learning outcomes and revising the necessary learning strategies.

Figure 1. Research Stages based on the ASSURE Method

Educational games are needed as an English learning method because they have several significant advantages compared to conventional learning methods. Several reasons for using educational games in learning English include: 1) Increasing motivation and interest in learning. Educational games tend to be more interesting and fun compared to traditional learning methods. Students are more motivated to learn because they feel involved in a game-like activity, not just an academic assignment. The feeling of enjoyment when playing games can increase interest and enjoyment in learning English. 2) Active participation. Educational games encourage interactivity and active participation. Students not only passively listen or read, but also interact directly with learning content. 3) Contextual Learning. Through educational games, it helps students understand when and how to use certain expressions or words appropriately.

Assessments are grouped into three categories; Very Good (A), Good (B), and Poor (C) (Suharsimi, 2013). Based on the assessment results from 52 students, it was found that 48% of students got A grades (25 students), 35% B grades (18 students), and 17% C grades (9 students).

Tabel 1. Student Assessment Results

Very Good (A)	Good (B)	Poor (C)
48%	35%	17%
25 students	18 students	9 students

CONCLUSIONS AND RECOMMENDATION

In the context of globalization and industrial revolution 4.0 and society 5.0, education is also the key to preparing individuals to face rapid and complex changes. Critical thinking, creative and information technology skills are aspects emphasized in modern education to ensure graduates are able to compete and adapt in an ever-changing job market. By understanding and mastering English, students can gain the skills and knowledge needed to face challenges in today's global era. Therefore, English subjects not only play an instructional role, but also prepare students to face an increasingly connected and complex world. Educational games are an alternative learning media that can help students have competence in learning English.

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