

## **Literature Study: Analysis of the Use of E-Module Based on Corn -Oriented Social Skill in Elementary Science Learning**

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### **Abstract**

*Technological progress is something that we cannot avoid in today's life, basically technological progress will go according to the progress of science. Every innovation is created to provide positive benefits for human life. Humanizing humans is very important in social life. The purpose of this study was to find out how to use corn-based skill-based e-modules in elementary science learning. By using the research method of literature study. This technique can be used by reading various literary works related to the problem under study, this strategy is used to gather basic information and points of view in writing. The use of e-modules is said to be more effective, efficient and practical if you have to use printed modules with indicators of social care. The two types of learning modules have differences with reinforcement using the t test that has been carried out, where the sig obtained is smaller than 0.05, so there is a difference between the two. The use of e-modules by integrating social skills with local corn wisdom in elementary science learning can maintain traditional knowledge and cultural empathy by understanding the perspectives and values attached to the importance of corn in the lives of people in the surrounding environment.*

**Keywords:** E-Module, Social Skills, Corn

## INTRODUCTION

Freedom to Learn is the motto of Education which is currently being promoted by the Minister of Education and Culture. The curriculum in elementary schools currently uses the independent curriculum and there are some who still use the 2013 curriculum. Both of these curricula have similarities in the main basic design, namely the goals of the national education system and national education standards. learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation and country. Humanizing humans is very important in social life. We are social beings who need help from others as well as social skills in learning at school. Seefelt and Barbour (1994:57-59) argue that skills in communicating, sharing, cooperating well, and participating in community groups are included in social skills (Bali, 2017). Elementary school students (SD) are the beginning of the success of education in Indonesia. However, what is happening now is far from the character of the nation itself. Therefore having social skills is important

especially in learning science. The relationship between social skills and learning science in elementary school is very close, and influences one another, one of which is cooperation in groups, learning science often involves working in groups, where students have to communicate and collaborate with their classmates. Social skills such as the ability to communicate effectively, listen, and cooperate will help students actively participate in group discussions, share knowledge, and achieve learning goals together. According to Razzouk and Shute (2012), assisting students in communicating effectively in the context of their digitally advancing lives supports the development of 21st century skills such as critical thinking and teamwork, which are intended to improve problem solving and help students become ready for their profession.

Corn local wisdom can also be integrated into social skills, especially in elementary science learning. Indonesia is a country that has a lot of culture or local wisdom and customs that can teach us about moral values and life in society. Integrating social skills with local corn wisdom can be optimized through learning in schools. Corn itself is one of

the local wisdom in Indonesia. Social skills can be related to maize local wisdom through various aspects of social interaction and cultural understanding. Good social skills enable one to better understand and appreciate local wisdom related to maize, as well as interactions with people who rely on maize as an important part of their lives.

Classroom learning must be packaged in an interesting way, one of which is through teaching materials. Teaching materials are all types of material or tools used by educators or teachers to convey information, knowledge, and skills to students or students in the learning process so that it becomes more effective, efficient, and attractive to students. There are various kinds of teaching materials, one of the teaching materials that can be used is modules. According to Anwar (2010), learning modules are teaching resources that are arranged in a systematic and interesting manner that contain information, methodology, and assessments that can be used alone to help students develop the skills needed. The learning module is a tool or resource designed to assist students in understanding and mastering a subject matter independently. The main objective of the learning module is

to give students the freedom to study independently, understand the material better, and develop lifelong learning skills.

With the advancement of the industrial revolution, digitalization is one of the main keys in solving problems. Therefore, we can take advantage of the sophistication of technology that is currently being discussed by making learning E-Modules as a tool to help effectiveness in schools and student interest in the learning process. E-modules are ICT-based modules, the advantages of e-modules are that they are interactive, facilitate navigation, enable/load images, audio, video, and animation as well as formative tests/quizzes that allow fast automatic feedback (Suarsana & Mahayukti, 2013). The use of e-modules can increase students' interest and motivation in learning science.

Based on the literature study in the use of E-Modules, most teachers do not have interesting teaching materials to convey to their students, therefore the researchers used the problem formulation 1) What are the results of the use of corn-oriented social skills-based E-Modules in elementary science lessons? 2) Can e-modules motivate elementary school students to learn? There are several national and international journal

articles that can be used as a source of obtaining data that will be needed by researchers. This research was conducted to be applied or implemented properly as a tool to find out the achievement of student competencies

## **RESEARCH METHODS**

The Literature Study approach was used in this study with the aim of gathering references consisting of several previous studies which were then compiled to provide interesting conclusions (Mardalis, 1999). This technique can be used by reading various literary works related to the problem under study, this strategy is used to gather basic information and points of view in writing. In collecting library materials, researchers search and select relevant library materials, access sources of information such as scientific journals, books, and related publications, read and understand in depth the library materials that have been collected. Identify key findings, main ideas and relevant concepts. Record and organize information found from various sources.

The data analysis technique that can be applied in this research uses the content analysis method which can be used to get strong conclusions about the truth and can be

re-examined according to the context (Krippendoff, 1993). In the analysis, selection, comparison, integration, and sorting will be carried out so that what is relevant is found (Sabarguna, 2005).

## **RESULTS AND DISCUSSION**

In the process of reviewing the literature related to the analysis of the use of corn-oriented social skills-based e-modules in elementary science learning, there is a problem, namely the required literature on corn-oriented social skills-based e-modules is still minimal.

The first research, this study uses the development research method with the 4D development model. The model has 4 steps consisting of Define, Design, Development, and Disseminate. According to (Mulyatiningsih, 2016) states that a more concise development but includes a complete development process in it is the development of a 4D model. So the researchers came to the conclusion that the study of the feasibility of Corn-oriented social skills-based E-Modules can be said to be feasible. The feasibility of the e-module from the average validation results of linguists, materials experts, and teaching material design experts obtained a

validity percentage of 94.79% with valid criteria so that it can be used. The attractiveness of the e-module from the average teacher response results and student responses in the implementation trial was 98.69% with very attractive and usable criteria. The effectiveness of the e-module in implementation trials based on the teacher activity observation sheet shows a percentage of 100%, student activity observation sheets shows a percentage of 97.4% and student learning outcomes show a percentage of 100% of students completing KKM, so that it can be declared effective and can be used. The subject of Natural Sciences in this study uses material related to analyzing the water cycle and its impact on events on earth and the survival of living things. Students are asked to observe pictures of the use of water and then students convey and receive opinions in group discussions to make mind maps related to the function of water. In addition, students are invited to read water cycle material and watch an explanatory video, then students follow the instructions in making a water cycle scheme associated with corn plants. The contents of the activities contained in the e-module include the appearance of let's read, let's practice, let's observe, let's

discuss, let's tell stories, let's try, and let's sing. The activities in it are packaged oriented towards social skills and associated with corn (Roisyatul, 2022). According to Iktiar (2018) states that the purpose of making the module is as follows: (1) to clarify and facilitate the presentation of messages so that they are not too verbal. (2) overcoming the limitations of time, space, and sensory power of both students and teachers. Interesting modules will increase students' enthusiasm for learning.

Science learning in elementary schools can be developed as an alternative for teachers to take advantage of local potential as a source of learning to raise awareness of the surrounding environment. The learning strategy for developing local wisdom is by utilizing the environmental and cultural potential of the community to manage natural resources as a source of learning (Karyadi, et al, 2016). Through strong social skills, one can develop cultural empathy which enables him/her to understand the perspectives and values attached to the importance of maize in the lives of local people. Strong social skills can also help one person have good and mutually beneficial relationships with local people who have local

knowledge about maize. This can create opportunities to work together on projects involving maize, for example, sustainable agriculture programs or the development of products derived from corn.

Corn is included in the cereal group, corn is also one of the world's food ingredients which can be said to be important besides wheat and rice. Corn is consumed by some of the people of Gorontalo, NTT, and several areas in East

Java (Soegiharto, 2011). In East Java, corn production contributed significantly. In 2012-2016 the corn harvested area in East Java was 30.73% of the national corn harvested area. This corn production is directed to dry land, one of which is in Bangkalan Madura Regency, to be precise in the Arosbaya, Burneh, Socah, Tragah, and Bangkalan Districts. Corn is a food product that is quite strategic after rice (Alizah & Rum, 2020). There is a table containing harvested area, production, and corn productivity in Bangkalan district in 2018.

**Table 1 Harvested Area, Corn Production and Productivity in the Bangkalan Madura Region in 2018**

No.	Kecamatan	Luas Panen (Ha)	Produksi (Ton)	Produktivitas (Ku/Ha)
1.	Arosbaya	1.092.00	23.903.88	218.90
2.	Burneh	3.643.00	86.521.25	237.50
3.	Socah	2.142.00	44.873.70	223.50
4.	Tragah	1.995.00	46.882.50	235.00
5.	Bangkalan	402.00	8.502.30	211.50

Sumber (Alizah & Rum, 2020)

It can be concluded from these data that in Madura, Bangkalan district, corn is the main staple after rice as a source of carbohydrates, and in Bangkalan district, it is also one of the largest corn producers in East Java.

Social skills are a form of communication, collaboration, participation and adaptation (sympathy, empathy and problem solving and discipline in accordance with the prevailing values and ethics) (Desi,

Rahayu, & Sholihin, 2014). Social skills can be communicated effectively this ability to convey ideas, feelings and opinions, clearly and with active and responsive listeners, empathy in social skills is the ability to understand and feel the feelings and perspectives of others, so that they can respond, the ability to resolving conflicts, namely to overcome differences of opinion and conflict by achieving peace. Social skills used in everyday life in science learning also require social skills. In the science learning process, students may have different views or understandings. Good social skills can help students deal with differences of opinion or conflict in a constructive way. This allows them to find the best solutions and achieve a deeper understanding of the subject matter. In science projects or experiments, social skills such as working together, dividing tasks, and appreciating the contribution of each team member are indispensable. Effective collaboration will improve the quality of group work and produce better results.

Teaching materials are various types of material or tools used by educators or teachers to convey information, knowledge, and skills to students or

students in the learning process. Teaching materials play an important role in the learning process because the existence of teaching materials will help make it more effective, efficient, and attractive to students. One type of teaching material is a learning module. Learning modules are modules that can be developed to discuss an in-depth and complete learning topic, and are equipped with assignments and exercises to test student understanding. According to Zulhaini (2016), modules are teaching materials made by educators to make it easier for students to study material independently (Naujah & et al., 2020).

In line with the second study, this study used a mixed methods approach (qualitative and quantitative). In Sugiyono's view, mixed methods research is a technique that combines qualitative and quantitative approaches to be used in a research project in order to produce more thorough, valid and objective data. The instruments used in this research were questionnaires and interviews. The sample used was fifth grade students. This research study aims to compare the use of printed modules and electronic modules, when looking at indicators of socially caring character behavior. By using the electronic

module, the analysis carried out by the researcher yielded 23.34% (7 out of 27 students) included in the very good category, in the good category the results were 33.33% (11 out of 27 students), 23.33% (5 out of 27 students) in the fair category, 13.33% (2 out of 27 students) were in the bad category and 6.67% (2 out of 27 students) were in the very bad category (Asrial & et al. 2021). When viewed from these data, the use of e-modules in indicators of mutual cooperation is included in the good category. E-module is a form of learning teaching material media that is presented independently and systematically arranged and presented electronically. According to Sugihartini & Jayanta (2017) argues that the electronic module is derived from the development of printed modules in digital form. So the researchers came to the conclusion that from the two teaching materials between print and e-modules it can be seen from the indicators of the social care character. In this study the e-module can be said to get a good category while the print module gets a pretty good category in terms of social care character indicators. These two types of learning modules have differences that are strengthened using the t test that has been

carried out, where the sig obtained is smaller than 0.05, so there is a difference between the two.

Agree with previous research conducted by Akhyar, et al, 2017; Darvina & Tiffani, 2019; Marlia, Saripudin & Kasmansyah, 2021) by implementing e-modules to prove students' social care character. This study says that e-modules are considered more practical and efficient if you have to use learning books or themes. Nurhidayati, Purno & Widiyaningtyas revealed that the use of e-modules was very effective in increasing students' learning motivation, besides that it was also effective in increasing student learning outcomes, as well as critical thinking skills.

## CONCLUSION

Based on the analytical studies that have been carried out by researchers, it can be concluded that the use of e-modules is said to be more effective, efficient and practical if you have to use print modules with indicators of social care. These two types of learning modules have differences that are strengthened using the t test that has been carried out, where the sig obtained is smaller than 0.05, so there is a difference between the two. The use of e-modules by integrating social skills with local corn wisdom in elementary science



learning can maintain traditional knowledge and cultural empathy by understanding the perspectives and values attached to the importance of corn in the lives of people in the surrounding environment. One of the activities in the e-module is that students are invited to read water cycle material and watch an explanatory video, then students follow the instructions in making a water cycle scheme associated with corn plants.

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