Elaboration of learning cycle 5E model and PJBL based on creative products and fun entrepreneurship through shutterstock application

Yudha Moningka[1], Nani Aprilia[2], Bekti Isnaeni[3]
[1]SMK Negeri 3 Penajem Paser Utara
[2]Ahmad Dahlan University
[3]Yogyakarta State University

Article Info

ABSTRACT

PKK subject is a lesson about ethics, values, skills and attitudes in facing the challenges of life to obtain opportunities in various risks faced. The implementation of "Elaboration of Learning Cycle 5E Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" as an effort to guide the learning process in accordance with the times of students to find business opportunities through mobile phones in the era of globalisation and industrial revolution 4.0. This descriptive research conducted at SMK Negeri 3 Penajem Paser Utara. Research subjects were students of Livestock Agribusiness Class XI Phase F Even Semester, 2022/2023 academic year. The object research is learning by using the 5E model based on creative product projects and fun entrepreneurship. Data collection techniques through documentation and observation. Data analysis technique is descriptive analysis. The findings showed that the project contributed to improving students' understanding and practice of entrepreneurial values.

Corresponding Author:

Nani Aprilia,
Ahmad Dahlan University
Email: nani.aprilia@pbio.uad.ac.id

Introduction

Education is an effort to shape the character of students so that they can differentiate between right and wrong, so that their lives in society will be meaningful and function optimally. According to Dianawati (2022) education is an effort to develop student potential by facilitating and encouraging student learning activities. In line with Diana, education according to (Sujana 2019). is a continuous and never-ending process (never ending proces), so that it can produce sustainable quality, which is aimed at realizing the human figure of the future, and is rooted in the nation's cultural values and Pancasila. Education must lead to the goals of education itself so that these goals can be achieved to become better. The aim of education is to create human resources of quality and character so that they have a broad view of the future to achieve the desired goals and are able to adapt quickly and precisely to the environment (Mitasari and Rusdarti 2018).

Schools as formal training and development institutions have two important things which include: 1) Schools are used to prepare professional workers in certain fields. 2) Schools are used as a tool to motivate workers to take responsibility for their careers and positions (Sujana 2019). Therefore, in practice, teachers in schools also have considerations in choosing the learning model that will be used during the learning process. Determining

the learning model is greatly influenced by the Basic Competencies (KD) or Learning Achievements (CP) in the independent curriculum, the objectives to be achieved in teaching, the nature of the material to be taught, and the level of students' abilities. Apart from that, each learning model has stages (syntax) that students can carry out with teacher guidance (Mitasari and Rusdarti 2018).

One of the learning models is project-based learning (PjBL). According to Anggraini and Wulandari (2021) the PjBL learning model is often referred to as a project work learning model which aims to facilitate students in the process of understanding and absorbing the theory given and fostering students' skills in critical thinking. So that students are able to think critically and find out solutions to problems given by the teacher. Learning using PjBL is said to be effective if the model can make students learn to be more active and student learning outcomes have increased (Wiranto, Selegi, and Sukardi 2021). The PjBL learning model is a learning model that involves students in solving problems, tasks, and provides opportunities for students to work autonomously or self-regulate, construct their own learning, and can produce a product of their own work (Hadi, Nurbayani, and Iranti 2021).

According to Widodo and Rahayu (2018) quality human resources are demonstrated by having an attitudeecopreneurship namely having creativity in viewing and exploiting opportunities to explore and manage environmental and economic potential optimally.One of the subjects that plays an important role in realizing educational goals is the subject of Creative Products and Entrepreneurship (PKK). PKK subjects are lessons about ethics and values (value), ability (ability), and behavior (attitude) in facing life's challenges to obtain opportunities in the various risks faced. The development of creative products and entrepreneurship in the realm of education is not only developed to produce intellectually skilled but inspiring-pragmatic people. Therefore, the development of creative and entrepreneurial products at vocational schools has been implemented with various forms of production and business-based learning at SMK Negeri 3 Penajem Paser Utara.

Based on the results of researchers' observations at SMK Negeri 3 Penajem Paser Utara, students were invited to engage in cheap and practical online entrepreneurship throughcell phoneby producing products in the form of photos of agricultural-themed objects and marketing these products through applicationsshutterstock. This is based on the demands of 21st century learning in which students are asked to develop creative and innovative skills. This is in line with research conducted by Rahayu, Iskandar, and Abidin (2022) that one of the demands of 21st century learning is to integrate technology as a learning medium to develop learning skills. The characteristics of learning in the 21st century are: Thinking critically, having the ability and skills to solve problems and communication, being creative, collaborative and innovative, having digital literacy skills, new media and ICT, and taking flexible and adaptive initiative. The learning system in the 21st century is centered on students (student-centered learning) (Mardhiyah et al. 2021; Rahayu, Iskandar, and Abidin 2022).

One of the applications used in selling object photos isshutterstock (Ferdiansyah and Alkis 2020). According to Hasibuan et al. (2023) is an application that can be used to sell various kinds of files including photo, vector, video files and can also be used to buy various types of licenses according to needs. Microstock websites such asShutterstock.com it contains a description title and search keywords that are adapted to image searches with several tools to help search for keywords to match the desired assets (Kurniawan and Romzi 2022).

Therefore, researchers are interested in conducting research "Elaboration of the 5E and PjBL Learning Cycle Model based on creative products and fun entrepreneurship through shutterstock application". This research aims to determine the implementation and results of the Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application

Method

This research is included in the type of descriptive research. According to Anggara and Samsudin (2023) in descriptive research there is no treatment, manipulation or change in the variables studied, but only describes a condition as it is. The only treatment provided is the research itself. The research was carried out in State Vocational School 3 Penajem Paser Utara. The subjects of this research are students in class XI Agribusiness Livestock Phase F Even Semester 2022/2023 academic year. The object of this research is learning using the 5E model based on creative product projects and fun entrepreneurship. Data collection techniques use documentation and observation. The data analysis technique in this research is descriptive analysis.

Results and Discussions

Implementation "Elaboration of the 5E Learning Cycle Model and PjBL Based on Creative Products and Fun Entrepreneurship Through Shutterstock Application"

In 2021, SMK Negeri 3 Penajem Paser Utara received a grant as a Vocational School Center of Excellence (SMK PK) and continued until 2023. One of the programs implementing this grant is for SMPK PK to

implement an independent curriculum through the implementation of "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" as an effort to guide the learning process according to the development of students to take advantage of business opportunities cell phonein the era of globalization and industrial revolution 4.0. The project-based learning model is student-centered learning (student centered learning). The teacher's role in Project Based Learning (PjBL) is what differentiates traditional learning from constructivist learning (Rehani and Mustofa 2023).

Implementation "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" carried out in phase F of the Creative Products and Entrepreneurship subject in the Entrepreneurship element. The learning model used isProject Based Learning (PjBL) with a 5E learning cycle consisting of 5 stages, namely: 1) Generating interest (engagement), 2) Exploration (exploration), 3) Explanation (explanation), 4) Expansion (elaboration/extention), 5) Evaluation (evaluation) coupled with the reflection of the star of goodness. An overview of the implementation of the program can be seen in Figure 1.
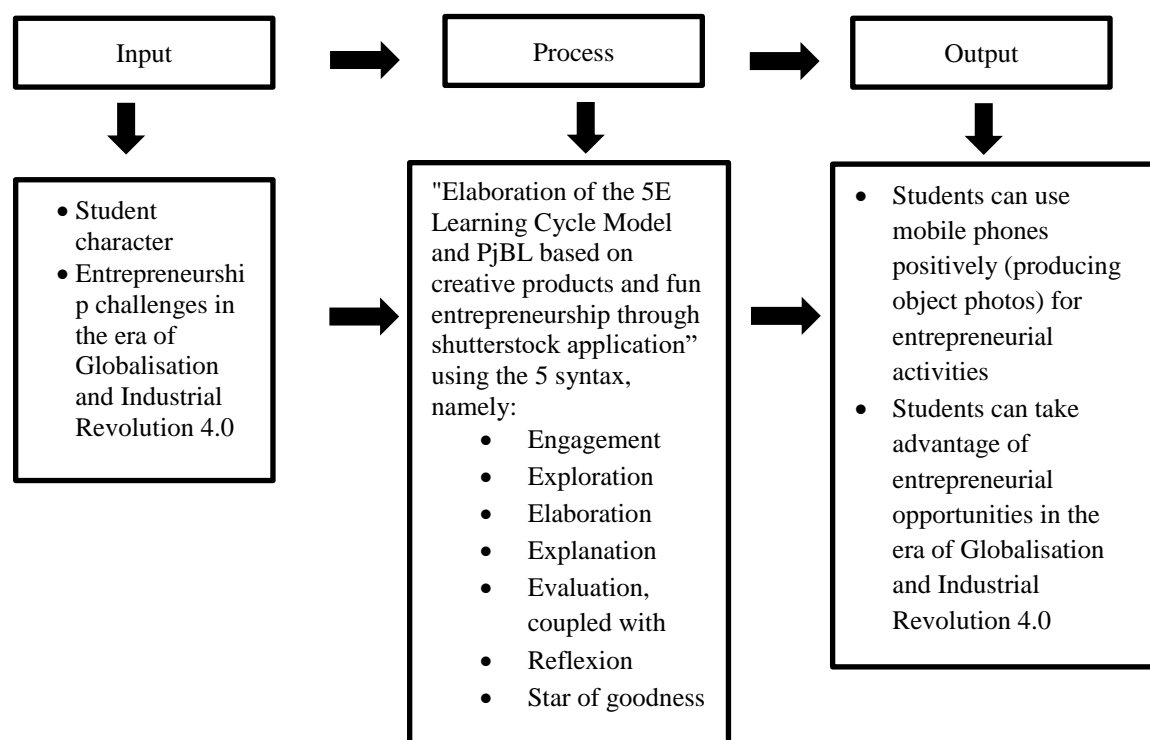

Figure 1. Implementation Flow Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship
(resource: personal documentation, 2024)

The stages of implementing the program are preparation, implementation, and producing output according to learning outcomes. The following are these stages.

Input Stage. At this stage, what is done is to preparetools for PjBL learning, because according to its characteristics, this project is implemented directly in the school and community environment. This project aims to explore and develop the potential of students so that they understand the scope and characteristics of the resources they have and are able to utilize them optimally in looking at business opportunities and are able to carry out entrepreneurial practices in accordance with their expertise program so that they can trigger the growth of the Pancasila Student Profile character in students.

After preparing tools, continued by analyzing the scope of the Creative Products and Entrepreneurship (PKK) Entrepreneurship element and adjusting it to the competency needs that students must have in preparation for entering the world of work. According to the researcher, the scope of this subject is general, so the researcher narrowed it down more specifically by taking the PjBL sub-theme, namely the production of

photographs of agricultural objects. Based on this, the researcher prepared a project scope plan and time allocation as follows.

Table 1. Time Allocation Analysis

No	Scope	Time Allocation
1	Build positive relationships(Engagement and non-cognitive diagnostic assessments	1
2	Equip yourself/strengthen your competencies	2
3	Explore local potential	1
4	Creativity and proactivity	4
5	Self-actualization	4
6	Effective communication skills	4
7	Personal branding (prospective entrepreneur)	1
8	Reflection and star of goodness	1
	Total	**15 JP**

Process Stage. At this stage, it includes learning activities in accordance with those that have been implemented according to the program based on scope and time allocation. Explore the material directly and by giving timing and students provide reflections ontimingwhich are given. Students collect portfolios every week according to the learning activities provided according to the scope of what will be taught that week.

The first scope is "Building positive relationships (Engagement and non-cognitive diagnostic assessment" is carried out by playing the Halo-halo Bandung clapping game and distributing assessment sheets. Students are invited to be directly involved in identifying themselves by playing games and filling in the list of assessment questions provided. Portfolio bills are collected directly by the teacher, and the teacher maps the students' abilities according to the assessment answers.

The second scope is "Equipping yourself/strengthening your competencies". In this scope, students receive competency strengthening by taking an inventory of competency needs to support them when they become students entrepreneur. Strengthening the competencies given to students includes object photo material, photo editing, and introduction to shutterstock application and how to sell photos through the application. The third scope is "Exploration of local potential". In this scope, students are expected to be able to see business opportunities based on local potential that exist in North Penajam Paser Regency, especially in the agricultural sector.

The fourth scope is "Creativity and proactiveness". In this scope, this is done by means of individual assignments andbuddy system. Students are given a project to practice photography taking photos of objects with an agricultural theme. Furthermore, students are also given the opportunity to carry out basic editing on photos of objects that have been taken. Students who have above average abilities in this material are welcome to become buddy his friend who is still having problems understanding the material.

The fifth scope is "Self-actualization". Self-actualization is the peak of a person's maturity and maturity. In this scope, students are given learning activities to analyze their own strengths and weaknesses. Students are invited to know themselves so they are able to accept their weaknesses and strengths and the weaknesses and strengths of others. Apart from that, self-actualization will make students improve their short comings based on notes or feedback given by teachers or peers.

The sixth scope is "Effective communication skills". In this scope, students are given space to present their work and defend arguments in activities feedback work given by teachers or friends. Students are also given the opportunity to tell the philosophical meaning of the photos of objects they produce. Apart from that, it also tells the philosophical meaning of basic editing, the obstacles found and the impressions gained from entrepreneurial activities in the shutterstock application.

The seventh scope is "Personal branding (prospectiveentrepreneur)". In this scope students are givenchallenge to make a video of the business journey of producing and selling photos of objects carried out so far. Then upload the video to their respective social media either atfacebook or on Instagram and add the hashtag #PKKPakYudha.

The implementation process consists ofof 5 stages, namely: 1) Generating interest (engagement), 2) Exploration (exploration), 3) Explanation (explanation), 4) Expansion (elaboration/extention), 5) Evaluation (evaluation) plus the reflection of the star of goodness.

Generation of interest (engagement). At this stage students are invited to be directly involved in new concepts, or new projects that will be implemented by students. The teacher invites students to play clapping Halo-halo Bandung outside the classroom. After the playing process is complete, students are given motivational questions and triggers using the SEL method (Social Emotional Learning) through simple questions such as: What do you see? What do you feel after playing Tap Halo-Halo Bandung? What do you think after playing Tap Halo-Halo Bandung? And what do you do after playing clap Halo-halo Bandung? After the game, students are given a non-cognitive diagnostic assessment sheet and students answer on the sheet. The aim of providing this assessment sheet is to measure the knowledge and understanding as well as supporting factors that students have before the learning process takes place.

Exploration. At this stage, the activities carried out by students are to investigate the resource capabilities of both cellphones and other devices, the phenomenon of social problems that occur in the community around where they live in the agricultural sector which is used to carry out this project assignment. Other activities carried out are identifying problems that occur, collecting supporting data, and designing solutions to the problems found.

Explanation. At this stage students are invited to understand the concept, process skill and behavior. The activities carried out are in the form of discussions to analyze data or information that has been previously collected with the teacher. The teacher provides scientific definitions by guiding the inquiry process to students. Understanding the project concept and solutions that have been designed along with their scientific basis is the result of the stages explanation.

Expansion (elaboration/extention). At this stage there is the core of project implementation in the field. Each student is given time to carry out a project, the work stage begins with downloading the applicationshutterstock on each cellphone, then register as a contributor and study the provisions or policies issued byshutterstock that must be adhered to, taking photos of objects with an agricultural theme, then doing basic editing on the photos of the objects that have been taken and the final stage is uploading photos of the objects to the shutterstock application. The elaboration stage also allows students to have discussions with the teacher when they experience problems in the field. Students are also expected to make documentation of the entire series of stages of this elaboration activity.

Evaluation (evaluation) plus the reflection of the star of goodness. At this stage, the teacher finds out the quality and quantity of achieved understanding of the topic or project that has been implemented. Students answer questions orally and in writing given by the teacher. The final stage of this activity is reflection as part of the evaluation of the project that has been implemented and the awarding of goodness stars to all students who have completed this project to completion.

Output Step. At this stage, students can use cell phonepositively (producing photos of objects) for entrepreneurial activities, and can take advantage of entrepreneurial opportunities in the era of Globalization and Industrial Revolution 4.0.

Implementation Impact "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application"

Implementation of the project"Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" has the following impact.

For students. The character of caring is instilled in students, namely how to maintain good relationships with other people, such as paying attention to other people, being compassionate, helping each other, and taking the initiative in dealing with environmental problems that they see in the agricultural sector. Increase students' sense of empathy, namely social responsiveness, such as being willing to share and helping people in need. They are moved to solve problems around the community in the agricultural sector and understand other people's feelings. Instilling good character in students to take advantage ofcell phoneas a medium for entrepreneurship and can usecell phonefor other positive things. Students are able to read and take advantage of the vast business opportunities open in the era of globalization and industrial revolution 4.0.

For teachers. Provide space and time for students to develop competence and strengthen character. Teachers are able to plan the project learning process with a clear final assignment. Teachers are able to develop competence as educators who are open to collaborating with educators in other subjects.

For schools. The existence of the PjBL project can support the production of prospective graduates entrepreneur. Making the educational unit an ecosystem that is open to community participation and the school as a learning organization that contributes to the environment and surrounding community. The school is also

in the process of becoming a school that has a culture and habits of providing space for students and teachers to continue to innovate and work.

For society. Helping to improve the economic level of local farmers around SMK Negeri 3 Penajam Paser Utara.Raising local potential or local agricultural wisdom in North Penajam Paser Regency.

Supporting and Inhibiting Factors for Implementation "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application"

According to research conducted by Gusi (2019), the supporting factors for PjBL learning are that students are more enthusiastic and active in carrying out the project, while the inhibiting factor is that there are still students who are less active, this is because students still seem shy or lack confidence. Meanwhile, according to Hadi et al. (2021) supporting factors include teacher readiness in preparing for learning and students' enthusiasm in participating in learning and supporting school facilities. The inhibiting factors of PjBL are the lack of teacher ability to manage technology and require a lot of time to prepare for learning. In carrying out the implementation of the program "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" There are supporting and inhibiting factors, namely as follows.

Supporting Factors. Good collaboration between educators and students who really support the project. The enthusiasm that exists within researchers to take part in providing a positive impact on students and real work for society. Support from the school so that the project can be implemented optimally.

Inhibiting Factors. There are students who compare with other classes who do not carry out projects. This is because the implementation system is independent of the teachers of each class. The pessimistic attitude of colleagues when project implementation is considered to be out of the habit of organizing learning in the school area.

Implementation Follow-up Plan "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application"

After carrying outprogram "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" Researchers have several alternative developments that will be carried out, including.

Sharpen the implementation design of the program "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" so that it becomes an alternative entrepreneurial project theme that can be implemented in a larger scope.

Socialize to the school community and share program implementation practices "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" especially to teachers who teach Creative Entrepreneurship Products subjects in Skills Competencies or other Vocational Schools and invite teacher collaboration so that it can be implemented by other educational units or schools.

Conclusions

"Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" can be implemented and help increase understanding and practice of entrepreneurial values among students, so that it can provide students with an idea that by using cell phone. Now you can do entrepreneurship on an international scale.

Steps in the project "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" includes preparations such as preparing preparation stool for learning, and compiling sub-themes. The next step is the implementation or process stage by providing learning experiences in the form of learning activities in each scope of based material evidence and the final step is output, namely creating candidates entrepreneur for students of SMK Negeri 3 Penajem Paser Utara.

Factors that support project implementation "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" is good collaboration between educators as facilitators and students as well as support from the school.

Things that hinder project implementation "Elaboration of the 5E Learning Cycle Model and PjBL based on creative products and fun entrepreneurship through shutterstock application" is that it is not implemented in every class and there is a sense of pessimism from fellow educators regarding the implementation of the project.

The follow-up plan for this project is to perfect the learning design and disseminate it to various parties so that it becomes a reference for similar projects.

References

Anggara, Meila, and Asep Samsudin. 2023. "Penerapan Model Pembelajaran Project Based Learning Untuk Mengetahui Gambaran Pemahaman Konsep Penjumlahan Siswa Kelas 1 Sekolah Dasar." *Sebelas April Elementary Education (SAEE)* 2(1):62–71.

Anggraini, Putri Dewi, and Siti Sri Wulandari. 2021. "Analisis Penggunaan Model Pembelajaran Project Based Learning Dalam Peningkatan Keaktifan Siswa." *Jurnal Pendidikan Administrasi Perkantoran (JPAP)* 9(2):292–99. doi: 10.26740/jpap.v9n2.p292-299.

Dianawati, Eko Puji. 2022. *Project Based Learning (PjBL): Solusi Ampuh Pembelajaran Masa Kini*. Lombok Tengah: Pusat Pengembangan Pendidikan dan Penelitian Indonesia.

Ferdiansyah, Pramudhita, and Citra Desy Aisyah Alkis. 2020. "Peningkatan Kompetensi Multimedia Bidang Fotografi Melalui Workshop Photopreneur." *Muria Jurnal Layanan Masyarakat* 2(1):9–18. doi: 10.24176/mjlm.v2i1.4204.

Gusi, Yoakim Yordianus. 2019. "Pengaruh Project Based Learning Tehadap Motivasi Belajar Peserta Didik Pada Mata Pelajaran PKn Di SMP." *Jurnal Rontal Keilmuan PKn* 5(1):10–16.

Hadi, Saipul, Etty Nurbayani, and Riska Iranti. 2021. "Penerapan Model Pembelajaran Problem Based Learning Pada Mata Pelajaran SBdp (Materi Karya Seni Rupa Kelas III Di SDIT Ma'arif Sepaku Penajam Paser Utara Pada Masa Pandemi Covid-19)." *Borneo Journal of Islamic Education* 1(1):259–68.

Hasibuan, Ade Zulkarnain, Munjiat Setiani Asih, Siti Sundari, Edrian Hadinata, and Khairunnisa Khairunnisa. 2023. "Pelatihan Dasar Shutterstock Sebagai Media Penyedia Konten Visual Bagi Siswa/i SMK 1 Pantai Labu." *Jurnal Pengabdian Masyarakat (JAPAMAS)* 2(2):205–13.

Kurniawan, Budi, and M. Romzi. 2022. "Pelatihan Desain Logo Dan Vector Sebagai Peluang Wirausaha Mahasiswa Di Dalam Industri Kreatif." *Indonesian Community Service and Empowerment Journal (IComSE)* 3(2):287–92. doi: 10.34010/icomse.v3i2.7582.

Mardhiyah, Rifa Hanifa, Sekar Nurul Fajriyah Aldriani, Febyana Chitta, and Muhamad Rizal Zulfikar. 2021. "Pentingnya Keterampilan Belajar Di Abad 21 Sebagai Tuntutan Dalam Pnegembangan Sumber Daya Manusia." *Lectura: Jurnal Pendidikan* 12(1):29–40.

Mitasari, Lilis, and Rusdarti Rusdarti. 2018. "Model Pembelajaran Production Based Training (PBT) Pada Pembelajaran Prakarya Dan Kewirausahaan." *EEAJ: Economic Education Analysis Journal* 7(3):992–1009. doi: 10.15294/eeaj.v7i3.28335.

Rahayu, Restu, Sofyan Iskandar, and Yunus Abidin. 2022. "Inovasi Pembelajaran Abad 21 Dan Penerapannya Di Indonesia." *Jurnal Basicedu* 6(2):2099–2104.

Rehani, Annisa, and Triono Ali Mustofa. 2023. "Implementasi Project Based Learning Dalam Meningkatkan Pola Pikir Kritis Siswa Di SMK Negeri 1 Surakarta." *Didaktika: Jurnal Kependidikan* 12(4):487–96.

Sujana, I. Wayan Cong. 2019. "Fungsi Dan Tujuan Pendidikan Indonesia." *Adi Widya: Jurnal Pendidikan Dasar* 4(1):29–39. doi: 10.25078/aw.v4i1.927.

Widodo, Sigit, and Agus Rahayu. 2018. "Pengembangan Sikap Ecopreneurship Peserta Didik Dalam Pembelajaran Ips Melalui Project-Based Learning." *SOSIO DIDAKTIKA: Social Science Education Journal* 5(2):1–12.

Wiranto, Ade, Susanti Faipri Selegi, and Sukardi Sukardi. 2021. "Efektivitas Model Creative Problem Solving Dan Project Based Learning Terhadap Hasil Belajar IPS." *Jurnal Swarnabhumi* 6(1):2548–5563.