

## **GRADE V STUDENTS' CREATIVITY: MAKING SIMPLE DRINK PRODUCTS FROM ALOE VERA AT MIS HANDAYANI PONTIANAK**

**Afrilya Herianty<sup>1</sup>, Kristia Setyaningsih<sup>2</sup>, Prof. Dr. Achmad Buchori, M.Pd<sup>3</sup>**

<sup>1,2</sup>Universitas PGRI Semarang,

<sup>3</sup>Universitas PGRI Semarang

[1afrilyaherianty5@gmail.com](mailto:1afrilyaherianty5@gmail.com)

### **ABSTRACT**

This research examines the development of creativity in fifth-grade students at MIS Handayani Pontianak through a project-based learning approach focused on making aloe vera beverage products. The integration of edupreneurship education combined with entrepreneurial principles aims to cultivate essential skills such as creativity, independence, and critical thinking. Using a qualitative case study design, data were gathered through observation, interviews, and documentation to capture the stages of the learning process: planning, production, promotion, and evaluation. In the planning stage, students brainstormed and budgeted for unique aloe vera drink ideas, learning to calculate production costs and manage resources. During production, students gained hands-on experience in preparing aloe vera and exploring flavor variations, enhancing both their practical skills and willingness to experiment.

The promotion stage helped students develop communication and branding skills as they designed logos and promotional materials, while the evaluation stage encouraged self-reflection on product quality, process effectiveness, and improvement opportunities. These activities reinforced basic economic concepts, such as cost estimation, pricing, and profit calculation, as practiced during Market Day. The project demonstrated that project-based edupreneurship activities improve students' creativity, problem-solving, and collaboration abilities while fostering an entrepreneurial mindset. This study recommends integrating similar programs into school curricula, leveraging local resources for sustainable product ideas, and providing entrepreneurship training for teachers to further support students. Involving parents and the community can enhance learning outcomes and provide students with a platform to showcase their work, helping to instill a foundational understanding of entrepreneurship from an early age.

**Keywords:** edupreneurship; creativity; project-based learning; aloe vera products, elementary education.

**INTRODUCTION**

Education in the modern era does not only emphasize academic abilities alone, but also develops non-academic skills such as creativity, independence, and entrepreneurship. Edupreneurship is an educational concept that combines learning with entrepreneurial principles. This is important to train students to become creative, independent individuals who are able to create business opportunities in the future.

Creativity is one of the important aspects in child development that needs to be developed early on, especially in formal education in schools. Creativity is not only related to art or expressive activities, but also includes students' ability to think innovatively, solve problems, and produce something new and useful. In the context of basic education, creativity is essential to prepare students to face the challenges of the modern world which is full of complexity and dynamics of change.

Creativity is one of the 21st century competencies that is important for individual development, especially in the current era of globalization and digitalization. According to Guilford (1950), creativity is the ability to produce new ideas that are unique, original, and have value. This ability is very important to develop from an early age, including in elementary school environments, where students are still in the process of forming mindsets and skills. In this case, education plays a major role in creating an environment that supports the development of student creativity through various activities that stimulate imagination and innovation.

In fifth grade students, their cognitive and motor development has begun to mature to be able to process more complex concepts. They begin to be able to think critically and creatively in processing information given by the teacher. Based on Jean Piaget's cognitive development theory, children at this age enter the concrete operational stage, where they begin to be able to think logically about concrete objects and situations, but do not yet fully understand abstract things. In this context, giving assignments to make simple products from natural ingredients such as aloe vera can be an effective way to stimulate their creativity.

Aloe vera is a plant that has many benefits, both for our health. This plant is also easy to find and process, making it suitable as a basic ingredient for creative projects for students. By inviting students to make simple products from aloe vera, such as drinks and jelly, they can learn to use natural resources wisely while developing their ability to innovate. Vygotsky's theory of the "Zone of Proximal Development" (ZPD) also supports this approach, where social interaction and assistance from teachers or peers can help students reach their maximum creative potential.

One of the plants that is often found and has high economic potential is aloe vera. This plant is not only easy to cultivate, but also has many benefits, such as being used in health products and souvenirs typical of West Kalimantan. Therefore, fifth grade students can be directed to learn to make simple products from aloe vera. This activity not only teaches creativity but also fosters an entrepreneurial spirit from an early age.

In addition, student creativity in making simple products is also in accordance with the concept of project-based learning (PBL), where students learn through direct experience in creating real products. Project-based learning allows students to integrate various subjects such as science, mathematics, art, and life skills in one fun and meaningful activity. Through this approach, students not only learn theory, but also apply it in real-life situations, so that they can improve critical thinking, problem-solving, and collaboration skills.

***Research Objectives***

The main objective of this study is to examine and analyze the development of creativity of fifth grade students through the activity of making simple beverage products

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from aloe vera using a project-based learning approach. This study aims to understand how project-based learning methods can stimulate students' creativity, both in terms of ideas, manufacturing processes, and innovations produced. In addition, this study also aims to evaluate the effectiveness of this approach in improving creative and collaborative thinking skills, as well as to identify challenges faced by students in the learning process.

The specific objectives of this study are as follows:

1. To measure the level of creativity of fifth grade students in making simple products from aloe vera.
2. To identify changes in students' creative thinking skills through project-based learning.
3. To analyze the effectiveness of project-based learning methods in improving students' creativity and practical skills.
4. To identify the challenges and obstacles faced by students during the process of making products from aloe vera.
5. To assess the impact of project activities on students' ability to work collaboratively and innovatively.
6. To develop recommendations or learning strategies that can be applied to improve students' creativity and skills in utilizing natural resources creatively and sustainably.

Through this study, it is hoped that more effective learning strategies can be formulated in fostering students' creativity and practical skills in utilizing natural resources, especially aloe vera, which are available in their environment.

## METHOD

This research method uses a qualitative approach with a case study design to explore and understand how project-based learning can improve the creativity of fifth grade students in making simple beverage products from aloe vera. This method was chosen because it allows researchers to dig deep into information about the process, experience, and changes in student creativity in a real context.

### 1. Participants

The subjects of the study were fifth-grade students at MIS HANDAYANI Pontianak, with the number of participants selected purposively. The class teacher and several students will be used as key informants to gain an in-depth perspective on the activities carried out and the results achieved.

### 2. Activities

Edupreneurship activities are divided into four main stages: Planning, Production, Promotion, and Evaluation. Each stage is carefully designed to hone students' creativity in making simple beverage products from aloe vera.

- **Planning:** students are invited to discuss and brainstorm about the idea of aloe vera beverage products, while designing a unique concept that differentiates their products. Students make a plan for the materials and capital needed, including calculating the estimated cost of production, packaging, and additional materials. They also compile the steps of the production process in sequence, from processing aloe vera to packaging, so that they have a clear guide in creating their products.
- **Production:** students began to put their plans into practice. They learned how to properly prepare aloe vera, from peeling, cleaning, to processing it into a safe and delicious drink. In this process, students were encouraged to experiment with additional natural flavors, such as lemon or honey, to make their products more

attractive. After the drinks were finished, students packaged their products with simple packaging and label designs, which gave a professional impression to their products.

- **Promotion:** Students learn how to introduce their products to others. They start by designing a logo or label for the product as part of simple branding. Then, students develop promotional strategies, such as creating posters, utilizing social media, or conducting promotions in the school environment. To hone their communication skills and self-confidence, students also do promotional simulations where they introduce and explain their products to friends and teachers.
- **Evaluation:** where students conduct product trials and ask for input from friends and teachers to find out the advantages and disadvantages of their products. They are then invited to reflect on the entire process, analyze the challenges faced, and think about opportunities for improvement in the future. Students prepare a simple report that includes planning, costs, production processes, and final results, as documentation and a form of accountability for the products they create. Through these four stages, students not only learn to make aloe vera drink products, but also develop entrepreneurial skills, planning, promotion, and reflection skills that will be useful in the future.

### 3. Data Collection

Data collection was conducted using three main techniques: observation, interviews, and documentation.

- **Observation:** Researchers will directly observe project-based learning activities involving students in making simple aloe vera beverage products. Observations are conducted to record activities, interactions, and creative processes that emerge during the activity.
- **Interviews:** Semi-structured interviews are conducted with teachers and students to gain an in-depth understanding of their experiences and perceptions of project-based learning. These interviews will include questions related to motivation, challenges faced, and their views on creativity.
- **Documentation:** Documentation in the form of student work, teacher notes, photos, and videos during the activity. The results of simple aloe vera beverage products and process notes will be used as material to evaluate aspects of student creativity and innovation.

### 4. Data Analysis

The collected data were analyzed using thematic analysis techniques, where data from observations, interviews, and documentation were coded and grouped based on main themes relevant to the research objectives. The analysis steps include: organizing data, reading data thoroughly, conducting initial coding, forming themes, and formulating research findings.

## RESULTS

The results of this study indicate that the implementation of project-based learning entrepreneurship activities in making simple aloe vera beverage products significantly increases the creativity and practical skills of fifth grade students. In the Planning stage, students demonstrated the ability to design unique product ideas and learn to prepare budgets and plan production processes. Students were able to think of innovative additions, such as the use of natural flavors to increase product appeal. Active involvement in planning and

developing product ideas shows that this learning is effective in stimulating students' creative thinking skills.

In the Production stage, students were enthusiastic in practicing their plans and skilled in following the production steps. They not only learned how to process aloe vera into drinks, but also mastered packaging skills that made their products look more professional. Students enjoyed the opportunity to experiment with flavors and additional ingredients, demonstrating creativity and courage in trying new things. This production experience provided a real opportunity for students to understand simple production processes and hone their fine motor skills.

During the Promotion stage, students showed improvements in communication skills and marketing strategies. They successfully designed a simple logo for their product and developed an effective promotional strategy, both through posters at school and social media. The promotional simulation helped students develop confidence in introducing products and speaking in public. The results of this promotion show that students have the potential to develop entrepreneurial skills with the right support.

In the Evaluation stage, students conducted a deep reflection on the products and processes they had gone through. They were able to identify the advantages and disadvantages of the beverage products they made and provide constructive input for improvement. Students also showed an increase in their reflection skills, where they were able to recognize the challenges faced and possible solutions to overcome these obstacles. The final report they compiled showed that students were not only able to document the process, but were also able to evaluate the results of their work in a constructive way.

Overall, this study shows that project-based learning entrepreneurship activities have a positive impact on increasing students' creativity, practical skills, and entrepreneurial skills. This method has also been proven to provide real experience in creating and marketing products, which ultimately encourages students to think critically, innovate, and collaborate with their friends.

### ***Understanding Basic Economic Concepts***

Edupreneurship also introduces children to basic economic principles, such as production costs, selling prices, and profits. In this study, children practice from making to selling to consumers, namely peers and the school environment, which is carried out during Market Day activities.

Table 1. Production Cost Estimation

Bahan/Biaya	Jumlah	Harga
Aloe Vera	Free	Rp 0
Sugar	500 Gram	Rp 10.000
Water	Free	Rp 0
Salt	Taste	Rp 0
Daun Pandan	Free	Rp 0
Syrup Marjan Melon Flavor	1 botol	Rp 22.000
Bottle Size 350 ml	10 botol	Rp 25.000
Gas	Estimation	Rp 10.000
Total Biaya Produksi		Rp 67.000

With a production cost of Rp 67.000, which includes the purchase of granulated sugar, green Marjan syrup or food coloring, packaging bottles, and estimated gas usage, you can produce 10 bottles of aloe vera drinks. Aloe vera syrup is sold for Rp 15.000, the total income obtained from the sale of all bottles reaches Rp 150.000. After deducting the total

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production costs, the estimated net profit obtained is Rp 83.000. This profit shows a fairly good profit potential, especially since the main ingredient, aloe vera, can be obtained for free, thus keeping production costs low and increasing profit margins.

## CONCLUSION

This study shows that the application of project-based learning in edupreneurship activities, especially in making simple beverage products from aloe vera, can improve creativity, practical skills, and entrepreneurial abilities of fifth grade students at MIS Handayani Pontianak. Through the stages of Planning, Production, Promotion, and Evaluation, students can develop unique product ideas, learn to plan budgets, and carry out the production process independently.

In the Planning and Production stages, students are able to think creatively in designing products and dare to experiment with the addition of natural flavors. In the Promotion stage, they show increased communication skills and confidence in introducing products. The Evaluation stage encourages students to reflect deeply on their work, including identifying the strengths and weaknesses of their products and providing constructive input for future improvements.

Overall, this edupreneurship activity provides real experience in understanding basic economic concepts, such as production costs, selling prices, and profits, which are useful in developing an entrepreneurial spirit from an early age. This project-based learning method has proven effective in encouraging students to think critically, innovatively, and collaboratively, while introducing the use of natural resources creatively and sustainably.

**Recommendations:** Based on the research findings, it is recommended that project-based edupreneurship programs be more deeply integrated into the school curriculum, so that students can practice basic business concepts in real contexts. Schools can also utilize other local materials as the basis for products, introducing creative and sustainable resource utilization. Additional skills training for teachers in entrepreneurship is also important to enrich the guidance given to students. In addition, the provision of simple facilities and equipment in schools will support the smooth running of production activities. Involving parents and the community can expand support and provide opportunities for students to promote their products in local activities. Each activity also needs to be evaluated periodically and documented as material for reflection and future development. Finally, as students' skills improve, schools can introduce more complex entrepreneurship concepts, such as digital marketing or more detailed business planning, so that students are better prepared to face future economic challenges.

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## REFERENCES

- Amabile, T. M. (1983). *The Social Psychology of Creativity*. New York: Springer-Verlag.
- Ariani, L. (2018). *Pengaruh Project-Based Learning terhadap Kreativitas Siswa Kelas V SD*. Tesis. Universitas Negeri Yogyakarta.
- Barkatsas, A., & Bertram, A. (2018). *Learning to Teach Mathematics Through Lesson Study and Open Approach*. Springer.
- Craft, A. (2005). *Creativity in Schools: Tensions and Dilemmas*. New York: Routledge.

## SCHOLA

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Available Online at <https://journal2.upgris.ac.id/index.php/schola/>

- Finke, R. A., Ward, T. B., & Smith, S. M. (1992). *Creative Cognition: Theory, Research, and Applications*. Cambridge, MA: MIT Press.
- Fitriani, I. (2021). *Pengembangan Kreativitas Melalui Kegiatan Membuat Produk dari Lidah Buaya pada Siswa Sekolah Dasar*. Tesis. Universitas Pendidikan Indonesia.
- Gardner, H. (1993). *Frames of Mind: The Theory of Multiple Intelligences*. New York: Basic Books.
- Guilford, J. P. (1967). *The Nature of Human Intelligence*. New York: McGraw-Hill.
- Hapsari, D. (2015). *Manfaat Tanaman Lidah Buaya dan Pengolahannya*. Yogyakarta: Penerbit Andi.
- Husna, N. (2019). *Efektivitas Pembelajaran Berbasis Proyek dalam Meningkatkan Kreativitas Siswa Sekolah Dasar*. Disertasi. Universitas Negeri Malang.
- Karwowski, M., & Kaufman, J. C. (2017). *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*. Academic Press.
- Lubart, T. I., & Sternberg, R. J. (1995). *An Investment Approach to Creativity: Theory and Data*. *Journal of Creative Behavior*, 29(1), 1-20.
- Munandar, U. (2009). *Pengembangan Kreativitas Anak Berbakat*. Jakarta: PT Rineka Cipta.
- Prasetya, E. (2020). *Laporan Penelitian Pengembangan Produk Berbasis Aloe Vera di Sekolah Dasar*. Laporan Penelitian. Universitas Negeri Surabaya.
- Thomas, J. W. (2000). *A Review of Research on Project-Based Learning*. Laporan Penelitian. Autodesk Foundation.
- Sunyoto, D. (2013). *Kreativitas dalam Edupreneurship*. Jakarta: Gramedia Pustaka Utama.
- Wahyuni, S. (2017). *Mengembangkan Jiwa Kewirausahaan di Sekolah*. Bandung: Alfabeta.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.