

A CIPP MODEL BASED EVALUATION OF ENTREPRENEURSHIP PROJECT BASED LEARNING FOR DEVELOPING STUDENTS ENTREPRENEURIAL CHARACTER: A CASE STUDY AT SMA NEGERI 3 SEMARANG

Anisa Nur Hidayah^{1✉}, Joko Widodo², Kusumantoro³

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¹ Master of Economics Education, Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia

^{2,3} Department of Economics Education, Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia

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Abstract

This study evaluates the implementation of entrepreneurship project-based learning in shaping students' entrepreneurial character using the Context, Input, Process, and Product (CIPP) model at SMA Negeri 3 Semarang. Employing a qualitative evaluation design, the research focuses on assessing the entrepreneurship project learning program through interviews, document analysis, and observation. Data validity was ensured through extended observation and triangulation of sources, methods, and time, and analyzed using data condensation, display, and conclusion drawing. Findings in the context aspect show: (1) learning objectives are in very good condition; (2) learning needs are good; and (3) the learning environment is very good. In the input aspect: (1) the teacher's role in guiding and facilitating students is good; (2) the teacher's role in fostering entrepreneurial character is good; (3) student participation is poor; (4) students' project-related skills are very good; (5) learning space availability is good; and (6) learning tools are in poor condition. The process aspect, related to project-based learning implementation, is generally good. In the product aspect: (1) student learning outcomes are good; and (2) the entrepreneurial character traits developed include creativity, responsibility, self-confidence, and innovation.

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INTRODUCTION

Education is a fundamental element in the development of a nation. The goal of education is not only to provide knowledge but also to shape attitudes and instill good moral values, integrity, responsibility, and empathy. Education plays a crucial role in the process of improving human resources (Huda & Kardoyo, 2021). In this era of globalization marked by rapid changes, the role of education becomes increasingly important in preparing students to face the growing complexity of global challenges (Muliadi & Nasri, 2023). Today, senior high schools have begun implementing entrepreneurship education, one of which is through entrepreneurship projects conducted at school. According to Sari et al. (2021), entrepreneurship education in senior high schools plays a role in shaping students' cognitive, affective, and psychomotor skills to become true entrepreneurs, thereby guiding them to consider entrepreneurship as a career choice. This is in line with Apriyati & Marom (2024), who state that entrepreneurship education plays a crucial role in shaping students who are capable of facing modern economic challenges, where entrepreneurship education not only provides students with technical knowledge but also develops their creative and innovative potential in the business world. Lv et al. (2021) also emphasizes that entrepreneurship education is a key driver in enhancing the development of entrepreneurial abilities and asserts that it can influence and improve entrepreneurial competencies.

Entrepreneurship project-based learning has become strategically significant due to the fact that education in Indonesia still largely focuses on theoretical instruction rather than skill-based learning. This has resulted in many secondary school graduates struggling to compete in the workforce because they lack skills relevant to the needs of the industrial world (Isma et al., 2023). Noviani et al. (2022) assert that senior secondary education plays an important role in equipping its graduates with creativity and life skills, as not all high school graduates continue to higher education. Unlike vocational high schools, which are directed from the beginning through specific majors such as Online Business and Marketing, general senior high school students are not initially oriented toward entrepreneurship. Another reason is that vocational school students participate in industrial work practice programs that simulate what they have learned, whereas senior high school students do not receive this experience, making entrepreneurship projects especially important for them. This is in line with Latifah et al. (2022), who state that the lack of managerial and technical skills among young entrepreneurs is suspected to be due to the fact that the majority of them are graduates of general senior high schools. Haq (2022) states that entrepreneurship project-based learning is capable of developing students' entrepreneurial characteristics and is highly suitable for modern learning, as it can enhance communication skills, critical thinking, creativity, and collaboration. Mulyani (2014) states that entrepreneurship project-based learning is more effective in improving entrepreneurial attitudes and character compared to other learning models. Natsir et al. (2023) argue that entrepreneurship projects are

highly relevant for integrating entrepreneurial values because project-based learning involves the application of complex practices.

Manuhutu (2023) asserts in his research that entrepreneurial character can be developed and reinforced through entrepreneurship projects implemented in schools. This is in line with Pandangwati et al. (2018), who state that entrepreneurship projects can improve students' entrepreneurial character and motivation, as these projects allow students to apply their ideas in practice. Sumanti & Giatman (2024) further emphasize that creative and entrepreneurial projects can train students to possess an entrepreneurial spirit, enabling them to eventually create their own job opportunities. Therefore, it can be concluded that entrepreneurship projects can enhance students' entrepreneurial character. This indicates that such projects serve as a platform for students to explore their business ideas and designs, while also fostering entrepreneurial traits within themselves. The entrepreneurship project carried out at SMA N 3 Semarang as an implementation of Workshop and Entrepreneurship learning is expected to be one of the solutions to produce entrepreneurs with superior character. Entrepreneurship project learning at SMA Negeri 3 has been implemented from the beginning of the Education Unit Level Curriculum until now the Merdeka Curriculum. The entrepreneurship project at SMA N 3 Semarang has produced many works that are able to compete in the national arena. In addition, the entrepreneurship project at SMA N 3 Semarang also provides direction and facilitates students in producing this work.

Based on interviews conducted by researchers at SMA Negeri 3 Semarang, it can be seen that there are three teachers who teach workshop and entrepreneurship subjects. Dewi et al. (2024) said that the busy teaching hours of teachers affect the effectiveness of teaching teachers in the classroom. It is also one of the obstacles that makes teachers must be able to manage the class well so that students easily accept the material provided. limited resources in terms of tentors to facilities that support the running of entrepreneurship projects are also an obstacle to the implementation of entrepreneurship projects. Another obstacle that often occurs is that students are less interested in workshop and entrepreneurship subjects because they think that this subject is not a compulsory subject. Whereas workshop and entrepreneurship lessons can indirectly help students to develop creative and innovative characters in students. The formation of entrepreneurial character in students is very important in preparing a resilient, independent, creative and innovative generation. Therefore, educational institutions need to focus on developing student character. Anisa & Mustofa (2021) and Ibidunni et al. (2021) define entrepreneurial character as the characteristics, traits, and personality of individuals in creating business ideas. Istinganah & Widiyanto (2020) mentioned some of the main characteristics of entrepreneurs such as self-confidence, responsibility, courage to take risks, future orientation, and interest in doing business. At the senior high school (SMA) level, these characters can be developed through learning workshop and entrepreneurship, especially through entrepreneurship projects as a form of hands-on practice.

The implementation of entrepreneurship projects requires evaluation in order to

identify obstacles and improve its effectiveness in shaping entrepreneurial character. Project-based learning is in line with constructivism theory that emphasizes learning experiences and collaboration between students in building knowledge (Pratami, 2024). In the context of entrepreneurial projects, students are required to design, produce and market their own products. This process encourages students to solve problems directly and apply what they have learned. Evaluation is needed so that schools can determine the effectiveness of the program and determine the right strategy to improve its implementation.

Evaluation of education programs has an important role in responding to public demands for the quality of education. Diana & Sari (2020) state that program evaluation aims to provide information to decision makers, while Diharja et al. (2023) emphasize evaluation as a research process to assess an object based on certain indicators. The CIPP (Context, Input, Process, Product) evaluation model developed by Stufflebeam in 1986 was used in this study because it is able to provide a comprehensive evaluation of the entire program cycle. Sanchez (2023) also mentioned that this model is effective in evaluating programs in various institutions, including educational institutions. Therefore, this study aims to evaluate the entrepreneurship project in shaping students' entrepreneurial character using the CIPP model at SMA Negeri 3 Semarang.

METHODS

This research uses a qualitative approach with a case study research design. Ardiansyah et al. (2020) added that qualitative research aims to understand phenomena in depth by interpreting and analyzing a phenomenon. According to Creswell (1999) the main objective in qualitative approach research is to understand, describe, develop and find central phenomena. This research is evaluative research with a case study at SMA Negeri 3 Semarang. Evaluative research is an evaluation design and stages in collecting the value and benefits of a process or practice in the field of education whose function is to explain a phenomenon under study (Rini et al. 2024). This research employs a case study design to explore in-depth the implementation of entrepreneurship project learning at SMA Negeri 3 Semarang. The case study was chosen because it is able to describe real conditions contextually and comprehensively. The implementation procedure includes three stages, namely: pre-fieldwork, which begins with problem identification, permit processing, preliminary observations, and determining the evaluation focus based on the CIPP model; field data collection, in the form of observations of project learning activities, in-depth interviews with school officials and the collection of documents such as lesson plans, teaching modules, project reports and activity photos; and the analysis and compilation of findings stage, where all data is reviewed, compared, and interpreted to produce evaluative conclusions and recommendations. This procedure ensures that the research process is systematic, in-depth, and able to capture the dynamics of the program as it occurs naturally without intervention.

The evaluation model used in this study is the CIPP (Context, Input, Process, Product) Evaluation model developed by Daniel Stufflebeam in 1968. The data sources used in this study include the Vice Principal for Academic Affairs, Workshop and Entrepreneurship subject teachers and students. Data collection techniques in the study were interviews, documentation studies and observations. Participant selection was conducted using purposive sampling, as subjects were chosen based on their direct involvement in the implementation of the entrepreneurship project program. Participants consisted of Craft and Entrepreneurship teachers, eleventh-grade students participating in the entrepreneurship project, and school officials such as the principal or curriculum representative responsible for program policy. Meanwhile, school documents and archives were used as supporting data sources in the form of project scores, learning tools, and activity documentation. The determination of the number of participants followed the principle of data saturation, which occurs when the information obtained no longer yields new findings. This mechanism allows the research to have a strong data foundation and can be replicated by other researchers with the same participant criteria.

Data validity techniques used include extended observation, triangulation of sources, techniques and time. Data analysis was conducted using the Miles and Huberman model, which includes three stages: data condensation, data presentation, and conclusion-verification. In the data condensation stage, researchers selected and compiled data from interviews, observations, and documentation, then coded them based on CIPP categories. The condensed data were then presented in narrative form, tables, and evaluation matrices to facilitate the researcher in understanding the relationships between patterns and findings. The final stage, drawing conclusions, was conducted by verifying the data through triangulation of sources, techniques, and time, ensuring data validity. This systematic analysis process resulted in a comprehensive understanding of the effectiveness of the entrepreneurship project program and recommendations for improving future implementation.

RESULT AND DISCUSSION

The results in this study include an evaluation of the context, input, process and product of entrepreneurship project learning in shaping entrepreneurial character at SMA Negeri 3 Semarang can be seen in table 1. The Results and Discussion section presents the findings of the research together in one integrated part. It should begin by clearly showing the results that directly address the research objectives, using tables, figures, or other visuals when necessary. Any visuals included must be easy to understand, properly labeled, and supported by concise and accurate descriptions.

Table 1. Evaluation Results of Context, Input, Process and Product of Entrepreneurship Project Learning at SMA Negeri 3 Semarang

Component	Aspects assessed	Result
Context	Entrepreneurship objectives learning	Very good
	Academic learning needs (teaching methods/media/materials)	Good
	Non-academic learning needs (learning environment)	Very good
Input	Teacher qualifications education	Very good
	The teacher's mentoring and student's role in facilitating	Good
	The role of teachers in shaping students' entrepreneurial character	Very good
	Student participation in learning	Not good
	Students' skills in entrepreneurship projects	Very good
	Learning facilities (place and tools)	Not good
Process	The suitability of the learning process with the project stages	Good
Product	learning outcomes	Very good
	Entrepreneurial that are formed characters	Very good

Source: Data processed, 2025

The table shows the overall evaluation results of entrepreneurship project learning at SMA Negeri 3 Semarang from the context aspect related to learning objectives, learning needs and learning environment. The result is teachers, students and vice principals have understood the learning objectives of entrepreneurship. Teachers use various learning methods such as lectures, questions and answers, discussions, problem-based learning and project-based learning, teachers also use learning media such as canva and padlet. The teaching materials used are complete both from books and other reference sources. The learning environment is very supportive of entrepreneurship project learning. The environment is safe, comfortable, clean and free from noise.

The input aspect relates to the role of teachers in guiding and facilitating students, the role of teachers in shaping students' entrepreneurial character, teachers' educational qualifications, the role of student participation in learning, students' skills in entrepreneurship projects and facilities and infrastructure. The result is Teachers' educational qualifications are in accordance with the subjects they teach and all teachers are S1 graduates and certified. Teacher role in mentoring teacher helps answer students' questions related to formulating project ideas; The teacher guides the preparation of the entrepreneurship project design; The teacher provides input and direction on each idea/work created by students; Teachers provide advice and facilitate in solving students' entrepreneurship project problems.

Participations student in class is not good because Many students were not active in asking questions or giving opinions during the lesson. Student skills is very good because

Students have been able to do all the assignments given by the teacher starting from observation tasks, discussions, business analysis to compiling the final report. The school does not provide a practice room and practice tools for entrepreneurship project learning. In process learning All stages of entrepreneurship project learning are implemented well and according to procedures. Product evaluation are Student learning outcomes are divided into two aspects, namely practical scores with an average of 83 and final report scores with an average of 95.

Context Evaluation

Entrepreneurial characters formed during the project include creativity, innovation, risk-taking and responsibility. The evaluation of the context aspect of entrepreneurship project learning at SMA Negeri 3 Semarang showed very good results. Fitri et al. (2024) stated that educational goals should be aligned with the needs of students, and in this study, it was found that the learning objectives of entrepreneurship at SMA Negeri 3 Semarang are focused on shaping entrepreneurial character and attitude as well as providing students with real entrepreneurial experience. This goal is in line with Permendikbudristek No. 12 of 2024, which emphasizes the importance of project-based learning and the development of business ideas relevant to society. Teachers have a good understanding of the learning objectives and flow, thus supporting effective communication in the educational process (Ginting, 2021). Observations show that the learning atmosphere is also supportive, characterized by positive interactions between students, an atmosphere free from distractions, and student enthusiasm in entrepreneurship learning. This is reinforced by Putu et al. (2024) who emphasized the importance of school culture in creating an inclusive and collaborative learning environment. The overall context results reflect the constructivism approach, where students as active subjects build their knowledge through experience and interaction with the environment. Therefore, the evaluation of the context, which includes learning objectives, learning needs, and learning environment, is categorized as very good and supports the formation of students' entrepreneurial character optimally.

Input Evaluation

The input evaluation in this study focuses on the planning, strategy and learning design of the entrepreneurship project, by examining the role of teachers, the role of students, teaching materials, and facilities and infrastructure. Workshop and entrepreneurship teachers at SMA Negeri 3 Semarang are considered to have excellent qualifications and competencies, as evidenced by their relevant educational backgrounds and certified employment status. Teachers not only teach the material, but are also effective in guiding projects, providing feedback, and fostering entrepreneurial characters such as confidence, honesty, creativity, and independence (Ginting et al., 2024; Rochiyanti & Mawardi, 2021; Ramadanti et al., 2022; Hidayat et al., 2023). This is supported by the use of various learning methods - such as question and answer, discussion, problem-based learning and projects - as well as interactive media such as

Canva and Padlet, which have proven effective in fostering students' entrepreneurial spirit (Faika et al., 2024; Rejekiningsih et al., 2021).

Process Evaluation

Evaluation of the entrepreneurship project learning process at SMA Negeri 3 Semarang shows that the stages of the activity have been running quite well and are able to shape the entrepreneurial character of students. The stage begins with an observation of the surrounding environment that aims to train sensitivity to business opportunities. Although there were minor obstacles such as students chatting during the observation, in general this stage went smoothly. The next stage is group discussion, where students are invited to work together to determine business ideas. The differences of opinion that arose were an indicator of students' critical thinking skills. Characters such as cooperation and responsibility began to appear at this stage. At the business planning stage, students create a Business Model Canvas to develop a structured business strategy. According to Utami & Rusdarti (2021), student creativity can be seen through the ability to create new applicable ideas. Tahara & Pujiati (2019) stated that this assignment trains students' cognitive and psychomotor aspects.

At the entrepreneurial practice stage, students carry out their business projects directly in class. This process develops characters such as discipline, cooperation, and a sense of responsibility. Khotimah & Emawati (2025) emphasized that entrepreneurial projects must go through the stages of planning, making, marketing to reporting. Santos et al. (2023) stated that the success of the project depends on students' active involvement and continuous motivation. Some obstacles were encountered, such as limited practice space, delays due to rental equipment, and students' negligence in bringing equipment. However, all of these processes became an important part of character building and entrepreneurial skills. Shiri et al. (2025) and Dharmanegara et al. (2022) emphasize the importance of hands-on experience in entrepreneurship education from an early age. This project is in line with the view of constructivism, where students build understanding through direct experience and reflection (Sulistiyan et al., 2023). In accordance with the principle of learning by doing, students not only learn theory, but also implement it in real life. Unfortunately, the limited frequency of exhibitions is a challenge, because exhibitions serve as an important means of reflection and interaction in students' self-development.

Product Evaluation

The product evaluation in this study includes three main aspects, namely student learning outcomes, products resulting from entrepreneurship projects, and entrepreneurial characters formed during the learning process. Based on observations, teachers assess entrepreneurship projects based on two main aspects, namely the value of the production process and the final report. The production process assessment includes three indicators: preparation stage, work process, and work results. Each of these indicators is assessed with criteria filled in by the teacher and used as a group score. In class XI-5, five groups

obtained an average production process score of 83.3 and a final report score of 95. These combined scores indicate that the quality of student learning outcomes through this project is in the excellent category. The entrepreneurial products produced by the students were very diverse and reflected creativity and innovation. An engineering product in the form of AI-Based Iris Recognition System for Disease Identification also showed proud achievements by winning a bronze medal at the international China Adolescent Science and Technology Contest 2024. Meanwhile, an aquaculture-themed project on the development of chicken feed made from Black Soldier Fly maggot and water hyacinth won a Gold Medal in the Global Youth Invention and Innovation Fair (GYIIF) 2025. These products show that students are not only able to create valuable goods but are also able to compete at the national and international levels.

From the various products produced, it can be concluded that students have internalized innovative and solution-oriented skills. Sihwadi et al. (2023) stated that learning that produces entrepreneurial products can foster students' entrepreneurial character. Hasanah & Hidayat (2024) also added that this kind of project supports the formation of students' independence and intelligence. Constructivism theory underpins this entrepreneurial project learning process. Knowledge and skills are formed through direct experience, social interaction and reflection of the challenges students face. In the entrepreneurial project process, students are challenged to design ideas, develop plans, produce goods, evaluate results and market them.

The entrepreneurial characters formed during the project include confident, independent, creative, innovative, and risk-taking attitudes. Likasari (2024) and Riza & Chisbiyah (2024) added that such projects improve students' communication, collaboration, interest in learning, and problem-solving skills. Furthermore, Akrima et al. (2025) emphasized that entrepreneurship projects build character traits such as responsibility, risk-taking, and independence. Thus, the product evaluation in the entrepreneurship project at SMA Negeri 3 Semarang showed excellent results and deserves to be further developed.

CONCLUSION

Based on the results of the entrepreneurship project evaluation research with the CIPP model at SMA Negeri 3 Semarang, it can be concluded that the implementation of the entrepreneurship project has gone well in all four evaluation components. In the context aspect, the understanding of teachers, vice principals, and students regarding entrepreneurship learning objectives is good, with academic and non-academic learning needs in good to excellent condition. In the input aspect, the role of teachers is considered very good in terms of qualifications, mentoring and student facilitation, although student participation in learning is still lacking and learning tools still need to be improved. The process aspect shows that the stages of project learning have been carried out completely and systematically. Meanwhile, in the product aspect, student learning outcomes were assessed as excellent with high average scores, the products produced were competitive up

to the international level, and the project proved to be able to shape entrepreneurial characters such as self-confidence, independence, and innovation.

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REFERENCES

- Akrima, N., Sofwan, M., & Budiono, H. (2025). Analisis pembentukan karakter kreatif siswa melalui kegiatan kewirausahaan di sekolah. *Pendas*, 10(2), 112–120. <https://doi.org/https://doi.org/10.23969/jp.v10i01.22350>
- Anisa, A. T. N., & Mustofa, N. H. (2021). Pengaruh Karakteristik Wirausaha, Modal Usaha, Strategi Pemasaran Terhadap Perkembangan Usaha Mikro Kecil Menengah (UMKM) Dengan Inovasi Sebagai Variabel Intervening. *Sketsa Bisnis*, 8(2), 82–98. <https://doi.org/10.35891/jsb.v8i2.2687>
- Brammantio, Ekasari, N., & S, J. (2023). Analisis Pengaruh Pendidikan Kewirausahaan Terhadap Keterampilan Berwirausaha. *Jurnal Manajemen Dan Keuangan (Mankeu)*, 12(2), 572–584. <https://doi.org/https://doi.org/10.22437/jmk.v12i2.25449>
- Dewi, A., Saragih, S., & Nasution, Z. (2024). Penguatan Kompetensi Guru PAI dalam Menghadapi Pendidikan Era Society 5 . 0 di SMA Budisatrya Medan. *Jurnal Cakrawala Akademika*, 1(4), 1086–1101. <https://doi.org/https://doi.org/10.70182/JCA.v1i4.6>
- Dewi, K., Samadi, M., Hermansyah, Y., & Nurishlah, L. (2022). Pengembangan keterampilan kewirausahaan siswa sekolah dasar melalui program market day. *Jurnal Murabbi*, 2(2), 1–11. <https://doi.org/https://doi.org/10.69630/jm.v2i2.27>
- Dharmanegara, I. B. A., Rahmayanti, P. L. D., & Yasa, N. N. K. (2022). The Role of Entrepreneurial Self-Efficacy in Mediating the Effect of Entrepreneurship Education and Financial Support on Entrepreneurial Behavior. *International Journal of Social Science and Business*, 6(2), 165–173. <https://doi.org/10.23887/ijssb.v6i2.46719>
- Diana, A., & Sari, R. (2023). Evaluasi Program Pendidikan. *Jurnal Studi Islam Indonesia (JSII)*, 1(1), 157–166. <https://doi.org/https://doi.org/10.61930/jsii.v1i1.168>

- Diharja, U., Machrawinayu, I., & Ritonga, M. G. A. (2023). Evaluasi Model CIPP dalam Peningkatan Mutu Pembelajaran pada Program Kampung Cambridge Mutiara Cendekia. *Jurnal Basicedu*, 7(6), 3989–4002. <https://doi.org/10.31004/basicedu.v7i6.6580>
- Faika, S., Indrawati, Nulhakim, L., & Haryadi, R. (2024). peran guru dalam menumbuhkan jiwa kewirausahaan pada siswa SMAN 2 Krakatau steel cilegon. 09(September), 1–23. <https://doi.org/https://doi.org/10.23969/jp.v9i3.17508>
- Ginting, F., T, N., Kurniyati, W., Nahara, A. S., Sofwan, M., & Sholeh, M. (2024). Strategi guru dalam menumbuhkan jiwa kewirausahaan peserta didik melalui pembelajaran di sekolah dasar. *JGK (Jurnal Guru Kita)*, 8(3), 504. <https://doi.org/10.24114/jgk.v8i3.58312>
- Ginting, L. (2021). Keefektifan Pelaksanaan Pelatihan Pembentukan Karakter dengan Metode Partisipasi. *Lembaran Ilmu Kependidikan*, 50(1), 51--59. <https://doi.org/https://doi.org/10.15294/lik.v50i1.29370>
- Hasanah, A. U., & Hidayat, W. (2024). Penanaman Nilai-Nilai Kewirausahaan Melalui Pembelajaran Berbasis Proyek Di SMPN 54. *Jurnal Generasi Tarbiyah: Jurnal Pendidikan Islam*, 3(2), 170–181. <https://doi.org/10.59342/jgt.v3i2>
- Hidayat, A., Ishak, A., Albari, Nurcahyati, & Setiono, B. (2023). Menumbuhkan Jiwa Kewirausahaan Sejak Dini dengan Memotivasi dan Melatih Keterampilan untuk Siswa MTs Negeri 1 Yogyakarta. *Rahmatan Lil 'Alamin Journal of Community Services*, 3(1), 20–29. <https://doi.org/10.20885/rfa.vol3.iss1.art3>
- Huda, C., & Kardoyo, K. (2021). Kepemimpinan Kepala Sekolah, Pembiayaan Pendidikan, Komite Sekolah, Lingkungan Sekolah Terhadap Kinerja Sekolah. *Business and Accounting Education Journal*, 2(2), 160–174. <https://doi.org/10.15294/baej.v2i2.50640>
- Ibidunni, A. S., Mozie, D., & Ayeni, A. W. A. A. (2021). Entrepreneurial characteristics amongst university students: insights for understanding entrepreneurial intentions amongst youths in a developing economy. *Education and Training*, 63(1), 71–84. <https://doi.org/10.1108/ET-09-2019-0204>
- Ibrahim, I., Adi Prasetyo, Choirun Niswah, & Zulkipli, Z. (2022). Sarana Dan Prasarana Pendidikan Di Madrasah Ibtidaiyah. *Khatulistiwa: Jurnal Pendidikan Dan Sosial Humaniora*, 2(3), 170–181. <https://doi.org/10.55606/khatulistiwa.v2i3.578>
- Istinganah, N. F., & Widiyanto. (2020). Pengaruh Modal Usaha, Tingkat Pendidikan, dan Karakteristik Wirausaha Terhadap Perkembangan UKM. *Economic Education Analysis Journal*, 9(2), 438–455. <https://doi.org/10.15294/eeaj.v9i2.39293>
- Kalkan, F., & Cemaloğlu, N. (2023). Development of Teacher Support Scale for Secondary School Students (TSSSSS): A Validity and Reliability Study. *International Journal of Contemporary Educational Research*, 10(2), 293–311. <https://doi.org/10.52380/ijcer.2023.10.2.485>
- Khotimah, K., & Emawati. (2025). Menumbuhkan jiwa kewirausahaan dalam implementasi proyek penguatan profil pelajar pancasila. *Jurnal Education and Development*, 13(2), 88–92. <https://doi.org/10.37081/ed.v13i2.6760>

- Komar, Z., Rusdarti, R., & Khafid, M. (2020). Implementation of Project Based Learning Model to Improve the Learning Results of Economic Subjects of SMA Negeri 15 Semarang. *Journal of Economic Education*, 10(1)(1), 34–41. <https://doi.org/10.15294/jeec.v9i2.41335>
- Kuura, A., & Lundin, R. A. (2019). Process perspectives on entrepreneurship and projects. *International Journal of Managing Projects in Business*, 12(1), 25–47. <https://doi.org/10.1108/IJMPB-12-2017-0165>
- Lv, Y., Chen, Y., Sha, Y., Wang, J., An, L., Chen, T., Huang, X., Huang, Y., & Huang, L. (2021). How Entrepreneurship Education at Universities Influences Entrepreneurial Intention: Mediating Effect Based on Entrepreneurial Competence. *Frontiers in Psychology*, 12(July), 1–12. <https://doi.org/10.3389/fpsyg.2021.655868>
- Manuhutu, S. (2023). Sosialisasi Penguatan Proyek Profil Pelajar Pancasila (P5) Melalui Kewirausahaan Berbasis Kearifan Lokal di SMA Negeri 2 Seram Bagian Barat (SBB). *Jurnal Pengabdian Arumbai*, 1(1), 42–47. <https://doi.org/10.30598/arumbai.vol1.iss1.pp42-47>
- Muliadi, E., & Nasri, U. (2023). Future-Oriented Education: The Contribution of Educational Philosophy in Facing Global Challenges. *Jurnal Ilmiah Profesi Pendidikan*, 8(4), 2420–2427. <https://doi.org/10.29303/jipp.v8i4.1807>
- Nugroho, K., & Ridho, A. R. (2024). Evaluasi Program Tahfidzul Qur'an Dengan Model Cipp Di Ma Al-Islam Jamsaren Surakarta. *Indonesian Journal of Islamic Educational Review*, 1(2), 105–114. <https://doi.org/10.58230/ijier.v1i2.121>
- Nurhayani, Yaswinda, & Movitaria, M. A. (2020). Model Evaluasi CIPP Dalam Mengevaluasi Program Pendidikan Karakter Sebagai Fungsi Pendidikan. *Jurnal Inovasi Penelitian*, 2(8), 2353–2362. <https://doi.org/https://doi.org/10.47492/jip.v2i8.1116>
- Nurhidayah, Masyhuri, Rohmani, Z., Wahyuni, B. T., Mahsuruddin, & Febriyana, S. H. (2024). Evaluasi Program Kewirausahaan Di Sekolah Dasar Menggunakan Metode CIPPO. *Renjana Pendidikan Dasar*, 4(1), 63–70
- Pohan, A. S. M., & Fadhli, M. (2024). Pengelolaan Kegiatan Kewirausahaan dalam Menumbuhkan Kreativitas Dan Inovatif Peserta Didik di SMK Sinar Husni BM 1 L Deli. *JAMP : Jurnal Administrasi Dan Manajemen Pendidikan*, 7(2), 244. <https://doi.org/10.17977/um027v7i22024p244>
- Prabawati, M., & Suparman, S. (2019). Tingkat pemahaman guru terhadap karakteristik dan penerapan model project based learning (pjbl) dalam pembelajaran produk kreatif dan kewirausahaan (pkk) smk negeri di diy. *Jurnal Pendidikan Teknik Sipil*, 1(1), 73–80. <https://doi.org/10.21831/jpts.v1i1.28276>
- Pratami, R. (2024). Pendekatan Konstruktivisme dalam Kebijakan Pembelajaran Berbasis Proyek: Transformasi Pendidikan Menuju Kreativitas dan Kolaborasi. *Jejaring Administrasi Publik*, 16(2), 76–87. <https://doi.org/10.20473/jap.v16i2.60539>
- Pujianti, Kardoyo, & Utanto, Y. (2021). Biology learning management contain using character education with T-PACK through project based learning (PBL) model.

- Educational Management, 10(2), 289–298.
<https://journal.unnes.ac.id/sju/eduman/article/view/48461>
- Purnama, N. (2024). Pelatihan business model canvas bagi siswa sman 1 ganyar dalam membangun bisnis di usia din. *Jubaedah : Jurnal Pengabdian Dan Edukasi Sekolah*, 2(1), 1–23. <https://doi.org/10.46306/jub.v4i1>
- Purwanto, A., Novitasari, D., & Asbari, M. (2022). The Role of Leadership , Teaching Factory (TEFA) Program , Competence of Creative Products and Entrepreneurship On Entrepreneurial Interest of the Vocational School Students. *International journal of social and management studies (ijosmas)*, 03(5), 58–64. <https://doi.org/https://doi.org/10.5555/ijosmas.v3i5.185>
- Rejekiingsih, T., Budiarto, M. K., & Sudiyanto, S. (2021). Pengembangan multimedia interaktif berbasis potensi lokal untuk pembelajaran prakarya dan kewirausahaan di sma. *Kwangsang: Jurnal Teknologi Pendidikan*, 9(2), 167. <https://doi.org/10.31800/jtp.kw.v9n2.p167--185>
- Riza, F., & Chisbiyah, L. A. (2024). Komparasi Model Pembelajaran Project-Based Learning Dengan Experiential Learning Pada Pembelajaran Kewirausahaan SMK. *Briliant: Jurnal Riset Dan Konseptual*, 9(4), 948–956. <https://doi.org/10.28926/briliant.v9i4.1753>
- Rochiyanti, A., & Mawardi, I. (2021). Peran Guru Sekolah Dasar dalam Menumbuhkan Jiwa Kewirausahaan Anak di Masa Pandemi Covid-19. *Proceeding of The URECOL*, 2020, 258–263. <http://repository.urecol.org/index.php/proceeding/article/download/1759/1725>
- Sanchez, R. (2023). Utilization of the daily lesson logs: An evaluation employing the CIPP model. *International Journal of Open-Access, Interdisciplinary and New Educational Discoveries of ETCOR Educational Research Center (IJOINED ETCOR)*, 2(1), 199–215.
- Santos, C., Rybska, E., Klichowski, M., Jankowiak, B., Jaskulska, S., Domingues, N., Carvalho, D., Rocha, T., Paredes, H., Martins, P., & Rocha, J. (2023). Science education through project-based learning: A case study. *Procedia Computer Science*, 219(January), 1713–1720. <https://doi.org/10.1016/j.procs.2023.01.465>
- Sari, A. I., Karlina, E., & Rasam, F. (2021). Peran Pendidikan Kewirausahaan Dan Motivasi Berwirausaha Dalam Menumbuhkan Sikap Mental Kewirausahaan Peserta Didik. *Research and Development Journal of Education*, 7(2), 403. <https://doi.org/10.30998/rdje.v7i2.10287>
- Shiri, N., Khoshmaram, M., Mehdizadeh, H., Sadraei, R., & Ayoubi, R. (2025). How is the entrepreneurial mindset of university students formed? The role of entrepreneurial inspiration, education, methods, and environment. *International Journal of Management Education*, 23(2), 101158. <https://doi.org/10.1016/j.ijme.2025.101158>
- Sihwadi, Santoso, B., & Kuat, T. (2023). Meningkatkan jiwa wirausaha melalui pengembangan pembelajaran berbasis produk pada siswa smk. *Indo MathEdu Intellectuals Journal*, 4(2), 986–1000. <https://doi.org/http://doi.org/10.54373/imeij.v4i2.320>

- Sulistiyani, E., Hairunisya, N., & Suja'i, I. S. (2023). Peran Guru dalam Pembentukan Karakter Kewirausahaan pada Pembelajaran Tatap Muka Terbatas Mata Pelajaran Produk Kreatif dan Kewirausahaan Kelas XI SMKN 2 Boyolangu. *Jurnal Pendidikan Dan Kewirausahaan*, 11(3), 1018–1026. <https://doi.org/10.47668/pkwu.v11i3.876>
- Tahara, V., & Pujiati, A. (2019). Peran penugasan prakarya dan kewirausahaan terhadap minat berwirausaha siswa sma. *Economic Education Analysis Journal*, 7(3), 1056– 1070. <https://doi.org/10.15294/eeaj.v7i3.28339>
- Utami, W. C., & Rusdarti. (2021). Effectiveness of Think-Pair-Share Learning Model on Students Creativity and Critical Thinking Ability. *Economic Education Analysis Journal*, 10(2), 268–284. <https://doi.org/10.15294/eeaj.v10i2>