

The Role of Edupreneurship in Building Students' Literacy and Social Character: A Literature Review

Kesya Nabila Sumarlen¹, Gita Cintya Devi Aritonang², Syalwa Rizkia Putri Purnama³,
Endang Supardi⁴, Nofriansyah Nofriansyah⁵

^{1,2,3,4,5}Universitas Pendidikan Indonesia, Bandung, Indonesia

Email: ¹kesyanabilaa@upi.edu, ²gitacintya99@upi.edu, ³syalwarizkiaputri@upi.edu, ⁴endang-supardi@upi.edu, ⁵nofriansyah10@upi.edu

ABSTRACT

The cultivation of education-based entrepreneurial spirit (edupreneurship) has become increasingly urgent amid the complexity of 21st-century challenges; however, studies that comprehensively map its influence on students' literacy and social character remain scarce. This article aims to analyze and synthesize the role of edupreneurship in developing literacy dimensions and shaping students' social character based on existing literature. The study employed a literature review approach, examining 16 scientific articles published between 2021 and 2026. The synthesis indicates that the implementation of edupreneurship consistently enhances multiple literacy dimensions among students, including financial literacy, digital literacy, and entrepreneurial literacy, while simultaneously fostering social character traits such as cooperation, independence, and social responsibility through direct practice-based learning. These findings imply that the edupreneurship model is strategically feasible for integration into school curricula as a sustainable instrument for strengthening national character

Keywords:

Curriculum; Edupreneurship; Literature Review; Social Character; Student Literacy

Kata Kunci:

Edupreneurship, Literasi Peserta Didik, Karakter Sosial, Kajian Literatur, Kurikulum

Article history:

Submitted: 15-05-2026;
Revision: 01-05-2026;
Accepted: 17-06-2026;
Published: 29-06-2026.

ABSTRAK

Penanaman jiwa kewirausahaan berbasis pendidikan (*edupreneurship*) menjadi semakin penting dalam menjawab kompleksitas tantangan abad ke-21, terutama dalam mempersiapkan peserta didik yang tidak hanya memiliki kompetensi akademik, tetapi juga literasi multidimensional dan karakter sosial yang adaptif. Meskipun demikian, kajian yang secara komprehensif memetakan kontribusi *edupreneurship* terhadap penguatan literasi dan pembentukan karakter sosial peserta didik masih relatif terbatas. Artikel ini bertujuan menganalisis dan menyintesis temuan-temuan penelitian mengenai peran *edupreneurship* dalam mengembangkan berbagai dimensi literasi serta membentuk karakter sosial peserta didik. Penelitian menggunakan metode *literature review* dengan menganalisis 16 artikel ilmiah yang diterbitkan pada periode 2021–2026. Analisis dilakukan melalui proses identifikasi, seleksi, pengelompokan tema, dan sintesis temuan dari setiap penelitian. Hasil kajian menunjukkan bahwa implementasi *edupreneurship* secara konsisten berkontribusi terhadap peningkatan literasi keuangan, literasi digital, dan literasi kewirausahaan peserta didik. Selain itu, pendekatan pembelajaran berbasis praktik kewirausahaan terbukti efektif dalam membentuk karakter sosial, seperti kerja sama, kemandirian, tanggung jawab, kreativitas, kepemimpinan, serta kepedulian terhadap lingkungan sosial. Temuan ini menegaskan bahwa *edupreneurship* tidak hanya berfungsi sebagai strategi pengembangan kompetensi kewirausahaan, tetapi juga sebagai pendekatan pendidikan yang mendukung penguatan literasi dan pembentukan karakter secara holistik. Oleh karena itu, integrasi *edupreneurship* ke dalam kurikulum sekolah perlu dipertimbangkan sebagai strategi berkelanjutan untuk menghasilkan lulusan yang adaptif, inovatif, dan berkarakter dalam menghadapi dinamika masyarakat dan dunia kerja abad ke-21.



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

INTRODUCTION

Education in the 21st century faces the reality of massive social change and disruptive technological acceleration (Nofriansyah et al., 2026). These dynamics demand that educational institutions no longer merely serve as institutions for the transfer of theoretical knowledge, but rather as adaptive agents of transformation (Setiyadi, 2023; Nofriansyah et al., 2025). One of the critical challenges in the modern educational landscape is the low level of literacy and the gradual erosion of social character among students (Agustian et al., 2022). This phenomenon is closely linked to the need to manage students' self-efficacy and self-regulated learning in response to the use of learning management system technology in schools (Supardi & Triansyah, 2024; Riyadi et al., 2025). The tangible impact of this issue triggers strategic challenges and operational barriers that institutions must face, particularly at the vocational high school level (Rochmah et al., 2025). Therefore, the urgency of strengthening entrepreneurship programs to build students' values and character has become a fundamental issue that must be implemented immediately (Nugraha et al., 2022).

Faced with the complexity of these challenges, the world of education requires an innovative approach capable of simultaneously integrating cognitive, affective, and psychomotor aspects (Aini et al., 2024). The concept of edupreneurship has emerged as a promising strategic alternative for reforming learning practices (Mugiarto, 2023). Edupreneurship is not merely about transferring entrepreneurial values into formal institutions, but rather an educational philosophy and approach that adopts creativity, innovation, perseverance, and the ability to identify opportunities, all oriented toward academic and social well-being (Suwardi et al., 2021). Through the implementation of collaborative learning platforms, the educational ecosystem can be optimally promoted as an interactive space capable of reaching even underserved areas (Basri et al., 2025).

An analysis of the current situation based on previous research indicates that the paradigm of innovation and interactive activity-based learning has a strong correlation with improved learning capacity (Liubana et al., 2025; Rahayu et al., 2025; Meirani et al., 2025). The use of innovative, simulation-oriented learning media can significantly boost conceptual understanding as well as collaborative problem-solving skills among students (Wijoyo et al., 2025; Nofriansyah et al., 2026; Firdaus et al., 2026; Rahayu et al., 2026). A student-centered approach using simulation methods provides students with the space to make valuable decisions and practice moral judgment in challenging situations (Wijoyo et al., 2025). On the other hand, from the perspective of personal capacity building, indicates that entrepreneurship education and entrepreneurial competence have a highly significant positive influence on the formation of students' intentions and readiness to act (Farizhi et al., 2021; Triansyah et al., 2025). These competencies equip them with the ability to manage risks, think strategically, and create added value grounded in ethical responsibility (Supardi et al., 2022).

Although the urgency and effectiveness of these elements have been widely recognized, a thorough review of the existing literature reveals a significant research gap (Rochmah et al., 2025). Most previous research on edupreneurship tends to focus exclusively on commercial aspects, increasing entrepreneurial intent, business competencies, and the development of students' technical skills solely for the sake of industrial needs and economic growth (Farizhi et al., 2021). On the other hand, studies on interactive and sustainable learning often focus on specific content such as science or ecological conservation in isolation without linking them to the edupreneurship framework (Wijoyo et al., 2025; Nofriansyah et al., 2026). Studies that specifically, deeply, and comprehensively synthesize the role of edupreneurship as a driving force

in building multidimensional literacy while shaping students' social character values through a structured literature review approach remain very limited (Rochmah et al., 2025).

This research is situated in a transdisciplinary field that bridges the concepts of educational entrepreneurship management with developmental psychology of character and social literacy. The novelty of this study explicitly lies in the effort to delineate the entrepreneurial competencies of transformative school principals in guiding the holistic implementation of edupreneurship. While previous research viewed edupreneurship as a tool for cultivating young entrepreneurs, this study reinterprets edupreneurship as a pedagogical instrument to foster social sensitivity, collaborative skills, critical literacy, and social moral responsibility based on a curation of various relevant recent research findings (Nugraha et al., 2022).

Based on this background and the identification of these theoretical gaps, the objective of this study is to analyze and describe the role of edupreneurship in fostering students' literacy and social character through a literature review approach. Theoretically, this study is expected to enrich the body of knowledge in the fields of educational technology and curriculum management, particularly regarding the formulation of a holistic learning model that integrates life skills with ethical values. Practically, this article is projected to serve as a reference and strategic recommendation for educational policymakers, school principals, and teachers in designing curricula, selecting interactive media, and creating a school ecosystem that is adaptive to the demands of the 21st century without sacrificing the social identity of students.

RESEARCH METHODOLOGY

This study employs a literature review approach to explore the role of edupreneurship in fostering literacy and social character among students. This approach was chosen because it allows for the systematic integration, evaluation, and synthesis of findings from various previous studies, thereby yielding comprehensive theoretical conclusions relevant to current developments in education.

The literature search was conducted through two reputable scientific databases, namely Google Scholar and SINTA, using keywords tailored to the research variables. The selected literature met the inclusion criteria based on topic relevance, including: (1) the concept and implementation of edupreneurship, (2) the development of student literacy, and (3) the formation of students' social character. From this screening process, several scientific articles that met all eligibility criteria were identified and used as primary data sources. These articles sequentially discuss school principals' entrepreneurial competencies in the context of edupreneurship, strategies and challenges in implementing edupreneurship in educational institutions, and internal student factors influencing the effectiveness of the learning system.

The analysis was conducted using content analysis techniques through three stages. First, data reduction, which involves sorting and abstracting key concepts to ensure they remain relevant to the research objectives. Second, data categorization and presentation, in which findings are grouped descriptively based on the edupreneurship implementation framework, the literacy indicators that emerge, and the forms of social character developed in the students. Third, drawing conclusions through critical synthesis of propositions to formulate a comprehensive conceptualization of the effectiveness of edupreneurship in developing students' potential. Thus, the results of this study are not merely descriptive but provide a critical analysis that can serve as a reference for educational policies and practices.

RESULT AND DISCUSSION

General Description of Journal Article Screening Results

In an effort to gain a comprehensive understanding of the role of edupreneurship in building students' literacy and social character, a systematic process of searching, screening, and analyzing various scientific literature was conducted. The literature search focused on reputable databases, namely Google Scholar and the SINTA Science and Technology Index, with the publication period limited to 2021–2026 to ensure data currency. Through this process, our group successfully screened and identified 16 scientific articles deemed most relevant, valid, and representative for further analysis.

Each selected article was analyzed in depth using content analysis to extract the research methodologies employed and the key findings generated. A summary of the screening and analysis results for the 16 selected journal articles is presented in a structured format in Table 1 below

Tabel 1. Mapping Article

Author and Year	Research Methods for Original Articles	Key Findings
Wijoyo, Ahman, Kurniawati, Supardi, & Firdaus (2025) (<i>Featured Article by Prof. Endang</i>)	<i>Quasi-Experimental Method</i> with quantitative and qualitative approaches among high school students.kualitatif pada siswa sekolah menengah.	The use of the game-based learning medium (<i>board game</i>) "Maju Indonesiaku" significantly improved students' cognitive understanding of the concepts of biodiversity and biological conservation, while also stimulating communication skills, cooperation, critical thinking, and decision-making in a simulation of sustainable economic development..
Mugiarto (2023)	<i>Library Research</i> using a philosophical approach and documentation techniques.	<i>Edupreneurship</i> management in vocational high schools, implemented through the <i>teaching factory</i> program (6M model) and <i>business center</i> , is capable of fostering significant entrepreneurial traits, such as self-confidence, responsibility, task and results orientation, leadership, honesty, discipline, cooperation, and perseverance.
Farizhi, Setiawan, Rahmattullah, & Nor (2025)	An explanatory quantitative study using <i>Structural Equation Modeling</i> (SEM-PLS v4) on 314 Muslim student respondents.	Entrepreneurship <i>education</i> , entrepreneurial competencies, and entrepreneurial motivation have a direct, positive, and significant influence on Muslim students' entrepreneurial intentions by integrating Islamic ethical values (honesty, justice, social responsibility), whereas entrepreneurial mindset

Author and Year	Research Methods for Original Articles	Key Findings
		patterns do not effectively mediate this relationship.
Lestari & Dwiatmaja (2025)	An Exploratory Study on the Implementation of the Merdeka Curriculum in Secondary Schools.	Finding a positive correlation between an adaptive inclusive learning environment and increased social independence as well as creative economic sensitivity among students.
Basri, Evadianti, Seftiani, Zakaria & Jacqueline (2025)	Qualitative descriptive study conducted at Gubuk Literasi community reading garden in Bandar Lampung, Indonesia. Primary data were collected through observation, in-depth interviews, and documentation. Key informants included the founder and volunteers of Gubuk Literasi, while children served as secondary informants. Data were analyzed using the Miles & Huberman technique (data reduction, data presentation, conclusion drawing). Triangulation was applied to ensure credibility and validity.	Persuasive communication by volunteers significantly influences children's reading interest through four sequential stages: (1) Attention-capturing children's focus via engaging language and active listening; (2) Empathy - understanding children's feelings to select appropriate interaction approaches; (3) Reception- children accept verbal and non-verbal input reinforced by reward systems; and (4) Interest - children develop intrinsic motivation to read voluntarily. Community-based, volunteer-driven literacy programs aligned with edupreneurship principles can effectively address educational disparities in underprivileged rural regions, contributing to SDG 4 (Quality Education) and SDG 10 (Reduced Inequality).
Suwardi, Machmud, Supardi & Iswanti (2021)	Explanatory survey with a quantitative approach at Siliwangi University, Tasikmalaya. Sample: 195 economics education students selected via purposive sampling (Slovin formula, 5% error margin). Data collected by questionnaire (Likert scale 1-5). Variables: Opportunity Recognition (OR), Green Entrepreneurial Intention (GEI), and Entrepreneurship Education (EE). Analyzed using Structural Equation Modeling	Opportunity recognition has a positive and significant direct effect on students' green entrepreneurial intention (path coefficient = 0.508; CR = 2.479; p = 0.013), explaining 5% of variance. Entrepreneurship education positively and significantly moderates the relationship between opportunity recognition and green entrepreneurial intention (path coefficient = 0.003; CR = 1.978; p = 0.048), with the moderated model explaining 20.3% of variance. Well-designed entrepreneurship education strengthens students' capacity to

Author and Year	Research Methods for Original Articles	Key Findings
Kurniyanto, Qomaruzzaman & Nurlelah (2024)	(SEM-PLS) with IBM SPSS 22 and AMOS. Validity: loading factors >0.5; Reliability: Cronbach's Alpha >0.6. Qualitative descriptive research with a phenomenological approach at SMK Nurul Huda Baros, Serang, Banten. Data collected through participatory observation, semi-structured in-depth interviews, and documentation. Informants: school principal, vice principals, academic and non-academic coordinators, entrepreneurship teachers, and students. Data analyzed using descriptive analysis; validity ensured through source and method triangulation.	identify environmental opportunities and translate them into green entrepreneurial intentions. Edupreneurship management is implemented per national Ministry of Education guidelines, covering organizational structure, quality assurance, and marketing strategy. Two flagship programs — Teaching Factory (TF-6M model) and Business Center — effectively cultivate entrepreneurial character traits including self-confidence, task orientation, risk-taking courage, honesty, and perseverance. Challenges include limited human resources, insufficient dedicated facilities, low consumer confidence in student-produced goods, and order-dependent production systems. Cross-sector collaboration among school, government, and industry is recommended to sustain program effectiveness.
Nuriza, Muhlisin & Hartono (2025)	Qualitative descriptive research at elementary schools implementing edupreneurship integration in Indonesia. Primary data: participatory observation, in-depth interviews, and Focus Group Discussions (FGD) with principals, teachers, and students. Secondary data: curriculum documents (RPP), syllabi, teaching modules, and student portfolios. Data analyzed via interactive model (condensation, display, verification/conclusion). Triangulation of sources and methods ensured validity.	Integrating edupreneurship into the elementary school curriculum successfully fosters student creativity and innovation through practical and contextual learning. This integration helps students become more independent, willing to take risks, and think strategically in problem-solving, while building a solid foundation for sustainable innovation.

Author and Year		Research Methods for Original Articles	Key Findings
Supardi, Muhidin, & Sutarni (2022)	Islamy,	Quantitative approach using the Explanatory Survey Method with path analysis. Respondents: 100 students from 25 public and private A-accredited Vocational High Schools (Business and Management Expertise Sector) in Bandung, Indonesia. Instrument: 13-item five-point Likert scale questionnaire measuring entrepreneurship education (X), entrepreneurial competencies (Y), and entrepreneurial intentions (Z). Analysis: path analysis with SPSS.	(1) Entrepreneurship education significantly influences entrepreneurial intentions both directly (40.6%) and indirectly through entrepreneurial competencies (total effect: 61.3%); (2) Entrepreneurship education has a significant direct effect on students' entrepreneurial competencies (contribution: 78.4%); (3) Entrepreneurial competencies significantly influence entrepreneurial intentions (direct contribution: 26.5%). Entrepreneurial competence functions as a mediating variable that strengthens the relationship between entrepreneurship education and entrepreneurial intentions.
Nugraha, Yuningsih, & Setiani (2022)	Wulandari,	Descriptive qualitative approach with interview research techniques. Conducted at SD Negeri Margaluyu, Sumedang Regency, West Java, Indonesia. Respondent/informant: the supervisor of the entrepreneurship extracurricular program at the school. Data collection: direct structured interviews and observation. Analysis: descriptive narrative.	Entrepreneurship education at SD Negeri Margaluyu was implemented through a self-development extracurricular program involving 21 students (Grades 1–6). The program successfully cultivated entrepreneurial characters including creativity, independence, problem-solving ability, perseverance, financial management skills, and social interaction skills. The student-centered approach and use of teacher motivation and rewards promoted high student enthusiasm. However, participation was limited due to low student confidence and communication barriers related to limited technology access among lower-grade students.
Liubana, Supardi, Kurjono, & Abd Majid (2025)	Ahman, Kurniawati,	Quantitative approach using a survey method. Population: 201 Grade XI students at SMAN Tupan and SMAN Benlutu, Batuputih Sub-district (3T/disadvantaged area), East Nusa Tenggara, Indonesia.	Learning interest ($p = 0.027$) and learning discipline ($p = 0.000$) both significantly and positively influence student learning motivation in 3T area economics subjects, consistent with Bandura's social-cognitive theory. However, peer support does not

Author and Year	Research Methods for Original Articles	Key Findings
	Sampling: purposive sampling; minimum sample of 107 participants determined via G*Power analysis (effect size = 0.15, power = 0.95, α = 0.05). Instrument: structured 5-point Likert scale questionnaire measuring learning interest (X1), learning discipline (X2), peer support (Z), and learning motivation (Y). Analysis: Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.	significantly moderate the relationship between learning interest or learning discipline and learning motivation (p = 0.744 and p = 0.861, respectively). In disadvantaged educational contexts, intrinsic factors such as individual interest and discipline appear to be more dominant drivers of motivation than external social support from peers.
Agustian, Rahayu, Indira, Salukh, & Rodhiyah (2022)	Descriptive qualitative approach with interview and direct observation techniques. Community service (pengabdian kepada masyarakat) conducted at SDN 2 Padenganploso, Lamongan Regency, East Java, Indonesia (1 June 2023). Participants: 68 students (Grades 1–6) and all teachers. Data collection: structured interviews with teachers as informants and direct observation of students during the “Panen Karya” (Harvest of Works) event. Analysis: descriptive narrative.	The “Panen Karya” project-based entrepreneurship program successfully cultivated positive entrepreneurial characters among 68 participating students, including creativity, problem-solving skills, healthy competition, teamwork, perseverance, social interaction, and financial management. Teachers applied innovative, project-based learning strategies, guiding students to repurpose waste materials into marketable craft products. Student character development was evidenced by increased creativity in production, enhanced imagination in upcycling, and improved socialization skills. The program demonstrates that entrepreneurship education in elementary schools can be effectively implemented through practical, project-based activities aligned with the school’s vision and mission.
Aini, Ikhsani, Damayanti, & Sobara (2024)	A Qualitative Descriptive Study employing a case study design. Data were collected through questionnaires, interview sheets, and observation sheets distributed to 12 students enrolled in the Unternehmendeutsch course	Experiential learning through the Unternehmendeutsch course effectively fostered edupreneurship among students. The learning process—structured around Kolb’s cycle—integrates entrepreneurial knowledge, practical application, and reflective analysis. Students developed

Author and Year	Research Methods for Original Articles	Key Findings
	at the German Department, Universitas Negeri Malang. Data analysis followed a continuous analytical cycle encompassing thematic and narrative analysis, including open coding, axial coding, selective coding, and member checking.	diverse entrepreneurial products across digital, food, and service/trade sectors. The findings confirm that experiential learning enhances students' entrepreneurial mindsets, broadens knowledge acquisition through firsthand experience, and demonstrates the significance of active thinking, trial-and-error, and reflective practices in higher education.
Safitri, Rahmawati, Supardi, & Hanifah (2025)	A Qualitative Descriptive Study based on field observations. Data were collected through interviews, direct observations, and literature reviews at SMK Bina Warga Bandung. Key informants included the school principal, teachers, and students. Data analysis involved data reduction, data presentation, data verification, and triangulation of sources and techniques.	The principal of SMK Bina Warga Bandung demonstrated strong entrepreneurial competence in implementing edupreneurship through programs such as teaching factory management, school canteen management, a Friday almsgiving (sedekah Jumat) program, and corporate sponsorship partnerships. Supporting factors included strong inter-teacher collaboration and diverse income-generating school programs. The primary inhibiting factor was inadequate physical infrastructure, particularly limited land area, which restricted the development of additional business centers.
Supardi & Triansyah (2024)	An Explanatory Quantitative Study employing Structural Equation Modeling with Partial Least Squares (SEM-PLS v4) analysis. The study involved 305 senior high school students in Bandung City who utilized the Canvas LMS platform, drawn from grades X, XI, and XII. Data were collected via structured questionnaires. Instrument validity and reliability were verified using construct validity ($r \geq 0.3$, $p < 0.05$) and Cronbach's Alpha ($\alpha \geq 0.7$).	Self-efficacy exerts a significant positive influence on LMS effectiveness ($T = 7.110$, $p < 0.01$), explaining 41.6% of its variability. Self-regulated learning also significantly and positively affects LMS effectiveness ($T = 4.408$, $p < 0.01$), accounting for 22.6% of variability. However, LMS effectiveness did not have a statistically significant effect on student learning outcomes ($T = 1.655$, $p > 0.01$). The results suggest that while self-efficacy and self-regulated learning enhance LMS usage effectiveness, effective LMS use alone

Author and Year	Research Methods for Original Articles	Key Findings
		does not directly translate to improved academic achievement.
Rochmah, Maisyaroh, & Rochmawati (2025)	A Systematic Literature Review (SLR) following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol. A total of 30 Scopus-indexed articles published between 2019 and 2024 were selected from an initial pool of 818 articles retrieved via Publish or Perish (PoP) using Google Scholar and Scopus databases. Articles were filtered based on their relevance to strategies, impacts, and challenges of entrepreneurship learning in vocational high schools.	Key strategies in vocational entrepreneurship education include teaching factory, entrepreneurship-based curriculum development, industry collaboration, internalization of entrepreneurial values, and integration of technology and social media. These strategies positively impact students' entrepreneurial skills, motivation, and career intentions. Major challenges include low student marketing competency, limited digital literacy, and suboptimal curriculum quality. Recommendations emphasize strengthening school-family-industry collaboration, improving teacher quality, developing adaptive technology-based curricula, and internalizing entrepreneurial values to produce competitive graduates.

The Role of Edupreneurship in Building Student Literacy

An analysis of the available literature indicates that the implementation of edupreneurship in educational institutions makes a tangible contribution to boosting various dimensions of student literacy, particularly financial literacy, digital literacy, and entrepreneurial literacy, which ultimately lead to readiness to face 21st-century challenges. Entrepreneurial-oriented learning shifts the educational paradigm from a teacher-centered approach to a student-centered one, thereby requiring students to actively construct their knowledge independently.

The flagship work from the " demonstrates that students' literacy can be progressively developed through continuous interactive simulation media. Through the implementation of an economic-ecological board game, students are not merely memorizing theories but are cognitively challenged to resolve real-world dilemmas between economic growth and environmental conservation. This process empirically expands students' entrepreneurial literacy and critical thinking skills because they must devise financial strategies, invest in economic facilities, and simultaneously calculate ecological impacts with precision. Findings from Prof. Endang's team indicate that multidimensional understanding encompassing economic, policy, social, and ecological aspects can be accelerated simultaneously when students are positioned as active decision-makers.

This aligns with the argument in " , which states that the functions of the marketing mix (7P) and product management in edupreneurship require mastery of comprehensive business literacy. Through the business center program, students engage in hands-on practices such as observing market activities, identifying real consumer needs, determining selling prices, and

independently preparing bookkeeping and financial reports. These practical activities structurally strengthen students' financial literacy, translating abstract theoretical understanding into functional skills applicable in the real-world workplace.

Furthermore, the link between literacy mastery and the intent to act is supported by findings from the "In the modern context, holistic entrepreneurial literacy encompasses the integration of technical business knowledge and the internalization of universal ethical values. In the contemporary era, digital literacy is also rapidly evolving through the use of technology as an instrument for entrepreneurial learning, enabling students to access materials flexibly and practically, improving efficiency, and strengthening business competitiveness. Based on the Theory of Planned Behavior (TPB) perspective, the enrichment of competencies and literacy acquired by students through formal education directly strengthens their behavioral control and attitudes, which in turn fosters full readiness to innovate and create new products amidst market fluctuations.

In general, the synthesis of these various studies confirms that the development of edupreneurship should not be limited to the mere delivery of theoretical texts. The use of digital technology, contextual game simulations such as those proposed by the ", and teaching factory-based practices have proven to be the primary drivers in constructing the higher-order thinking skills, creativity, and comprehensive economic literacy required in the 21st century.

The Role of Edupreneurship in Building Students' Social Character

In addition to strengthening cognitive and literacy skills, a review of the literature empirically demonstrates that an edupreneurship approach has a powerful transformative effect on shaping students' social character. Social character traits such as responsibility, cooperation, social awareness, communication skills, discipline, and honesty are not taught as rote values but are cultivated through a systematically designed entrepreneurial activity ecosystem.

The seminal work positions social interaction as the core element of successful sustainable entrepreneurship-based education. In the simulation game developed by the authors, students play social roles with conflicting interests, such as entrepreneurs, fishermen, environmental activists, and government officials. These conditions of conflict and competition among groups force students to practice communication, negotiation, and collaboration skills to reach a consensus on shared well-being. Characteristics of social concern and intergenerational responsibility emerge when students realize that selfish economic decisions will destroy the environment's carrying capacity and threaten living populations. Therefore, the research by Prof. Endang et al. successfully demonstrates that a collaborative instructional environment can foster students' cognitive flexibility and social maturity in high-pressure situations.

These findings show significant similarities with the results of the study (Mugiarto, 2023) in the field of vocational education. Through the teaching factory (TF-6M) model and school production units, students' soft skills (personal and social) are intentionally integrated into the professional work cycle. Character traits such as discipline and responsibility are fostered through the standardization of work procedures akin to the real industrial world, while traits like honesty and perseverance are rigorously cultivated as students manage their own finances, maintain accounting records, and prepare business accountability reports. Whether in the macro-game simulation developed by (Supardi & Triansyah, 2024) or in micro-business practices, teamwork is an absolute prerequisite for the group's success.

On the other hand, there is a unique dimension that complements this analysis of social character, as identified by the ". Entrepreneurship education should not be oriented solely toward

the maximization of material profit, but must be grounded in social responsibility, justice, and moral integrity. The internalization of spiritual and cultural values can balance commercial ambition with social ethics. This fosters a pattern of character in young entrepreneurs who are not only technically competent but also possess a high degree of social sensitivity to provide tangible benefits to the surrounding community through job creation. Although there are methodological differences where (Supardi & Triansyah, 2024) uses a simulation game experiment approach, (Mugiarto, 2023) focuses on vocational high school (SMK) institutional management, and (Farizhi et al., 2021) employs quantitative structural modeling there is a consistent overlap in the patterns of findings. The fundamental similarity across all these articles indicates that social character cannot thrive within a passive, conventional classroom model. Social character requires a space for self-actualization in the form of experiential learning and the principle of learning by doing.

Analysis of the Role of Edupreneurship in Social Character Development

Various studies that have been reviewed reveal an interesting pattern: edupreneurship does not stop at the realm of business skills development alone. More than that, edupreneurship practices have been shown to help shape students' social character, which serves as a crucial foundation for life in society. Character education from a scientific perspective requires that the learning process be able to produce changes in attitude, the internalization of values, and the continuous cultivation of positive social behaviors. When learning is designed based on real-world experiences a hallmark of edupreneurship students no longer merely absorb theory but directly construct social values through their active engagement in the field.

Supardi et al., (2022) provides a solid empirical foundation for understanding this. In their study of vocational high school students majoring in Business and Management in Bandung, it was found that entrepreneurship education has a highly significant effect on students' entrepreneurial competencies, with a contribution rate of 78.4%. This figure positions entrepreneurship education as the most dominant factor in shaping students' competencies compared to other variables. Even when entrepreneurial competencies were used as a mediating variable, the influence of entrepreneurship education on entrepreneurial intentions increased to 61.3%.

These findings indicate that the quality of the design and implementation of entrepreneurship education in schools significantly determines the extent to which positive character traits including social character can be developed in students. In line with this, a study in which Prof. Endang Supardi also participated views edupreneurship as a systemic transformational movement, not merely an additional program. From this perspective, the development of social character is not a side effect but an integral part of the very purpose of edupreneurship itself. The three dimensions of social character cooperation, independence, and social responsibility will be analyzed based on findings from the reviewed literature.

Fostering a Spirit of Cooperation (*Gotong Royong*)

Among the various social traits identified in the literature, the ability to cooperate emerges as the dimension most consistently found as a result of the implementation of edupreneurship. This is understandable given that nearly all project-based entrepreneurial activities whether market simulations, group product development, or managing a joint business require coordination, task division, and effective communication among students.

Nugraha et al (2022) documents the experience of implementing an entrepreneurship program at Margaluyu Public Elementary School, where entrepreneurship-based extracurricular activities successfully encouraged students to actively socialize and build productive

relationships with others. Interestingly, this ability to socialize was not explicitly taught but developed naturally as a consequence of the demands of the activities themselves. Noted similar findings in the context of a project showcase at SDN 2 Padenganploso. They concluded that practicing cooperation among peers within teams was one of the key characteristics successfully fostered, particularly because the process of creating the projects through to their presentation to visitors was carried out collaboratively by each class group.

A comparison of the two studies reveals a fundamental similarity: in both contexts, collaboration did not arise from the teacher's verbal instructions, but rather from real needs that emerged during the entrepreneurial activities. This pattern aligns with the arguments of experience-based learning theory, which posits that values are more easily internalized when learned through direct engagement rather than through mere conceptual explanations. Extends these findings to the elementary education level, which has integrated edupreneurship into its curriculum, and finds that students demonstrate improved abilities in teamwork, negotiation, and presenting ideas three competencies that are tangible manifestations of the character trait of cooperation. Adds another important dimension: effective teachers in entrepreneurship education are those who can develop both managerial skills and a spirit of leadership in their students. These two competencies inherently cannot develop without continuous practice in collaborating and communicating with others.

Fostering Independence in Problem-Solving

Independence as a social trait must be understood more broadly than simply the ability to work alone. In the context of social life, independence refers to a person's capacity to think critically, make responsible decisions, take risks, and find solutions to problems without always relying on others' guidance. This trait consistently emerges as one of the outcomes of experience-based entrepreneurship education. Emphasizes that the entrepreneurship program at SDN 2 Padenganploso explicitly targets independence as one of the character traits it aims to cultivate (Agustian et al., 2022). In practice, students are placed in situations where they must be able to identify problems around them and find solutions independently, including when facing obstacles in the process of creating their projects. Complements this picture by noting that students actively involved in the entrepreneurship program at SD Negeri Margaluyu demonstrate a significant increase in self-confidence, evident, among other things, in their courage to speak in public and answer questions enthusiastically. In educational psychology, this type of self-confidence is known as self-efficacy an individual's belief in their own abilities which is a crucial prerequisite for the development of true independence.

From a more quantitatively measurable perspective, Supardi et al. (2022) demonstrates that components of entrepreneurial competence including decision-making, risk management, and opportunity recognition directly contribute 26.5% to students' entrepreneurial intentions. This data confirms that independence in facing risks and uncertainties is not an innate talent but rather a competency that can be systematically developed through well-designed entrepreneurship education. Provides evidence from the vocational education level that the systematically managed teaching factory and business center programs at SMK Nurul Huda Baros successfully fostered self-confidence, risk-taking courage, and resilience in students. These three traits directly strengthen students' independence in responding to uncertain situations. Reinforces these findings by concluding that students' full engagement in the entrepreneurial project cycle from planning and implementation to evaluation is an effective way to foster

independence and strategic thinking skills that are difficult to acquire through passive classroom learning.

Fostering Social Responsibility Toward the Surrounding Environment

Social responsibility is a character dimension that positions individuals not only as subjects engaged in self-development, but also as agents who care about and contribute to the well-being of others and their environment. It is this dimension that gives edupreneurship greater value compared to conventional entrepreneurship education: it does not merely produce businesspeople, but educates citizens who are aware of the social impact of their every action.

Safitri et al (2025) documents how the principal of SMK Bina Warga Bandung consciously integrates socially valuable programs such as the Friday charity program and rule-based canteen management that addresses the needs of the school community as an integral part of the school's edupreneurship ecosystem. This is not merely a side activity; rather, it is a deliberate effort to instill the awareness that business activities must benefit others, not just oneself. From this perspective, edupreneurship intersects directly with the concept of sociopreneurship that is, entrepreneurship oriented toward creating social value alongside economic value. (Kurniyanto et al., 2024) supports this view from a practical perspective: through managing a business center that involves real transactions with customers, students at SMK Nurul Huda Baros gradually realized that their actions have a direct impact on the satisfaction and trust of others. This awareness then transforms into a genuine sense of responsibility not because it is commanded, but because it is experienced firsthand. Supardi et al (2022) adds an important perspective regarding the teacher's role: one indicator of effective entrepreneurship education is the teacher's ability to guide students to anticipate the future and consider the impact of their actions on the surrounding environment.

The futuristic orientation and environmental awareness instilled through this entrepreneurship education are a tangible manifestation of social responsibility that transcends personal interests. Also provides a concrete example from the elementary school level: when students present their work to visitors during a project showcase, they learn that the creations they produce can inspire and benefit others. Such small experiences, from a character education perspective, actually serve as the starting point for the growth of genuine empathy and social concern. Reinforces this argument by stating that entrepreneurship education instilled from an early age will produce a generation that is not merely focused on finding a job, but a generation accustomed to thinking about how to create added value that benefits the wider community.

Curriculum Implications and New Theories (Models)

The implementation of a curriculum that integrates entrepreneurial values into education now holds an increasingly crucial position, as this approach has the potential to shift students' perspective from a job-seeking orientation toward the ability to create job opportunities for others (Setiyadi, 2023). A consequence of this policy is the need to redesign formal learning, so that the educational process is no longer fixated on presenting material that is theoretical, rigid, and lacking in variety (Rochmah et al., 2025). This study presents an original contribution in the form of a modified holistic edupreneurship model, which serves as a tool to strengthen students' social character dimensions (Safitri et al., 2025). The empirical foundation of this model refers to findings that opportunity recognition contributes significantly to shaping green entrepreneurial intentions with the support of entrepreneurship education (Suwardi et al., 2021). Based on this, it is urgent for national curriculum policies to shift toward a practice-based learning approach designed to resemble real-life situations and challenges (Wijoyo et al., 2025).

The conceptual framework in this study is structured narratively, following a linear sequence that integrates the stages of input, process, intervention, and output (Safitri et al., 2025). In the input dimension, the curriculum is designed to instill an edupreneurship ecosystem comprehensively and systematically across various levels of education (Aini et al., 2024). These inputs are then processed through an experiential learning approach to strengthen character development and enhance students' financial literacy from an early age (Agustian et al., 2022). This pedagogical process is then reinforced through a series of academic interventions, including structured edupreneurship management to foster students' independent mindset (Mugiarto, 2023). From this series of strategic interventions, two complementary outcomes are achieved: mastery of multidimensional literacy in the cognitive aspect and the development of strong social character in the affective aspect (Nugraha et al., 2022). Ultimately, the combination of high-level literacy skills and character maturity is oriented toward achieving long-term outcomes, namely the formation of a 21st-century generation that is competitive at the global level (Farizhi et al., 2021).

The implementation of edupreneurship in a school setting, managed in a structured manner through the utilization of authentic industry platforms, has proven effective in developing students' cognitive capacities (Mugiarto, 2023). This learning approach is also capable of fostering the development of self-efficacy and self-regulated learning in students' strategic decision-making (Supardi & Triansyah, 2024). When this model is applied in elementary schools and integrated into the core curriculum, the results demonstrate the program's success in instilling foundational character values from early childhood (Nugraha et al., 2022). Through hands-on activities such as market day programs, schools contribute to fostering independence and basic financial management skills in children from an early age (Lestari & Dwiarmaja, 2025). Consistent exposure to learning interests and entrepreneurial discipline through such simulations requires, in the long term, the presence of social support from peers (peer support) as a moderating variable (Liubana et al., 2025).

The acceleration of competencies within the digital economy ecosystem in the education sector is now being optimally driven by trends in research that have emerged over the past decade (Nofriansyah et al., 2026). These trends underscore the importance of integrating financial literacy with digital technology proficiency simultaneously within the classroom (Nofriansyah et al., 2026). The use of this collaborative learning platform has a concrete, experimental impact on promoting and enhancing students' edupreneurship skills (Basri et al., 2025). This collaborative platform-based learning also trains students' ability to manage business capital and optimize innovation opportunities in underprivileged areas (Basri et al., 2025). The positive interaction between self-efficacy levels and the utilization of this learning management system ultimately fosters an adaptive business mindset ready to face the challenges of the times (Supardi et al., 2022).

On the other hand, the edupreneurship component in this updated curriculum is not solely focused on achieving economic gains, but rather emphasizes the internalization of social and cultural values within the school environment (Aini et al., 2024). Collaborative work among students in groups during the process of creating joint projects serves as the primary foundation for building a strong and sustainable social character (Agustian et al., 2022). Entrepreneurship extracurricular activities that prioritize the principle of collaboration have been proven to encourage students to actively build social interactions and establish productive relationships with their peers (Liubana et al., 2025). This social awareness is further expanded through

contextual practice, enabling students to gain firsthand experience in understanding cultural values and community empowerment in their surroundings (Aini et al., 2024).

Both qualitatively and quantitatively, the contribution of systematically designed entrepreneurship education has proven to be highly significant, with an impact of 78.4% on improving students' competencies (Supardi & Triansyah, 2024). However, the sustainability of implementing an ideal edupreneurship curriculum is often hindered by various real-world challenges in the field as well as the readiness of school operational management (Rochmah et al., 2025). Therefore, the introduction of financial literacy and the habit of independently managing business savings must be balanced with tactical analysis by policymakers in formulating well-thought-out implementation steps (Rochmah et al., 2025). On the other hand, the development of business communication competencies will only be effective if supported by the availability of inclusive collaborative learning platforms that are equally accessible within the educational environment (Basri et al., 2025)

CONCLUSION

A review of various scientific literature in this study provides a clear picture that edupreneurship is not merely a supplementary learning strategy, but rather an educational approach that is truly capable of strengthening two important dimensions simultaneously: students' financial literacy and social character. From the literacy perspective, various forms of edupreneurship implementation ranging from economic-ecological simulation games, school business unit management, to teaching factory practices provide students with opportunities to develop financial literacy, digital skills, and an entrepreneurial mindset simultaneously. What distinguishes this approach from conventional methods is the role of students, who are no longer passive recipients of information but active agents who must make real decisions, assess risks, manage resources, and create products with practical value. It is this process that makes the literacy developed functional and ingrained, rather than merely the memorization of easily forgotten concepts.

From a character-building perspective, this study identified consistent patterns across various educational levels and contexts: the three dimensions of social character examined the ability to collaborate, independence in problem-solving, and concern for the social environment emerged organically from the dynamics of entrepreneurial activities themselves, rather than from normative moral instruction. Collaboration within project teams, the pressure to solve problems without always relying on teachers, and the awareness that one's work impacts others are pedagogical conditions that naturally stimulate the development of these character traits. This pattern reinforces the core argument of the experiential learning approach: character and competencies are most effectively developed when individuals learn through meaningful experiences, not through lectures on values. These findings have significant implications for the future direction of education policy.

A curriculum that systematically integrates edupreneurship rather than treating it merely as an additional subject has the potential to become a strategic tool in preparing a generation that is both economically competent and socially mature. A model that flows from the design of a conducive learning ecosystem, the implementation of real-world project-based learning, to assessments that measure not only cognitive but also affective outcomes, offers a relevant framework to serve as a reference for national curriculum reform. However, the effectiveness of this model depends on the readiness of school infrastructure, the capacity of teachers as facilitators, and the sustained support of policymakers at various levels. In practical terms, educators and school administrators need to shift their focus from simply delivering content to

creating a learning ecosystem that enables students to be creative, collaborate, and make tangible contributions. Entrepreneurial school leadership has proven to be a key factor in fostering a vibrant and sustainable edupreneurship culture. To strengthen the scientific foundation of these findings, future research should develop more standardized instruments to measure the long-term impact of edupreneurship on social character, while also opening the door to comparative studies that span various levels of education and different cultural backgrounds.

REFERENCES

- Agustian, M. F., Rahayu, R. D., Indira, I., Salukh, A., & Rodhiyah, M. (2022). Pembentukan Karakter Siswa Melalui Program Kewirausahaan Untuk Meningkatkan Literasi Financial. *Journal Of Human And Education (JAHE)*, 2(1), 73–80. <http://jahe.or.id/index.php/jahe/article/view/775/430>
- Aini, D. N., Ikhsani, M. I., Damayanti, E. A., & Sobara, I. (2024). Fostering Edupreneurship Among Students as a Social and Cultural Practice: A Case Study in the German Department at Universitas Negeri Malang. *Pertanika Journal of Social Sciences and Humanities*, 32(4), 1477–1506. <https://doi.org/10.47836/pjssh.32.4.12>
- Basri, H., Evadianti, Y., Seftiani, R., Zakaria, N. A., & Jacqueline, G. (2025). Collaborative Learning Platforms for Promoting Edupreneurship in Underprivileged Regions. *APTISI Transactions on Technopreneurship*, 7(1), 132–143. <https://doi.org/10.34306/att.v7i1.571>
- Farizhi, M. R., Setiawan, A., Rahmattullah, M., & Nor, B. (2021). Increasing Entrepreneurial Intention of Muslim Students Through Entrepreneurship Education and Entrepreneurial Competence: The Mediating Role of Entrepreneurial Mindset. *E3J (Economic Education and Entrepreneurship Journal)*, 8(1), 48–66. <https://doi.org/10.1080/2331186X.2021.1918849>
- Firdaus, A. Q., Nusantara, T., Rustanto Rahardi, H. S., Nofriansyah, N., Alfari, R., & Efendi, N. A. Web-Based Adaptive Learning System for Personalized Development of Higher-Order Thinking Skills Using Differentiated Instruction to Support Sustainable Development Goals (Sdgs). *Journal of Engineering Science and Technology, Special Issue on 3rd BPNIC2025*, Vol. 21, No. 2, pp. 9–16, 2026
- Kurniyanto, T., Qomaruzzaman, M., & Nurlalah. (2024). Manajemen Edupreneurship Dalam Pembentukan Karakter Kewirausahaan Siswa. *KARIR Jurnal Ilmiah Manajemen*, 3(2), 80–90. <https://doi.org/10.32493/karir.v3i2.44781>
- Lestari, A. T., & Dwiarmaja, A. Z. (2025). Intensi mahasiswa dalam mengembangkan edupreneurship: Ditinjau dari pendidikan kewirausahaan dan kreativitas. *Idarah: Jurnal Manajemen Pendidikan*, 9(1), 17–34.
- Liubana, A., Ahman, E., Supardi, E., Kurniawati, S., Kurjono, & Majid, mohamad zuber abd. (2025). The Moderating Role Of Peer Support On Learning Interest And Learning Discipline On Student Learning Motivation In Economics Subjects In 3T AREAS. *Jurnal Ekonomi Pendidikan Dan Kewirausahaan*, 13(2), 321–336. <https://doi.org/10.26740/jepk.v13n2.p321-336>
- Meirani, M., Nofriansyah, N., Badeni, B., Juarsa, O., Kristiawan, M., Risdianto, E., & Ugli, Y. K. B. (2026). Problem-Based Learning E-Modules to Improve Students' 21st-Century Skills: A Systematic Literature Review. *Jurnal Pemberdayaan Masyarakat*, 5(1), 1-10.
- Mugiarto, M. (2023). Pembentukan Karakter Kewirausahaan Siswa SMK melalui Implementasi Manajemen Edupreneurship. *Jurnal Kridatama Sains Dan Teknologi*, 5(02), 241–254. <https://doi.org/10.53863/kst.v5i02.915>

- Nofriansyah, N., Ahman, E., Supardi, E., Budiwati, N., Sutarni, N., & Dahlan, D. (2025). A Decade of Digital Economy Research in Education: A Bibliometric and Systematic Review of Trends, Gaps, and Future Directions. *AL-ISHLAH: Jurnal Pendidikan*, 17(4), 8275-8294.
- Nofriansyah, N., Ahman, E., Budiwati, N., Rahmadani, R., Supriatna, E., Hendriyani, C., Islamy, F.J., and Putrie, C.A.R. (2026). Development of a Web-Based Economics Learning System to Integrate Financial and Digital Literacy for Enhancing Critical Thinking Skills. *Journal of Engineering Science and Technology*, Special Issue on 3rd BPNIC2025, 21(2), 65–72.
- Nofriansyah, N., Riyadi, S., Vimarsya, A., Maulana, A. H., & Pamungkas, P. A. (2026). Utilizing Website-Based EcoLearn Learning Media to Enhance Students' Critical Thinking Skills. *INSIGHT: Innovation and Studies in Science, Education, and Technology*, 1(2), 195-202.
- Nofriansyah, N., Sutarni, N., Hufad, A., Vhalery, R., Rahayu, S., Meilia, M., Meirani, M., & Amri, A. (2025). Digital transformation of economics education: Development of the Ekonara application based on local culture. *Journal of Engineering Science and Technology*, Special Issue on ISCoE2024, 20(4), 174–181
- Nugraha, D., Wulandari, M. A., Yuningsih, E., & Setiani, N. (2022). Pembentukan Karakter Peserta Didik melalui Program Kewirausahaan di Sekolah Dasar. *Jurnal Basicedu*, 6(4), 6754–6762. <https://jbasic.org/index.php/basicedu>
- Nuriza, R., Muhlisin, & Hartono, B. S. (2024). Integrasi Edupreneurship Dalam Kurikulum Pendidikan Dasar Untuk Meningkatkan Kreativitas Dan Inovasi. *Manajerial: Jurnal Inovasi Manajemen Dan Supervisi Pendidikan*, 5(4), 1044–1052. <https://jurnalp4i.com/index.php/manajerial>
- Rahayu, S., Sutarni, N., Nofriansyah, N., & Soffiatun, S. (2025). The Effectiveness of The Arcs Learning Model in Improving Student Learning Outcomes in Economics. *Research and Development Journal of Education*, 11(1), 115-123.
- Rahayu, S., Nofriansyah, N., Vhalery, R., Maruwae, A., Aisyah, I., Dewi, T. A., ... & Rusdan, R. Development Of An Interactive Android-Based Learning Application Integrating Higher-Order Thinking Skills For Economics Education To Support Sustainable Development Goals (Sdgs). *Journal of Engineering Science and Technology*, Special Issue on 3rd BPNIC2025, 21(2), 1-8.
- Riyadi, S., Budiyanto, E., Hastuti, H., & Nofriansyah, N. (2025). Pemanfaatan Chatbot Ai Untuk Meningkatkan Kemandirian Belajar Siswa: Systematic Literature Review. *Research and Development Journal of Education*, 11(2), 1106-1114
- Rochmah, L. M., Maisyaroh, M., & Rochmawati, R. (2025). Strategi dan Tantangan Implementasi Edupreneurship di Sekolah Menengah Kejuruan: Kajian Literatur Sistematis. *Jurnal Pendidikan Dan Teknologi Indonesia*, 5(4), 1075–1089. <https://doi.org/10.52436/1.jpti.757>
- Safitri, E. K., Rahmawati, D. N., Supardi, E., & Hanifah, A. L. P. (2025). Kompetensi Kewirausahaan Kepala Sekolah Dalam Implementasi Edupreneurship. *Jurnal Pendidikan Manajemen Perkantoran (JP Manper) Journal*, 10(July), 169–178. <http://ejournal.upi.edu/index.php/jpmanper>
- Setiyadi, B. (2023). *Edu Preneur Kewirausahaan dalam Pendidikan* (A. S. Hamidin, R. Z., & ASH (eds.); 1st ed.). Manggu Makmur Tanjung Lestari.
- Supardi, E., Islamy, F. J., Muhidin, S. A., & Sutarni, N. (2022). How to educate students to become competent entrepreneurs. *Cakrawala Pendidikan Jurnal Ilmiah Pendidikan*, 41(1), 142–153. <https://journal.uny.ac.id/index.php/cp/issue/view/2208>
- Supardi, E., & Triansyah, F. A. (2024). Pengaruh Self-Efficacy dan Self-Regulated Learning terhadap Hasil Belajar Siswa dengan Learning Management System Effectiveness Sebagai Variabel Mediasi. *Jurnal Pendidikan Manajemen Perkantoran (JP Manper)*, 9(2), 199–210. <http://ejournal.upi.edu/index.php/jpmanper%0APengaruh>
- Suwardi, D. M., Machmud, A., Supardi, E., & Iswanti. (2021). Opportunity Recognition and Green Entrepreneurial Intention: The Moderating Effect of Entrepreneurship Education. *Jurnal*

- Pendidikan Bisnis Dan Manajemen, 7(1), 42–55.
<https://journal2.um.ac.id/index.php/jpbm/article/view/22651/8356>
- Triansyah, F. A., Lubis, N. P. S., Ritonga, M., Thania, A. C., Irwandi, H., & Nofriansyah, N. (2025). Tren Pemetaan Riset Entrepreneurship Education Dan Education Computing Di Universitas: Sebuah Analisis Bibliometrik. *Research and Development Journal of Education*, 11(2), 914-926
- Wijoyo, S., Ahman, E., Kurniawati, S., Supardi, E., & Firdaus, M. M. (2025). The Use of Board Games in Teaching Biodiversity for Sustainable Development: A Quasi-Experimental Method. *International Journal of STEM Education for Sustainability*, 5(1), 53–71.
<https://doi.org/10.53889/ijses.v5il.49>