



Building an Entrepreneurial Ecosystem: Insights into Effective Management Practices in Vocational Schools

Daud Kurniadi Yudistiro Bakti^{1*}, Ari Yoga Pratama,² Esha Momena Yousaf³

¹Universitas Islam 45 Bekasi

²Universitas Islam Negeri Sunan Kalijaga Yogyakarta

³International Islamic University Islamabad (IIUI), Pakistan

ABSTRACT

This research aims to discover data and the concept of an educational institution regarding entrepreneurship education in vocational schools, which plays a crucial role in shaping a workforce with the skills to enter the job market. It seeks to understand the vision and mission of vocational schools. The research employs a qualitative method using library studies. Data is collected through relevant references such as journals, the internet, and articles related to the development of entrepreneurship in vocational schools. The results of this research indicate that the working world greatly requires individuals who can develop new ideas in business and possess adequate skills. Vocational education is a supporting factor in producing skilled workforce in their respective fields. Vocational schools have the opportunity to build an economic system by leveraging the development of adolescents at this time, educating students to be interested in becoming entrepreneurs. Entrepreneurship preparation should be emphasized, especially in vocational schools. If the education system and training run effectively, it is possible to produce competent entrepreneurs and reduce unemployment rates. The education sector has the responsibility to create prospective workers with skills and abilities.

 OPEN ACCESS

ARTICLE HISTORY

Received:14-08-2022

Accepted: 24-12-2022

KEYWORDS

Educational Management, Entrepreneurial Ecosystem, Management Practices, Vocational School.

Development: Studies in Educational
© 2024 Management and Leadership
This is an open-access article
under the [CC-BY-SA License](https://creativecommons.org/licenses/by-sa/4.0/).



INTRODUCTION

Entrepreneurship vocational education was a branch of higher education that focused on developing graduates with practical expertise in specific fields (Yamin et al., 2017). The primary objective of vocational education was to cultivate eight graduate competencies: Communication Skills, Critical and Creative Thinking, Information/Digital Literacy, Inquiry Reasoning Skills, Interpersonal Skills, Multicultural/Multilingual Literacy, Problem Solving, and Technological Skills. An effective and efficient vocational education model was employed to produce prospective workers who embodied the eight competencies outlined above ((Delalande et al., 2020; Olsson et al., 2022; Uemura & Comini, 2022)).

The vocational education curriculum had to continually adapt to changing conditions, technological advancements, and current labor market demands. This adaptation was crucial for integrating relevant new competencies and literacies into the curriculum, ensuring graduates could compete effectively in the job market. By including skills such as digital literacy and critical thinking, the vocational education curriculum prepared students for existing job opportunities. It promoted lifelong learning, essential in an era of rapid change.

However, challenges in making these adaptations included adequate resources, including funding and time, and the necessity for effective collaboration between educational institutions and industry stakeholders. To address these challenges, educational institutions needed to develop a sustainable quality assurance system and engage educators in ongoing training so they could effectively deliver new competencies. Thus, vocational education could meet market demands and future competency needs, ensuring that graduates were well-prepared to face the challenges of the workforce (Mulyadi, 2021; Nuryani & Handayani, 2020).

Learning models and modes also needed to be flexible, incorporating both face-to-face and technology-based learning to develop students into independent learners (Sharma & Sharma, 2020). In this new paradigm, the role of the teacher remained strategic as a designer and implementer of learning, acting more as a facilitator and motivator to ensure that students actively engaged in an effective and optimal learning process. To develop a vocational education curriculum suitable for the industrial revolution era, synergy was essential, involving the government, educational institutions, and industry to revitalize the curriculum (Faturrohman et al., 2022).

Current educational challenges included enhancing both the quantity and quality of vocational education to meet local and national needs, compete globally, and produce creative human resources to support the creative economy (Anam, 2016). A key goal was for vocational high school (SMK) graduates to find employment immediately after graduation, with all SMKs offering entrepreneurship development coaching (Mukhadis et al., 2019). Vocational education must focus on economic and productive outputs to cultivate reliable young entrepreneurs, given its role in skill development (Ali, 2015). Popular fields of study among the public included economics, management, accounting, auditing, and tax courses. The internet played a critical role in accessing information about vocational education curricula. Additionally, teacher professionalism, tuition fees, location, and study hours significantly influenced educational choices (Burhanuddin, 2019; Kim & Williams, 2020; Michaelides, 2020; Susanto, 2013).

Vocational education graduates must be able to teach students how to become entrepreneurs. The quality of vocational education graduates is assessed through the work ethic of graduates after entering the workforce (Suharno et al., 2020). Therefore, educational institutions must always keep abreast of technological changes. Educational institutions must continuously improve the quality of their graduates so that their students can teach how students will become entrepreneurs (Jones et al., 2021). This is closely related to the entrepreneurship curriculum. With a flexible curriculum, it will be easier to follow developments and applications in the workplace. Through entrepreneurship courses, various tasks can be applied to improve the quality of undergraduate graduates (Assunção Flores, 2021; Rizal et al., 2020).

Vocational education is expected to be able to produce skilled and qualified workforce candidates and quickly adapt to technological developments, and have a critical attitude in dealing with various problems. It requires teaching staff and instructors who have high skills and creativity to hone the high analytical skills of their students (Samrotussa'adah et al., 2022; Sari et al., 2020). As is known, vocational education has a learning content consisting of 70% practice and 30% theory which is oriented to the work readiness of its graduates (Prasetyo & Salabi, 2023).

Based on the above study, this study aims to learn about vocational schools that prepare students to become skilled workers in entrepreneurship and to know the process of developing vocational schools (Chao, 2024). As

well as preparing students to become community members with expertise in applied fields.

Many researchers have studied vocational schools for high school students. The learning process refers to developmental factors and explores all the potential of students to prepare them for the workforce with the competencies they possess in their respective fields. Vocational education also has educational characteristics that can effectively combine education and training functions. However, it is essential to determine how to increase interest in attending vocational education institutions.

With the vocational school system, there is an opportunity to enhance the potential of skilled and qualified students to become entrepreneurial workers. This system aims to meet the demands of the workforce in both industry and the business world, equipping students with adequate skills in their fields to reduce unemployment rates in various areas. This study will examine, in more detail, the concept of entrepreneurship development in vocational schools.

METHODS

This study uses a qualitative methodology with the library method. Data is collected through relevant references for analysis, data sources through related literature books, and reading journals related to the research topic. The data collection technique in this study is to collect data from library studies following what will be examined. The next stage is data processing with several stages and validating the data.

RESULT AND DISCUSSION

Vocational education is crucial in preparing students with the necessary skills to thrive in the workforce by promoting entrepreneurship and adapting to industry demands. The curriculum should integrate practical training and entrepreneurship concepts to ensure students develop both hard and soft skills essential for success in the ever-evolving job market. This hands-on approach, focusing on real-world applications of knowledge, aims to create graduates who are not only skilled but also innovative thinkers capable of addressing challenges effectively. Furthermore, collaboration between vocational institutions and local industries is imperative to align educational outcomes with actual job market requirements, driving economic growth through capable entrepreneurial graduates.

A flexible and responsive curriculum is necessary to meet the changing

technological landscape and labor market dynamics. This includes incorporating modern competencies and digital literacy into the learning modules while utilizing diverse teaching methods such as technology-based learning and experiential practice. The emphasis on soft skills—such as communication, teamwork, and problem-solving—should be a priority to equip students for various professional environments. By fostering a culture of entrepreneurship within vocational education, schools can empower students to pursue business opportunities, thereby reducing unemployment and contributing positively to their communities.

Entrepreneurship Development

Entrepreneurship development involved cultivating quality business skills and abilities that yielded positive environmental outcomes. These programs significantly impacted traditional businesses and social enterprises. The sustainability of business development projects depended on how entrepreneurs comprehended and practised their skills, developed their capacities, and fostered innovative attitudes necessary for business creation. Success in business ventures was recognized universally, starting with a firm intention and determination. Educational methodologies in various institutions played a crucial role in shaping students' majors and character, guiding them in their career paths and life goals. A person's decision to become an entrepreneur often emerged from this approach. Entrepreneurship development aimed to create products or services that contributed to positive environmental changes.

Vocational schools were expected to produce job-ready workers equipped with necessary skills. The term "vocational education" was widely recognized in Indonesia, where many institutions offered vocational programs. It played an essential role in the economic development of Indonesia, a developing country. High-quality vocational education was crucial for poverty reduction and transforming the educational structure.

Vocational education prepared students for employment with specific practical skills. This education usually followed formal pathways, including vocational secondary education through Vocational High Schools (SMK) and higher education like polytechnics. Thus, vocational education was closely tied to job-oriented programs. These schools represented a viable educational pathway, as many companies preferred graduates from vocational

backgrounds. Furthermore, vocational education provided a quick route to employment, where extensive hands-on practice prepared students for the workforce.

Vocational Learning Implementation

Learning in vocational schools applies a practical system, in contrast to high school in general, which refers more to material only. In this, he hopes to establish countless talented centre-level specialists to tackle the problems of the world of work, both in industry and business, as we are also aware that the presence of a professional or professional high school requires an adequate foundation and office to support a professional school.

To build a professional daily schedule school, it is imperative to have a satisfactory pragmatic office and educators with high capacity and ability (Hoffman, 2006). Availability of adequate training tools and materials, with the direction of proficient practice trainers, which occurs within a supervised and controlled learning framework with success and productivity, will want to produce professional school graduates who have high abilities and are ready to enter the world of work (Sartika et al., 2022).

The results of this study indicate that school institutions that are still centralized make the workforce an obstacle in working on alignment and unification, fully intending to produce innovative alums. The labor market potential for vocational education graduates is still vast. To create a workforce that graduates from vocational education or vocational schools, they must have soft and hard skills with critical thinking skills and skills (Ramadhan & Ramdani, 2014). Continuity contribution is needed between entrepreneurial learning activities. Business instructions are relied on to frame the mentality and capacity to create something that financially affects the climate, one of which is through business. Business training depends on the method used to progress (Mukhadis et al., 2019).

Vocational education is one of the educational programs that prepares students to increase their potential according to their expertise and to compete with their colleagues from other countries. The vocational education system or vocational school develops abilities and improves quality of life.

Business advancement is recognizing, creating, and turning dreams into living behavior. The progress of business ventures can be seen in the long-term depending on how a social businessman understands business information and puts it into practice with capacity and mental readiness. Every business will compete, where the opposition will continue to increase

and become more rigid as modern innovation advances. Thus, the entertainers need business arrangements and information to foster the business they live so they must be ruthless in being creative. The business venture improvement program is a significant interest in financial development with a focus on business entertainers, amiable ones who directly affect the local area. The entrepreneurship development program is an essential investment in economic growth by paying attention to business actors, especially social ones that directly impact the community (Mukhadis et al., 2019).

Vocational schools are education that focuses on producing workers. Vocational education requires practical and inexpensive facilities, as well as human resources experts in knowledge, skills, and polite attitudes to get support from the industrial world so that mutually beneficial cooperation can be established (Shrivastava & Acharya, 2021). So that it can print skilled and qualified workforce candidates and quickly adapt to technological developments, which have a critical attitude in dealing with all existing problems. Therefore, it is essential for teaching staff who have high skills and creativity to hone high analytical skills compared to their students. The vocational education curriculum emphasizes the development of skills according to the demands of the world of work (Bratianu et al., 2020).

Vocational schools should emphasize preparing vocational graduates following employment needs. Improving the quality of vocational education is expected to enhance the quality of graduates who can meet the requirements, do work, and have adequate skills. Vocational education also aims to prepare workers using a competency-based education approach, developing knowledge, skills, and attitudes. The learning component includes work-related expertise and practice. Vocational education is held in various ways and forms and is seen from the limited funds for developing vocational education. Vocational-based education models include formal and informal, learning at school, introduction to the workplace, and practicum.

As it is known that Indonesia still lacks skilled human resources (Putera et al., 2022; Simatupang & Widjaja, 2012). Therefore, vocational education is one way to produce a skilled and suitable workforce for the needs of the industrial world. The first strategy is to bring professional educators into the vocational field. In the curriculum, skills in communication, leadership, creative thinking, and critical thinking must be applied and adapted to the

needs of the world of work (Mutohhari et al., 2021). Vocational schools are also significant for students who have skills in developing creativity.

The world of work needs someone who can develop new ideas in business and has adequate skills. Vocational education is one of the supports to produce workers who have skills in their respective fields. Vocational schools could build an economic system by taking advantage of youth developments at this time, educating students to be interested in becoming entrepreneurs. Provision for entrepreneurship must be emphasized, especially for vocational schools. If the education and training system runs effectively, it can produce competent entrepreneurs and reduce unemployment. The world of education is responsible for creating prospective workers with the skills and abilities (Jackson, 2015; Pawar & Anscombe, 2022).

Entrepreneurship is a process of applying creativity and innovation in solving a problem and determining an opportunity to improve life. Entrepreneurship is related to entrepreneurs' attitudes, actions, and functions in starting, running, and developing businesses must-have to run a company (Rosita & Musnaini, 2020). Then Abbasov explained that vocational education is held with the assumption that individual and community needs must be met to fulfill the positions required by an efficient (Abbasov, 2019). Vocational education is also an organized educational program that prepares students to enter the world of work. The function of vocational education in nation-building is very influential in making economic standards more feasible (Payong & Wuriyanto, 2018).

Because vocational schools are very influential in forming entrepreneurs with the skills suitable to become members of entrepreneurship, improvement of quality and competent human resources (HR) will be the capital when someone enters the world of work. Not only that, but the teaching system must also develop good character starting from cooperation and leadership attitudes. The government should focus more on improving the ability of human resources (HR) through vocational education and training. Creating a workforce ready to use in the business and industrial world is the responsibility of vocational education institutions. Entrepreneurship is the process of running a company with a method of creative activities to create a change. Striving for the capacity and ability of human resources for a younger age than planned experts is the obligation of the whole school, both formal and casual.

The Entrepreneurship Development

The entrepreneurship development model in vocational schools focuses on the management of entrepreneurship in the vocational education system. This model aims to equip students with the necessary knowledge, skills, and mindset to become successful entrepreneurs.

The key elements of the entrepreneurship development model in vocational schools include:

Curriculum Integration: Integrating entrepreneurship education into the vocational curriculum ensures that students receive a comprehensive understanding of both technical skills and entrepreneurial competencies. This integration can be achieved through dedicated entrepreneurship courses or by infusing entrepreneurial principles and practices into existing vocational subjects.

Practical Learning: Providing hands-on, experiential learning opportunities is crucial in developing entrepreneurial skills. Vocational schools can organize workshops, business simulations, and internships to allow students to apply their knowledge in real-world settings. This practical approach helps students develop problem-solving abilities, critical thinking, and creativity.

Industry Partnerships: Collaborating with industry partners is essential for vocational schools to stay updated with the latest trends and demands in the business world. These partnerships can provide students with mentorship, guest lectures, industry visits, and opportunities for internships or apprenticeships. Such collaborations bridge the gap between classroom learning and industry requirements.

Business Incubation: Establishing a business incubation center within the vocational school allows students to develop their entrepreneurial ideas and turn them into viable businesses. This incubation center can provide resources, mentorship, and networking opportunities for aspiring student entrepreneurs. It creates a supportive environment for students to test their business concepts and receive guidance throughout the startup process.

Entrepreneurial Mindset Development: Instilling an entrepreneurial mindset is crucial for students to identify opportunities, take risks, and persevere in the face of challenges. Vocational schools can incorporate activities that foster creativity, innovation, and resilience. Encouraging students to think critically, embrace failure as a learning opportunity, and

develop a proactive approach to problem-solving are essential aspects of nurturing an entrepreneurial mindset.

The entrepreneurship development model in vocational schools aims to cultivate a culture of entrepreneurship, empower students to become self-reliant, and contribute to economic growth by producing skilled and innovative entrepreneurs.

These results are needed to show that students in vocational education institutions must be more active and innovative in learning because the primary key to the learning process goes well, students must be competent, and teachers must also be productive in teaching. Effective teachers and innovative students are the control holders in optimizing the learning process.

In the learning process in accordance with vocational education, prospective teachers can be directed to foster entrepreneurship through entrepreneurial experiences such as marketing assignments. Through these experiences, future educators can foster an entrepreneurial spirit in their students. Other things like reading about business opportunities, having creative ideas, and being Confident, tenacious, and optimistic (Jawas, 2017). And following developments in the field of entrepreneurship, learning from successful entrepreneurs is also very necessary. Learning strategies are critical to helping lecturers and students create, organize, and organize learning to allow learning events to occur to achieve learning goals (Ramlal, 2020).

The learning model for strengthening vocational life skills with an entrepreneurial perspective is needed to guide the learning process effectively, which has a theoretical foundation that is humanistic, flexible, adaptive, oriented to the present, has a simple learning syntax, is easy to do, can achieve the goals and learning outcomes targeted (McGrath & Powell, 2016). The learning model for strengthening vocational life skills with an entrepreneurial perspective that can be applied to the field of study should be packaged coherently with the nature of education. Philosophically, the purpose of learning is to facilitate students in the growth and development of learning awareness so that they can exercise their thoughts, feelings, and bodies in solving life problems in the real world. The learning model for strengthening (Eesley & Lee, 2021) perspective can accommodate these goals based on the constructivist paradigm as an alternative paradigm based on the constructivist paradigm following the nature of populist (Tan & Ibrahim, 2017) .

Entrepreneurship has been known for a long time and was introduced abroad, but along with developments, entrepreneurship has been widely

known by the public. Entrepreneurship development is a process of increasing skills and knowledge about business through training. Entrepreneurship development is also aimed at someone who wants to develop a business. Entrepreneurship can develop through apprenticeships and other community institutions.

Figure 1 : Conceptual Model Of Entrepreneurship Development

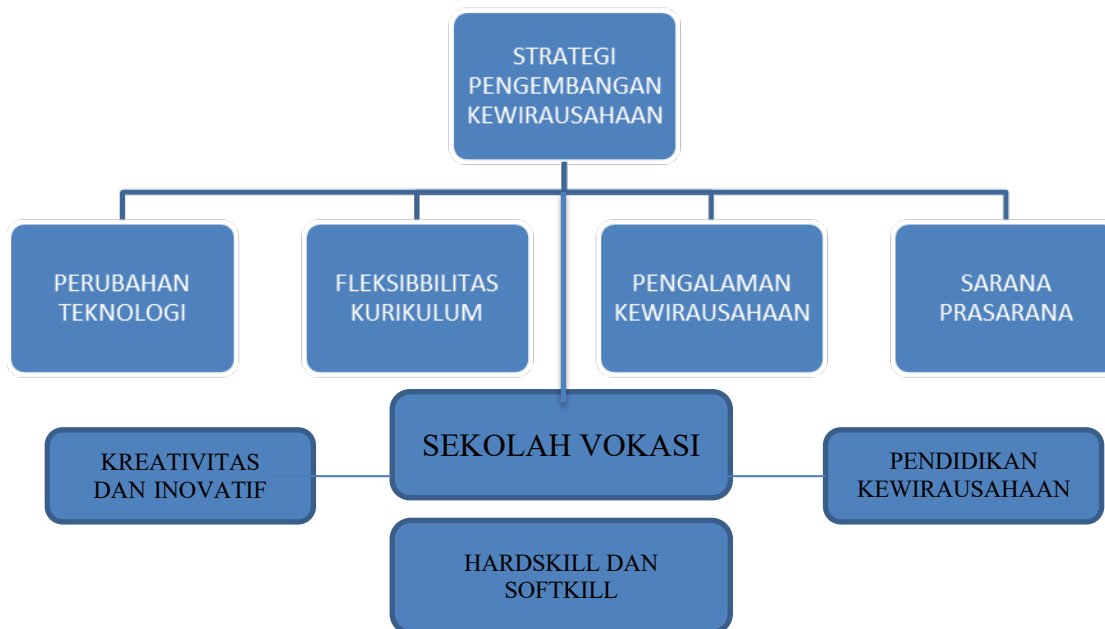


Figure 1 explains that the novelty model shows that the business improvement program is completed, for example, a business college, then continues with entrepreneurial abilities. Business actors must have creativity and be innovative in contributing. It is also supported by hard skills (special powers) and skills (soft skills). That way, they will easily face worldwide competition in the business world.

From the novelty model above, we can see that entrepreneurship education, entrepreneurial ability, creativity and innovation, and hard and soft skills are mutually sustainable. Entrepreneurial ability is a person's ability to do something, be it the ability to overcome one's mentality, formulate the vision and mission of work goals, or innovate. Then entrepreneurship education is crucial to prepare prospective workers who are creative and innovative and have the ability in the fields of hard skills and soft skills. If this entrepreneurship development program runs properly, it will be easier for someone to be involved in the world of work.

According to Roome, (Roome et al., 2011) hope to shape individual attributes to be autonomous, inventive, set out to just decide, have a leadership attitude, work hard, be honest, disciplined, and innovative (McMullen, 2015). Entrepreneurship is expected to form human resources that can positively influence the work process. The biggest challenge of vocational education at this time is entrepreneurship education. The construction and training perspective still centered on creating a workforce becomes an obstacle in synchronizing and combining full intentions to create active alums. Then switch to learning activities in vocational education institutions, learning in the classroom tends not to observe the material presented, so that material methods and discussions are more effective for evaluation on practical exams.

In the end, there are several suggestions for developing entrepreneurship through vocational schools. Vocational education has an essential role in community development. The result must be excellent, such as developing thinking and physical power. Then the sciences taught to students in vocational education institutions must be suitable to facilitate the development of students. Strengthening the soft skills of students through various ways.

Entrepreneurial education in vocational schools plays a crucial role in enhancing job readiness by equipping graduates with essential hard and soft skills, fostering creativity, and instilling a strong work ethic, thereby reducing unemployment rates. Positive teacher attitudes towards entrepreneurship significantly affect student motivation and outcomes, while vocational schools in Indonesia must adapt to global competition by implementing innovative curricula and strong industry collaborations. Government policies supporting entrepreneurial ecosystems are vital, as they encourage effective training and partnerships, leading to skilled workforce development. The long-term benefits of these practices include improved community economic growth and reduced unemployment. For research effectiveness, it's essential to articulate clear research questions, present results logically using visual aids, and highlight implications for educators and policymakers to apply findings effectively in practice.

CONCLUSION

The role of vocational education institutions or vocational schools becomes a competition in preparing a skilled workforce. When viewed, the number of competent graduates is still too minimal. Conceptually, several factors such as lack of interest in learning, lack of facilities and infrastructure,

and learning methods must be more conducive. Vocational schools not only create a workforce that has adequate skills and skills but also has a great mentality and ethics and is responsible for themselves just like everyone else. To enhance entrepreneurial education in vocational schools, it is recommended to integrate entrepreneurship principles into the curriculum, provide hands-on learning experiences through workshops and internships, establish industry partnerships for mentorship and real-world exposure, create business incubation centers for student startups, and foster an entrepreneurial mindset that encourages creativity, innovation, and risk-taking.

REFERENCE

- Abbasov, A. (2019). Academic Entrepreneurship as an Important Factor of Sustainable Economic Development. *Economic and Social Development (ESD 2019): 37th International Scientific Conference on Economic and Social Development - Socio Economic Problems of Sustainable Development*. <https://doi.org/10.1080/15226514.2019.1644286>
- Ali, N. (2015). Islamic Education Curriculum Management of SMK at Pesantren. *International Conference of Islamic Education (ICIED)*, 144–152. <http://repository.uin-malang.ac.id/80/>
- Anam, S. (2016). Pesantren Entrepreneur Dan Analisis Kurikulum Pesantren Mukmin Mandiri Waru Sidoarjo Dalam Pengembangan Dunia Usaha. *Marâji` : Jurnal Ilmu Keislaman*, 2(2), 304–329.
- Assunção Flores, M. (2021). The Multidimensionality of Teacher Professional Learning: Context, Content and Change. *European Journal of Teacher Education*, 44(4), 429–431. <https://doi.org/10.1080/02619768.2021.1973164>
- Bratianu, C., Hadad, S., & Bejinaru, R. (2020). Paradigm Shift in Business Education: A Competence-Based Approach. *Sustainability*, 12(4), 1348. <https://doi.org/10.3390/su12041348>
- Burhanuddin, B. (2019). The Scale of School Organizational Culture in Indonesia. *International Journal of Educational Management*, 33(7), 1582–1595. <https://doi.org/10.1108/IJEM-01-2018-0030>
- Chao, Y.-L. (2024). Different tracks, same greenness? Environmental literacy models integrated with teachers' environmental education practices for academic vs. technical/vocational high school students. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2357922>
- Delalande, G., Bejraoui, A., Li, M., & Benn, J. (2020). *Indonesia's Perspective on Total Official Support for Sustainable Development (TOSSD)*. <https://doi.org/10.1787/b53a1e0c-en>

- Eesley, C. E., & Lee, Y. S. (2021). Do University Entrepreneurship Programs Promote Entrepreneurship? *Strategic Management Journal*, 42(4), 833–861. <https://doi.org/10.1002/smj.3246>
- Fatur Rahman, N., Suherman, S., & ... (2022). The Pattern of Vocational School Partnership with Industry and the World of Work (IDUKA) In Order to Increase the Absorption Of Graduates of Setiabudhi Vocational School Rangkasbitung. *Journal of Positive School Psychology*, 6(5), 5191–5197.
- Hoffman, A. M. (2006). The Capability Approach and Educational Policies and Strategies: Effective Life Skills Education for Sustainable Development. *AFD, Paris*.
- Jackson, T. (2015). Entrepreneurship Training in Tertiary Education: Its Development and Transfer. *Local Economy: The Journal of the Local Economy Policy Unit*, 30(5), 484–502. <https://doi.org/10.1177/0269094215589143>
- Jawas, U. (2017). The Influence of Socio-Cultural factors on Leadership Practices for Instructional Improvement in Indonesian Schools. *School Leadership & Management*, 37(5), 500–519. <https://doi.org/10.1080/13632434.2017.1366440>
- Jones, O., Meckel, P., & Taylor, D. (2021). Situated Learning in a Business Incubator: Encouraging Students to Become Real Entrepreneurs. *Industry and Higher Education*, 35(4), 367–383. <https://doi.org/10.1177/09504222211008117>
- Kim, K. H., & Williams, N. (2020). Adaptive Creativity and Innovative Creativity. In *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship* (pp. 36–39). Springer International Publishing. https://doi.org/10.1007/978-3-319-15347-6_21
- McGrath, S., & Powell, L. (2016). Skills for Sustainable Development: Transforming Vocational Education and Training Beyond 2015. *International Journal of Educational Development*, 50, 12–19. <https://doi.org/10.1016/j.ijedudev.2016.05.006>
- McMullen, J. S. (2015). Entrepreneurial Action. In *Wiley Encyclopedia of Management* (pp. 1–2). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118785317.weom030026>
- Michaelides, D. (2020). Art of Innovation: A Model for Organizational Creativity. In *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship* (pp. 177–182). Springer International Publishing. https://doi.org/10.1007/978-3-319-15347-6_31
- Mukhadis, A., Ulfatin, N., & Putra, A. B. N. R. (2019). Synchronization of the Potential of Industrial World With School Profiles Vocational to Improve Quality and Capability Graduates of Vocational Schools in Indonesia. *Jurnal Ilmu Pendidikan*, 24(2), 47. <https://doi.org/10.17977/um048v24i2p47-54>
- Mulyadi, D. (2021). Pelaksanaan Kurikulum Jenjang Pendidikan Tinggi pada Era Revolusi Industri 4.0 Melalui Blended Learning. *Inovasi Kurikulum*,

- 18(1), 63–72. <https://doi.org/10.17509/jik.v18i1.36287>
- Mutohhari, F., Sutiman, S., Nurtanto, M., Kholifah, N., Samsudin, A., & ... (2021). Difficulties in Implementing 21st Century Skills Competence in Vocational Education Learning. *International Journal of Evaluation and Research in Education (IJERE)*, 10(4), 1229. <https://doi.org/10.11591/ijere.v10i4.22028>
- Nuryani, D., & Handayani, I. (2020). Kompetensi Guru di Era 4.0 Dalam Meningkatkan Mutu Pendidikan. *PROSIDING SEMINAR NASIONAL PROGRAM PASCASARJANA UNIVERSITAS PGRI PALEMBANG*.
- Olsson, D., Gericke, N., & Boeve-de Pauw, J. (2022). The Effectiveness of Education for Sustainable Development Revisited – a Longitudinal Study on Secondary Students’ Action Competence for Sustainability. *Environmental Education Research*, 28(3), 405–429. <https://doi.org/10.1080/13504622.2022.2033170>
- Pawar, M., & Anscombe, A. . W. (2022). *Enlightening Professional Supervision in Social Work*. Springer International Publishing. <https://doi.org/10.1007/978-3-031-18541-0>
- Prasetyo, M. A. M., & Salabi, A. S. (2023). School Effectiveness: Institutional Benchmarking for Vocational High School Management. *Jurnal Penelitian Dan Pengembangan Pendidikan*, 7(3), 474–483. <https://doi.org/10.23887/jppp.v7i3.57587>
- Putera, P. B., Widianingsih, I., Rianto, Y., Ningrum, S., & Suryanto, S. (2022). Human Resources of Research and Innovation in Indonesia: Reality, Policy Strategy, and Roadmap. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning*, 6(3), 386–401. <https://doi.org/10.36574/jpp.v6i3.365>
- Ramadhan, M. A., & Ramdani, S. D. (2014). Vocational Education Perspective on Curriculum 2013 and its Role in Indonesia Economic Development. *Economic Development*. <http://documents.worldbank.org/curated/en/1968/02/1753780/indonesia-economic-development-vol-6-6>
- Ramlal, A. (2020). Principals’ Experiences Leading Strategic Planning in High-Performing Primary Schools in Trinidad and Tobago. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 81(5-A), 1–18.
- Rizal, R., Misnasanti, M., Shaddiq, S., Ramdhani, R., & Wagiono, F. (2020). Learning Media in Indonesian Higher Education in Industry 4.0: Case Study. *International Journal on Advanced Science, Education, and Religion*, 3(3), 127–134. <https://doi.org/10.33648/ijoaser.v3i3.62>
- Roome, N., Bevan, D., & Lenssen, G. (2011). Corporate Responsibility and the Business Schools’ Response to the Credit Crisis. In *Business Schools and Their Contribution to Society* (pp. 223–236). SAGE Publications Ltd.

- <https://doi.org/10.4135/9781446250822.n22>
- Rosita, S., & Musnaini, D. M. F. (2020). *Commitment, Satisfaction and Motivation in Improving Organizational Citizenship Behavior and Its Impact on Lecturer Performance in Higher Education*. Universitas Jambi.
- Samrotussa'adah, Achmad Sanusi, Cahya Syaodih, & Asep Ahmad Sukandar. (2022). Learning Management In The Development Of Social Skills For Madrasah Aliyah Students (Qualitative Analytical Descriptive Study on MAN 1 and MAN 2 tasikmalaya regency). *International Journal Of Humanities Education and Social Sciences (IJHESS)*, 1(6). <https://doi.org/10.55227/ijhess.v1i6.203>
- Sari, D., Rejekiningsih, T., & Muchtarom, M. (2020). *Students' Digital Ethics Profile in the Era of Disruption: An Overview from the Internet Use at Risk in Surakarta City, Indonesia*.
- Sartika, D., Nengsi, A. R., & ... (2022). Work Readiness of Graduates Responding to User Needs for a "Ready to Work" Workforce from University Perspective. *Idarah (Jurnal Pendidikan Dan Kependidikan)*, 6(1), 37-50. <https://doi.org/10.47766/idadrah.v6i1.490>
- Sharma, S., & Sharma, S. K. (2020). Probing the Links Between Team Resilience, Competitive Advantage, and Organizational Effectiveness: Evidence from Information Technology Industry. *Business Perspectives and Research*, 8(2), 289-307. <https://doi.org/10.1177/2278533719887458>
- Shrivastava, U., & Acharya, S. R. (2021). Entrepreneurship Education Intention and Entrepreneurial Intention amongst Disadvantaged Students: an Empirical Study. *Journal of Enterprising Communities: People and Places in the Global Economy*, 15(3), 313-333. <https://doi.org/10.1108/JEC-04-2020-0072>
- Simatupang, T. M., & Widjaja, F. B. (2012). Benchmarking of Innovation Capability in the Digital Industry. *Procedia - Social and Behavioral Sciences*, 65, 948-954. <https://doi.org/10.1016/j.sbspro.2012.11.225>
- Suharno, Pambudi, N. A., & Harjanto, B. (2020). Vocational Education in Indonesia: History, Development, Opportunities, and Challenges. *Children and Youth Services Review*, 115, 105092. <https://doi.org/10.1016/j.childyouth.2020.105092>
- Susanto, H. (2013). Faktor-faktor yang mempengaruhi kinerja guru sekolah menengah kejuruan. *Jurnal Pendidikan Vokasi*, 2(2). <https://doi.org/10.21831/jpv.v2i2.1028>
- Tan, C., & Ibrahim, A. (2017). Humanism, Islamic Education, and Confucian Education. *Religious Education*, 112(4), 394-406. <https://doi.org/10.1080/00344087.2016.1225247>
- Uemura, M. R. B., & Comini, G. M. (2022). Determining Factors in the Performance of Integrated Vocational Education Schools. *Revista de Gestão, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/REGE-12-2020-0123>
- Yamin, M., Aswirna, P., Asnawir, Fahmi, R., & Nurdin, S. (2017). Material Effect on Entrepreneurship Learning towards Interest in Entrepreneurship

Activities of Students. *Journal of Research in Marketing*, 7(2), 544.
<https://doi.org/10.17722/jorm.v7i2.182>