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Teaching Factory (TeFa) Learning Strategy and Risk Management at SMK Negeri 1 Garut

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The absorption of SMK graduates in worklife is a crucial problem. TeFa is a learning tool at SMK Negeri 1 Garut that produces products/services from students and the use of products/services by the community. competence in Accounting Financial Institutions (AKL) of SMK Negeri 1 Garut is still transforming towards the implementation of TeFa learning. The research method includes a population of involved TeFa. students in administrators, and educators. Data were obtained questionnaires. through observations and focus group discussions. This research is a descriptive study using the SWOT analysis method and risk review on the TeFa component. The results showed that TeFa learning uses strengths and opportunities with moderate risk analysis results. Risk considerations are taken into account in the analysis of risk management and handling, with the respondents of educators finding moderate risk overall, as well as analysis of opportunities and strategies for achieving moderate and high results. The next step in risk analysis is using a strategy by accelerating the implementation of TeFa learning to produce competent workforce graduates according to market needs.

Keywords: Risk Management, Strategy, SWOT, TeFa learning, Vocational High School.

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INTRODUCTION

Graduates of globalization that know no boundaries and distances must prepare a professional and competent human resource sector to improve the quality of competition. With the policy strategy of increasing human resources, it can create available and used experts in the industrial world to be absorbed gradually. The concept of this pattern is not only socialized in the form of a narrative but also needs to be applied from a field-based aspect by following the Teaching Factory learning study in the scope of education (Delfiandra & Abadi, 2022). Teaching Factory (TeFa) is a curriculum learning model that utilizes the basic structure of the school to create industrial opportunities in order to increase the ability in productive subjects for students. The opportunity is profitable in terms of profit, material, and moral. Even at school, students are trained to face real work challenges based on the skills that must be possessed. That way, they will still get handson experience in the form of an industrial environment (Purwanto, Novitasari, & Asbari, 2022).

In education, the main mission of SMK is to prepare students as prospective workers who are prepared to enter IDUKA (Industry and the World of Work). SMK is required to meet the community's needs, namely the demand for labor. So that students are required to have professional skills and attitudes in their fields (Friatna et al., 2022). This is stated in Article 15 of the Law of the Republic of Indonesia number 20 of 2003 with the main explanation, namely that SMK graduates are prepared to be able to work in the field of business and industry. They can continue their education to the next level through vocational education to improve in certain fields as well as conduct entrepreneurship. The legal basis is a reference in preparing students to meet the target after graduation: Work, Continuing Education, and Entrepreneurship (BMW) (Sunggoro, Ghoer, & Kosasih, 2022). But in fact, the implementation of TeFa initiated by the SMK Directorate only focuses on SMK with technical expertise programs such as industrial engineering, motorcycles, etc. In fact, business management programs, such as accounting, also need real competitiveness before they graduate from an education outside of industrial work practices. As for the case studies, we can see that many private banks provide business loan services with low and light tax returns. With entrepreneurial motivation since school can instill an entrepreneurial mental attitude so that after graduating students can start their own business. To improve students' entrepreneurial skills and motivation, one of the innovations developed is entrepreneurship education (Hariati, Yahya, & Irfan, 2022). With this rate of occurrence, it is said that the missing link between schools and industry in this field is reflected in 65% of graduates of business and management vocational schools, including unemployed accounting skills programs. Based on these facts, it is necessary to have a new concept regarding the management of teaching factories for accounting expertise programs in vocational schools (Rohmah, Suyatmini, Hasanah, & Setiyana, 2021).

In research, existing or previous articles on TeFa, tend only to describe the application of case studies and cause-effect without a SWOT analysis. Therefore, researchers are interested in conducting research with the title Teaching Factory Learning Strategy (TeFa) and Risk Management at SMK Negeri 1 Garut. This study puts forward risk management from the researcher's point of view, based on application classification and segmentation, with a SWOT review. It is hoped that this review can be a long-term description and visualization of whether the TeFa model can or cannot be applied at the SMK level in the management department, especially in the accounting field.

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LITERATURE REVIEW

According to Hikmatiyar and Anggoro (2021), risk management put the main role of the industry to carry out independent supervision in ensuring product safety. The concept of risk management in education has the meaning of the role of actors in operating or carrying out activities of educational institutions to improve and develop complex activities that can increase unexpected negative risks at any time. The concept of education risk management in its management needs to be balanced between strategy and implementation so as to get maximum results in its operation (Setiawan, Ningsih, Nurgiansyah, & Rohman, 2022). Those risk management is the weak management of education in SMK, which often becomes a serious discussion in various forums and seminars. Vocational graduates are said to be very vulnerable to being fully accommodated in the employment of industrial companies within the scope of management because special skills services need to be managed optimally and have a large enough impact on schools (Mesiono, Nasution, Akhir, Tarmizi, & Suwandi, 2022)

One of the efforts to improve the quality of human resources is made through the distribution of quality education services. A quality workforce will be born from a quality education system that is able to implement the knowledge with the skills needed by the business world and the industrial world (IDUKA) for all implementers (Roesminingsih, Hariastuti, & Agustina, 2022). Implementation is an effort or process of action to activate group members so that members are willing and trying to achieve organizational goals because all members must have a desire to achieve these goals (Akbar, Iriantara, & Hanafiah, 2022).

Achieving organizational goals, especially in competency-based education and entrepreneurship, requires a SWOT review. SWOT analysis is a strategic management tool to identify the extent to which the organization's current strategy is able to deal with changing places in the business environment (Novia, Saiful, & Utomo, 2021). The analysis is also used to prepare students for the Skills Competency Test activities. Expertise Competency Test (UKK) is an assessment held specifically for SMK students to measure student competency achievement (Slamet, Pratikno, & Maulan, 2021). Expertise or skill is an act of testing the abilities and capacities acquired through longterm activities that are intentional, systematic, and sustainable to smoothly and adaptively carry out complex work activities or functions that involve ideas (cognitive skills), things (technical skills), and society (Monica & Hadiwinarto, 2020). Productive groups are subjects whose time allocation is adjusted to the needs of the expertise program and can be held in time blocks or other alternatives (Mariati, 2021). All of this refers to the vocational education curriculum which focuses on applied sciences. Vocational education is part of life skills education which requires students to learn to be skilled in identifying problem-solving as a characteristic of vocational education (Putera & Shofiah, 2021). Problem-solving is a very important skill for students, especially in vocational education (Sulistyanto, Mutohhari, Kurniawan, & Ratnawati, 2021)

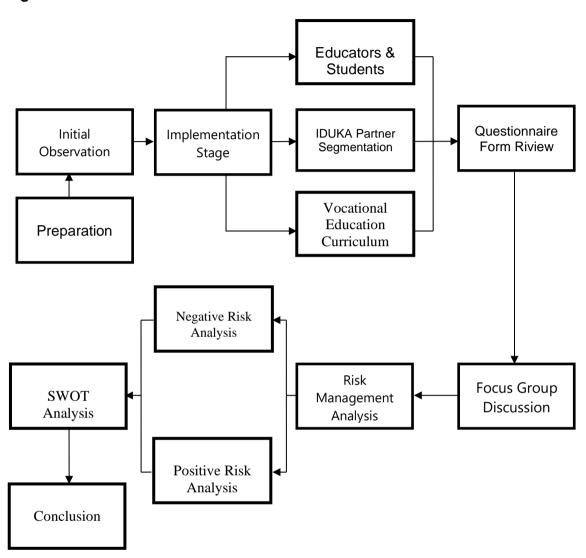
RESEARCH METHOD

This study uses a review of the application of TeFa in the education scope of SMK N 1 Garut. This system accommodates all forms of opportunities and risks whether the TeFa model is implemented or not. This method model can also be used by SMK N 1 Garut as a reference and evaluation and risk management in the long term while still paying attention to the applied vocational education curriculum, according to the direction of the Ministry of Education and Culture. The object of this research is the teaching staff, including productive teachers, competency teachers, vice principals for education, and school principals. In addition, IDUKA partners at SMK N 1 Garut also focus on developing discussions. The two objects are then implemented with reference to the Vocational

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education curriculum, then retrieve the information using a questionnaire form, FGD, and risk management analysis, with the results of the data being processed in a SWOT study to draw conclusions. The flow of the research method can be seen in Figure 1.

Figure 1. Research Method Flow



RESULTS

The results of the study with a SWOT analysis review on the questionnaire form recapitulation were sourced from interviews with educators at SMK N 1 Garut, which were then processed while still paying attention to the portion of the Vocational education curriculum. However, the identification of the risks obtained leads to the scope of negative risk management, which can be seen in Table 1 below.

Table 1. Analysis of Risk Management and Handling with Respondents of Educators

N o	Identification of Risk	Root Causes	Impact (-)	Type of Risk	Action Plan
1	TEFa Accounting Expertise Competence	There are components of the TeFa learning tools	Students have not felt the working atmosphere	Moderate	Evaluation of the components

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	has not been implemented optimally	that have not been fulfilled	prevailing in the industry		of the TeFa learning tools
2	Lack of experienced teachers in the industry	The teaching load is too high	Most of the teachers do not have industry experience resulting in LO achievements not being achieved according to IDUKA	Moderate	Evaluating the work program of accounting expertise competency
3	Public recognition through product/servi ce adoption	No products/servi ces have been produced or produced	There is no public recognition regarding competent products/services accounting skills	Moderate	Increase collaboration with IDUKA

Source: Data Processed by Researchers

The results of the opportunity analysis and achievement strategies obtained by researchers tend to lead to positive risk management impacts.

Table 2. Analysis of Opportunities and Strategies For Achievement

No	Opportunities	Impact (+)	Types of Opportunities	Action Plan
1	Policy Link & match between SMK and IDUKA	Improvement of facilities or quality improvement of education	Moderate	Collaborating with universities and IDUKA partners as well as grants from the government
2	The excellence of students for competence	Need for graduates with special skills to increase so that job opportunities are open	High	Prepare curriculum according to IDUKA and CertificatesCompetence

Source: Data Processed by Researchers

From Tables 1 and 2, researchers conducted a more in-depth analysis based on the scope of risk management, if the TeFa model was not applied and if it was carried out on students.

Risk Management Negative Impact

The dominance of TeFa accounting expertise competence has not been optimally implemented because one component of TeFa learning has not been fulfilled, which becomes a serious obstacle. The same thing also affects the public's treatment of product/service recognition (moderate risk). If this becomes an obstacle and causes the TeFa model not to be implemented in SMK learning, it will have a negative impact on students, namely as follows:

1. Psychological Risk
If the TeFa model is not applied, the psychological risk makes the students unable to
control fear and anxiety when they graduate from school. If this risk is not managed

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properly, it will impact the work ethic because they will continue to think about the failure that must be accepted if taking actions that are said to be serious. In addition, the psychological risk will change the character of someone who is not responsible for managing tasks. This can happen because it is recognized that the work will not get public recognition when it has been carried out.

2. Feeling a Lack of Confidence

Everyone will surely face the risk of lack of confidence if they do not prepare themselves carefully. Likewise, if the TeFa model is not applied by vocational students, they tend to feel less confident when competing and doing the assignments even though they are in accordance with their interests and talents.

3. Aggressive

We know that this country prioritizes the Pancasila economy. If TeFa is not specifically applied in education, students tend to have aggressive economic sensitivities. This means that students are only oriented to the principle of profit when competing in entrepreneurship with competitors, without thinking about the impact or risk of the steps taken in the long and short term.

4. Expansive

This trait tends to appear when students want to master certain economic fields without any preparation and have the negative potential to adopt a capitalist economy. On the other hand, its expansive nature tends to lead to liberal economic policies, so it has a negative impact on students if they do not have economic provisions that are oriented to Pancasila values through TeFa activities.

To assess the negative risks described above, mitigation or action plans must be carried out in the form of implementing more consistent administrative evaluations and establishing TeFa. As for negative risk management, if TeFa is not carried out in SMK N 1 Garut's learning, it can be seen in Figure 2 following.

Figure 2. Negative Risk Management



Risk Management Positive Impact

Opportunities for student excellence in competence (high chances) from TeFa's research using the risk management concept method at SMK N 1 Garut, it was found that the distribution of positive risks was described as follows:

1. Productive Work

Experience is mandatory in vocational education, especially at the SMK level. The TeFa module provides provisions and applied knowledge to be able to compete in the global world. Furthermore, they will get added value for themselves when they are included in the selection of work climate. This concept creates productive value in the younger generation, contributing to the country's economic growth because

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graduation with skills and talents is a very special thing, and it is expected by external industry parties to be able to provide solutions when they enter the given responsibilities.

2. Work Climate

A positive working climate in the work field contributes to lowering the unemployment rate index. Moreover, it is such a great achievement for SMK students when they graduate and open up job opportunities. Such action is said to be an obligation for a healthy and superior economic conception because competitive human resources must accompany the government's policy in maintaining the economic climate.

3. Improved Work Ethic

The two points above will not work for someone who does not have a work ethic. TeFa provides an overview of the work ethic that must be possessed by students of SMK N 1 Garut, especially in the accounting field. For instance, having a passion for processing and critiquing financial data sets. Work ethic itself can be interpreted as a sense of obligation and responsibility of a worker. This trait or character provides a positive career sense for oneself, the environment, and company leaders.

4. The Market Rejuvenation

The concept of market rejuvenation is not only carried out through central or local government policies. Vocational High School students can participate using the TeFa or entrepreneurial-oriented model. Products produced from student creativity in entrepreneurship are expected to be a revitalization of traditional markets to compete with modern markets. Based on previous expert research literature, the level of comfort is the main thing to be in line with the modern market. However, TeFa's research and risk management state that the dominance of convenience will have no effect if the product variety is not able to compete with modern markets such as minimarkets.

5. Improving Competence

Competence improvement is a special thing that cannot be bought because it grows rooted in one's experiences. The TeFa model emphasizes that students of SMK N 1 Garut can experience real workplace and economic competition. For example, an accountant must compete with other accountants in processing financial data for quarterly and periodic bookkeeping. It is true that the workplace can identify business competition, with the philosophy of taking opportunities at the right time, and will be left behind if they are silent without any breakthrough. Therefore, the TeFa model can foster vocational students to be more active in taking opportunities, actions, and risks, in all aspects of life, especially in a healthy economy.

6. Entrepreneurial Character

The previous five points cannot be carried out consistently without entrepreneurial character. Character is a manifestation of the nature of a person's identity, in controlling himself, as a form of personality. For this reason, the TeFa model focuses on characters who can adapt to an environment that has potential for vocational students. Both from an economic perspective, studying skills in the financial sector, as well as talent interests in other fields.

The positive risk management of TeFa research at SMK N 1 Garut can be seen in Figure 3 below.

Figure 3. Positive Risk Management

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SWOT Analysis

The positive and negative risk management was recapitulated with a SWOT review. Researchers use this analysis to make decisions based on 3 objects, namely educators and students, IDUKA partners, and the education curriculum. The results of the SWOT analysis in the form of descriptive data can be seen as follows:

1. Strength

Based on positive and negative risk management considerations, this study found a moderate risk analysis. The implication of implementing the most substantial strategy is to accelerate the implementation of TeFa learning and produce competent graduates according to market needs. Therefore, competence is a form of best graduates and is highly expected from the school and IDUKA partners so that they can positively impact the schools, companies, and the country's economy.

2. Weakness

When TeFa cannot be applied by SMK N 1 Garut have, it has been explained based on a negative risk management review, such as psychological risks, lack of confidence, aggressiveness, and expansiveness as a result of the lack of public recognition of products/services.

3. Opportunity

The opportunity that can be generated from the TeFa model is the creation of students with competent graduate competencies, as expected from qualified human resources, to continue synergizing in globalization in the manufacturing industry of SMK partners.

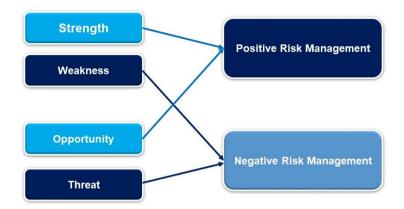
4. Threat

This result is the same as the student's weaknesses: psychological risk, lack of confidence, aggressiveness, and expansiveness. The schema of the relationship between SWOT and risk management can be seen in Figure 4.

Figure 1. SWOT Relationship With Risk Management

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DISCUSSION

Positive risk management tends to focus on strengths and opportunities. This analysis is used to test whether SMK N 1 Garut applies the TeFa learning model and has a good impact in the long term. Meanwhile, Weaknesses and Threats tend to lead to negative risk management. This is also a reference for SMK N 1 Garut if they do not apply the TeFa model. In fact, the TeFa Vocational School model has environmental characteristics, and the atmosphere of school regulations is conditioned based on industry standards or workplaces in the real field. These characteristics are carried out by learning to use devices or instruments to support students' activities. The output of the model is in the form of a product, intact, and has a market selling value. In addition, TeFa also has outlets/business centers for marketing products when production has been carried out and has regular customers as a form of strategic partner at SMK N 1 Garut.

In addition, the TeFa model has basic principles or guidelines in its application as follows:

1. Efficient

In its application, the TeFa system prioritizes the principle of efficiency in terms of equipment, financing, and maintenance. But still, they need to pay attention to the quality of the product/service. As in the field of accounting, an accountant must perform paper or bookkeeping efficiently so that when read by outsiders, it can be understood easily. This is crucial for SMK graduates in order to still have an outstanding work ethic.

2. Effective

This system is a model that creates an atmosphere of teaching and learning activities in accordance with the conditions of the workplace (IDUKA). This pattern is intended to provide the delivery of competencies based on the interests and talents of students at SMK N 1 Garut. Effectiveness also leads to emphasizing the amount of time required for competence so that educational substance can be easily absorbed and implemented responsibly.

3. Integration

Integration means a relevant relationship exists between the content of the Vocational education curriculum material and the vocational specialization in SMK N 1 Garut students.

4. IDUKA Cooperation

There is a collaboration between SMK N 1 Garut and IDUKA in order to increase productivity from the aspect of entrepreneurship, skills, competencies, expertise, and psychological factors. Competence in developing product innovation that is creative and has an entrepreneurial spirit has an effect on the originator of students' interest in entrepreneurship in the classroom. The ability of students in the subject of creative products and entrepreneurship can be seen from the competencies they already have. This can also affect students' interest in entrepreneurship. For

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example, students who are less competent in mastering the competence of creative and entrepreneurial products will affect their interest in entrepreneurship because these students do not want to know more about producing a product well and also want to understand how to market their products well (Purwanto et al., 2022).

Another reason the researcher chooses the SWOT method with the support of Risk Management data is to dissect the perception of actions that must be overcome when they arise due to unexpected missed activities. It is also said to be very good for Vocational education that is ready to work, and there is a revolution of improvement in what must be perfected and what must be maintained. Then as an evaluation for the main research subjects (educators and students), they are always ready to face changes and the changing workforce climate, especially the impact of globalization on the competition for foreign workers entering the country.

CONCLUSION

Learning Strategies *Teaching Factory* at SMK Negeri 1 Garut resulted in the dominance of positive impacts for educational institutions. This concept proves to be more useful when applied by vocational students. Skills, expertise, competencies, psychological aspects, and mental, can be packaged in an integrated manner in the TeFa model. The context of the relevance of TeFa is beneficial not only for education but also for the industrial sector in creating a professional and highly competitive workforce climate from the human resources sector.

Risk management analysis with review SWOT, the results of the study show that TeFa learning uses strengths and opportunities with moderate risk analysis results. Risk considerations are considered in the analysis of risk management and handling, with the respondents of educators finding moderate risk overall, as well as analysis of opportunities and strategies for achieving moderate and high results. The next step in risk analysis is using a strategy by accelerating the implementation of TeFa learning, aiming to produce competent workforce graduates according to the industry and market needs.

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DECLARATION OF CONFLICT INTEREST

The researcher declares that there is no potential conflict in this study concerning the research, authorship, or publication of this article.

REFERENCES

- Akbar, H., Iriantara, Y., & Hanafiah. (2022). Implementasi Manajemen Prakerin Untuk Meningkatkan Keterserapan Lulusan Siswa SMK Pada Industri Dunia Usaha Kerja. *Pendidikan Universitas Garut*, 1, 548–560. doi: 10.52434/jp.v16i1.1691
- Delfiandra, B., K, A., A, Y., & Abadi, Z. (2022). Pengaruh model pembelajaran Teaching Factory dan kesiapan guru terhadap hasil belajar siswa pada mata pelajaran teknik pemesinan. *Vomek*, *4*(1), 119–124. doi: 10.24036/vomek.v4i1.319
- Friatna, Y., Andriani, R., Adhirajasa, U., Sanjaya, R., Adhirajasa, U., Sanjaya, R., ... Sanjaya, R. (2022). Manajemen pengembangan kompetensi life skill siswa SMK PGRI Jatisari Kabupaten Karawang. *Manajemen Jasa*, *4*(1), 18–26.
- Hariati., Yahya, M., & Irfan, A. M. (2022). Evaluasi pelaksanaan teaching factory dalam

https://ejournal.aibpmjournals.com/index.php/IJTHAP

- meningkatkan keterampilan dan motivasi berwirausaha siswa SMK di Kota Makassar. *UNM of Journal Technologycal and Vocational*, *6*(2), 68–76.
- Hikmatiyar, A.F., & Anggoro, Y. (2021). Policy evaluation on food safety regulation: Study case on risk management program on food safety in Indonesia. *Journal of International Conference Proceedings*, *9*(1), 23-31. doi: 10.32535/jicp.v42i.1255
- Mariati. (2021). Analisis kesiapan kerja lulusan SMK Kompetensi Keahlian Akuntansi di Kota Medan pada masa pandemi Covid-19. *Universitas Muhammadiyah Sumatera Utara*, 2(1), 962–967. doi: 10.30596%2Fsnk.v2i1.8418
- Mesiono, Nasution, A., Akhir, M., Tarmizi, A., & Suwandi. (2022). Manajemen pendidikan menengah dan pengembangannya pada SMK Swasta Apipsu Medan. *Pendidikan Tambusai*, 6, 11877–11884. doi: 10.31004/jptam.v6i2.4333
- Monica, S., & Hadiwinarto. (2020). Pengaruh keterampilan membuka dan menutup pembelajaran terhadap keaktifan belajar siswa di Sekolah Menengah Kejuruan (SMK) Negeri 1 Lubuklinggau. *Jurnal Administrasi Manajemen Pendidikan*, 3(2), 12–23. doi: 10.32502/amp.v312.3054
- Novia, C., Saiful, S., & Utomo, D. (2021). Analisis SWOT peningkatan daya saing pada UKM keripik nangka di Kabupaten Malang. *Teknologi Pangan: Media Informasi dan Komunikasi Ilmiah Teknologi Pertanian*, 12(1), 61–69. doi: 10.35891/tp.v12i1.2460
- Purwanto, A., Novitasari, D., & Asbari, M. (2022). The role of leadership, Teaching Factory (TEFA) program, competence of creative products and entrepreneurship on entrepreneurial interest of the vocational school students. *International Journal of Social and Management Studies*, *3*(5), 58–64. doi: 10.5555/ijosmas.v3i5.185
- Putera, F. Z., & Shofiah, N. (2021). Model kurikulum kompetensi berpikir pada pembelajaran Bahasa Indonesia di perguruan tinggi vokasi. *Pendidikan Bahasa Dan Sastra Indonesia*, 6(1), 29–36. doi: 10.21107/metalingua.v6i1.10094
- Roesminingsih, V. M., Hariastuti, R. T., & Agustina, F. (2022). Perencanaan peningkatan mutu sekolah di SMKN Purwosari Bojonegoro. *Jurnal Pendidikan Tambusai*, *6*(1), 1892–1906. doi: 10.31004/jptam.v6i1.3234
- Rohmah, W., Suyatmini., Hasanah, U. S., & Setiyana, B. E. S. (2021). Pola pembelajaran akuntansi Sekolah Menengah Kejuruan dengan mengadopsi Teaching Factory. *Jurnal Pendidikan Ilmu Sosial*, 31(2), 74–81. doi: 10.23917/jpis.v31i2.15395
- Setiawan, F., Ningsih, A. W., Nurgiansyah, H., & Rohman, I. A. (2022). Prosedur aktualisasi manajemen risiko pendidikan dalam meningkatkan kualitas pendidikan. *Jurnal Penelitian Guru Indonesia*, 2(2), 204–214. doi: 10.36088/tsaqofah.v2i2.321
- Slamet., Pratikno, H., & Maulan, Y. M. (2021). Workshop jarkom berbasis cisco dan mikrotik untuk persiapan Uji Kompetensi Keahlian (UKK) bagi guru dan murid di SMK Kartika 1 Surabaya. *Journal of Service Learning*, 7(1), 1–7. doi: 10.9744/share.7.1.1-7
- Sulistyanto, S., Mutohhari, F., Kurniawan, A., & Ratnawati, D. (2021). Kebutuhan kompetensi di era revolusi industri 4.0: Review perspektif pendidikan vokasional. *Jurnal Taman Vokasi*, *9*(1), 25–35. doi: 10.30738/jtv.v9i1.7742
- Sunggoro, S., Ghoer, H. F., & Kosasih, U. (2022). Factory learning management in growing the entrepreneurship of Vocational School Students in Karawang District (Case Study at SMK Rismatek Karawang and SMK Lentera Bangsa Karawang). Journal of Industrial Engineering & Management Research, 3(3), 277–292. doi: 10.7777/jjemar.v3i3.368