

The Influence of Learning Motivation and Student Creativity on Entrepreneurial Interest in Teaching Factory

Irna Susiani*, Soeryanto, Meini Sondang Sumbawati, and Lilik Anifah

Universitas Negeri Surabaya, Surabaya, Indonesia

*Email: irnasusiana@gmail.com

Abstract: This research aims to examine the influence of learning motivation and students' creativity on entrepreneurship interest in Teaching Factory learning. This type of research is quantitative research with 80 students of Kartanegara Wates Vocational School, Kediri Regency as research subjects. The data collection technique used a questionnaire. Multiple linear regression used as data analysis. The research results showed that the partial test (t-test) on learning motivation was $.000 < .050$ and for creativity, it was $.00 < .050$. Meanwhile, the results obtained from the F-test show a value of $.000 < .050$. The determination test results obtained a value of 53.7%. The findings showed that learning motivation has a significant effect on interest in entrepreneurship. Additionally, creativity also shows a significant influence on interest in entrepreneurship. Learning motivation and creativity simultaneously have a significant influence on the entrepreneurial interest of Kartanegara Wates Vocational School students.

Keywords: *learning motivation, interest in entrepreneurship, student creativity, teaching factory*

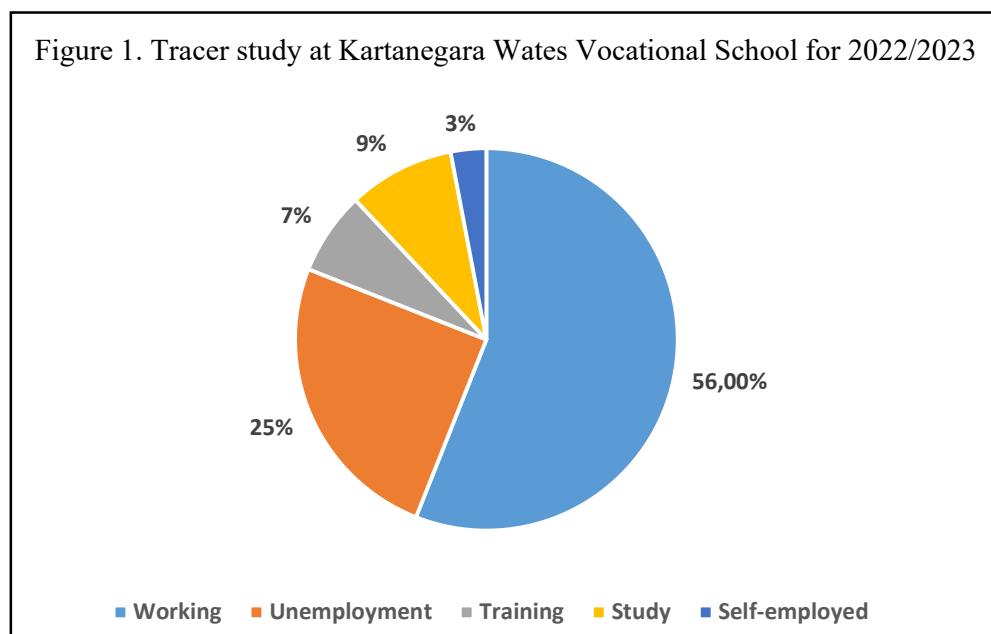
How to Cite (APA 7th Style): Susiani, I., Soeryanto, Sumbawati, M. S., & Anifah, L. (2024). The influence of learning motivation and student creativity on entrepreneurial interest in teaching factory learning. *Jurnal Kependidikan*, 8(1), 83-95. <http://dx.doi.org/10.21831/jk.v8i1.71880>

INTRODUCTION

Based on BPS data for 2023, statistics reveal that Vocational High School (VHS) graduates in Indonesia face a significant unemployment rate of 9.60 percent, ranking first. Senior high school graduates follow closely behind with an unemployment rate of 7.96 percent. Despite being relatively high, these figures have decreased compared to February 2022 and 2021, which stood at 8.35 percent and 8.55 percent respectively. Subsequently, unemployment rates for Diploma I/II/III graduates were recorded at 5.91 percent, while Diploma IV, S1, S2, S3 graduates faced a rate of 5.52 percent, and junior high school graduates had a rate of 5.41 percent (BPS, 2023) The high poverty rate in Indonesia is attributed to the surplus of vocational school graduates compared to available job opportunities.

Many vocational school graduates lack the necessary qualifications expected by industries or possess insufficient competency, as evidenced at Kartanegara Wates Vocational School in Kediri Regency. A significant number of graduates remain unemployed, as indicated by the 2022/2023 tracer study conducted by the special job exchange. At Kartanegara Wates Vocational School, only about 56% of graduates are absorbed into the workforce, with 7% undergoing further training, 9% pursuing higher

education, and 3% engaging in entrepreneurship. The remaining 25% are still unemployed due to inadequate teaching staff and insufficient school infrastructure. The lack of resources, such as practical tools, hinders effective learning, as one tool is shared among 10 students, requiring teachers to divide students to ensure active participation in practical activities.



The application of industrial culture among students is still lacking, evident in students lacking responsibilities and seriousness in practical activities, leading to results that do not meet industry standards. Vocational High Schools with teaching factory model programs aim to better prepare graduates with skills for entrepreneurship, enabling them to create job opportunities post-graduation and effectively tackle societal challenges. Kartanegara Wates Vocational School is dedicated to vocational education, playing a vital role in readying students for the workforce or entrepreneurship.

Therefore, this research can contribute to improving the effectiveness of vocational education by exploring the factors that influence students' entrepreneurial interest. Teaching factory is a learning model that immerses students in a real work environment. In the context of Kartanegara Wates Vocational School, this approach is expected to offer students profound practical experience in specific fields. Hence, it is crucial to expand the scope of this learning to inspire and enhance student creativity. According to the Directorate of Vocational School Development in 2017, the development of learning through the teaching factory aims to cultivate character and work ethic (discipline, responsibility, honesty, cooperation, and leadership as required by the industry), enhance the quality of learning outcomes by moving beyond mere competency provision (competency-based training) to training that fosters the ability to create goods/services (production-based training). This serves as a platform for developing technopreneurial goods or services, instilling an

industrial culture in schools, and generating revenue for schools through the department production unit, which also serves as a practical training ground for students.

Teaching factory is a learning activity where students directly engage in production activities to create goods or services (Sudiyanto, Sampurno, & Siswanto, 2013). The goods or services produced are of high quality, suitable for sale, and accepted by the public or consumers. The goal of teaching factory learning is to replicate the authentic product/manufacturing environment within the classroom (Chryssolouris *et al.*, 2016). The actual production site serves as a teaching tool to enhance educational activities with practical knowledge. Therefore, Kartanegara Wates Vocational School has partnered with PT. Bambang Jaya Mojokerto to offer insights into industrial culture and enhance students' machining skills.

Learning motivation is a crucial factor that can impact the level of students' engagement in the learning process. This study aims to shed light on the correlation between students' learning motivation and their inclination towards entrepreneurship following their involvement in the Teaching Factory program. According to Sardiman (2016) as cited by James O. Whittaker, motivation is the catalyst that prompts individuals to pursue goals stemming from that motivation, while learning is the process through which behavior is altered through practice or experience. Rangkuti and Wahidah (2017) also affirm the significant connection between learning motivation and interest in entrepreneurship, defining motivation as the driving force behind task completion.

Creativity plays a crucial role in cultivating an entrepreneurial mindset. By exploring the potential for enhancing student creativity through Teaching Factory learning, this study can significantly enhance the development of more impactful learning methodologies. According to Ardiansyah *et al.* (2021), when students improve their creative skills, they can generate more engaging and innovative products, consequently boosting their enthusiasm for entrepreneurship. This study seeks to provide valuable insights into the enhancement of student motivation and creativity through the Teaching Factory approach, and how this can effectively stimulate interest in entrepreneurship.

Previous research highlights the crucial role of vocational high schools in cultivating skilled workers and enhancing human resource capabilities. These institutions serve as hubs of excellence for vocational education, equipping students with practical and pertinent training to thrive in the professional realm. Vocational high schools are instrumental in shaping the labor market and fostering economic growth (Nur *et al.*, 2023). Subsequent studies have identified various factors that impact interest in entrepreneurship. Notably, creativity exerts a positive and substantial influence on entrepreneurial interest (Ardiansyah *et al.*, 2021). Moreover, students with higher levels of creativity are more likely to be inclined towards entrepreneurship. Additionally, students who gain valuable practical industrial experience tend to exhibit heightened interest in entrepreneurship (Hariyani & Syamwil, 2022).

Interest in entrepreneurship is a student's inclination or predisposition towards entrepreneurship, influenced by various factors such as the surrounding environment, social circle, family, educational level, and external circumstances. According to Sholahuddin *et al.* (2021), teaching factories play a crucial role in stimulating interest

in entrepreneurship. The teaching factory model significantly shapes students' mindset and motivation towards entrepreneurship, which is vital for their future career readiness and economic contribution to the local community (Nur *et al.*, 2023). Additionally, research indicates that the teaching factory, as an educational tool, effectively enhances the entrepreneurial skills of vocational school students. Gozali *et al.* (2018) found that students in classes utilizing the teaching factory approach demonstrate greater improvement in entrepreneurial competence compared to those in traditional classes.

Teaching factories are based on the equipment used (facilities and infrastructure), the curriculum used, and teacher competence, which can foster students' interest in entrepreneurship in vocational schools. Research indicates that implementing the teaching factory program can increase students' entrepreneurial interest (Suryati *et al.*, 2023). The teaching factory also aims to raise awareness that student learning in vocational schools should exceed what can be learned from books alone. Students can work in teams, practice interpersonal communication skills, and gain direct experience to prepare themselves for the workforce. Teaching factory can strengthen schools in producing added value in a productive manner oriented towards economic values (Muhitasari & Purnami, 2022; Rahmadan *et al.*, 2022). Several studies demonstrate that teaching factories can enhance the quality of students' hard and soft skills (Putri *et al.*, 2019; Sutianah, 2021). Moreover, research shows that implementing the teaching factory program can boost students' entrepreneurial interest (Gozali *et al.*, 2018; Puspita *et al.*, 2020).

Based on the various statements above, students' learning motivation greatly influences their interest in entrepreneurship, while students' creativity influences their interest in entrepreneurship. The teaching factory learning model can also increase their interest in entrepreneurship. However, previous research did not address students' learning motivation and creativity in the context of working on the product they will be working on. It was limited to motivation for learning specific subjects to boost interest in entrepreneurship and student creativity to increase interest in entrepreneurship. Therefore, this research will expand to examine the impact of student motivation and creativity in teaching factory learning on enhancing student interest in entrepreneurship. The research aims to determine the extent of the influence of students' learning motivation and creativity in teaching factory learning on increasing interest in entrepreneurship in the mechanical engineering department of Kartanegara Wates Vocational School.

METHOD

This research employs a quantitative approach utilizing a multiple linear regression model. The study involved 80 students who were subsequently divided into two groups. The total population of this study was 350 students in three expertise concentrations including Light Vehicle Engineering (LVE), Motorcycle Engineering and Business (MEB), and Machining Engineering (ME). The sample used by class XII students represents each department at Kartanegara Wates Vocational School. The research sample size was calculated using the formula from Isaac and Michael's formula Sugiyono (2017) with an error rate of 5%.

Table 1
Validity of motivation question items

Expertise Concentrations	The Number of Students
XII Light Vehicle Engineering 1	16
XII Light Vehicle Engineering 2	16
XII Motorcycle Engineering and Business 1	16
XII Motorcycle Engineering and Business 2	15
XII Machining Engineering 1	16
XII Machining Engineering 2	16
Total number of students	95

The data in Table 1 shows the total population of class XI in all skill concentrations at Kartanegara Wates Vocational School. Each expertise concentration class has 16 students, except for class XII MEB 2, which has a total of 95 students. The sample calculation technique using the Isaac and Michael formula is presented as follows. Based on the sample calculations using the Isaac and Michael formula, the result was 79.96. Rounding up the research sample calculation to 80, the same number of 13 students was randomly selected from each class, except for classes XII LVE 1 and XII Mechanical Engineering 1, as they had more students than the MEB class.

$$s = \frac{5^2 \times 95 \times 0.5 \times 0.5}{d^2(95 - 1) + 5^2 \times 0.5 \times 0.5} = \frac{118.75}{1.485} = 79.96$$

Data collection was conducted through a questionnaire. Closed-ended questionnaires were used to collect research data. In this research, three questionnaires were used to collect data. The motivation questionnaire comprises 6 questions, the creativity questionnaire consists of 4 questions, and the entrepreneurial interest questionnaire consists of 6 questions. Questionnaire item indicators were developed based on existing theory and subsequently chosen for inclusion in the questionnaire. The questionnaire was then validated using the Pearson Product Moment test. The data analysis methods used in this study to test the hypotheses included partial testing (t-test), simultaneous testing (f-test), and the coefficient of determination R². Prior to the data analysis, classical assumption tests were performed, which included tests for normality, multicollinearity, heteroscedasticity, and linear regression.

The learning motivation indicators used according to Uno (2008) included desire and motivation for learning success; encouragement and learning needs; hopes and aspirations for the future; learning rewards; engaging learning activities; and a conducive learning environment. The questionnaire used to assess student creativity, according to Guilford (1970), consists of four indicators Elaboration; Authenticity (originality); Fluency; and Flexibility. Meanwhile, the questionnaire used to measure interest in entrepreneurship, as outlined by Agustini (2014), includes seven measurement indicators.: strong determination

to achieve life goals and needs; strong self-belief; honesty and responsibility; physical and mental resilience; perseverance in work and effort; creative and constructive thinking; and future orientation.

FINDINGS AND DISCUSSION

Before using the questionnaire instrument for data collection, validity and reliability tests are conducted first on the learning motivation instrument, the creativity instrument, and the entrepreneurial interest instrument. The validity is calculated using Pearson Product Moment with a total of N of $50 - 2 = 48$, resulting in an r-table of .278. The validity and reliability test results are presented as follows: Table 2 shows data on the validity of the motivation questions, Table 3 displays the results of the validity of creativity questions, and Table 4 presents the outcomes of the validity of the items related to interest in entrepreneurship.

Table 2
Validity of motivation question items

Question Item	r-count	r-table	Validity
1	0.406	0.278	Valid
2	0.608	0.278	Valid
3	0.777	0.278	Valid
4	0.539	0.278	Valid
5	0.618	0.278	Valid
6	0.639	0.278	Valid

Table 3
Validity of creativity question items

Question Item	r-count	r-table	Validity
1	0.650	0.278	Valid
2	0.567	0.278	Valid
3	0.606	0.278	Valid
4	0.721	0.278	Valid

Table 4
Validity of entrepreneurship interest question items

Question Item	r-count	r-table	Validity
1	0.479	0.278	Valid
2	0.482	0.278	Valid
3	0.394	0.278	Valid
4	0.723	0.278	Valid
5	0.548	0.278	Valid
6	0.606	0.278	Valid
7	0.573	0.278	Valid

Based on the results of the validity test of the learning motivation items presented in Table 1, it is evident that all 6 items were deemed valid. Similarly, the validity test results of the creativity questions in Table 2 indicate that all 4 questions were considered valid. The validity test results of the questions regarding interest in entrepreneurship, totaling 7 questions, also confirmed that all items were valid. Therefore, it can be concluded that all question items have been validated.

Table 5
Reliability test results of question items

Variabel	Cronbach's Alpha	N of items
Learning Motivation	.652	6
Creativity	.513	4
Interest Interpreneurship	.597	7

Based on the results of the reliability test presented in Table 5, it is shown that the items in the learning motivation variable obtained a value of .652, which is $> .050$, indicating reliability. The results for the creativity variable show a value of .513, also $> .050$, confirming reliability. Similarly, the reliability test results for the entrepreneurial interest variable were .597, $> .050$, indicating reliability. Therefore, all items are considered reliable. After confirming the validity and reliability of the questionnaires, they were used as data collection instruments. Following data collection, a normality test was conducted to ensure the data's distribution. Table 5 displays the results of the normality test, which was performed using Kolmogorov-Smirnov and Shapiro-Wilk tests on the data related to learning motivation, creativity, and interest in entrepreneurship.

Table 6
Normality test results

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Learning Motivation	.053	80	.200*	.988	80	.680
Creativity	.050	80	.200*	.989	80	.719
Interest_ enterpreneurship	.077	80	.200*	.984	80	.413

Based on the normality test results obtained in Table 6, it is evident that the data for learning motivation values follows a normal distribution. The Kolmogorov-Smirnov test yielded a significance of $.200 > .05$, and the Shapiro-Wilk test resulted in a significance of $.680 > .050$. Similarly, the data for student creativity scores also exhibits a normal distribution. The Kolmogorov-Smirnov test showed a significance of $.200 > .050$, and the Shapiro-Wilk test resulted in $.719$. Moreover, the normality test conducted on entrepreneurial interest demonstrated a normal distribution pattern. The Kolmogorov-Smirnov test showed a significance of $.200 > .050$, and the Shapiro-Wilk test resulted in $.413$. In conclusion, all the collected data is normally distributed.

After confirming that all the data is normally distributed, a multicollinearity test is conducted. Table 6 displays the results of the multicollinearity test using the VIF value and

After conducting all the classical tests, a hypothesis test was performed using partial test data analysis (t-test) to examine the impact of learning motivation and creativity on interest in entrepreneurship at a significance level of 5%. The results of the partial test are presented in Table 10. The analysis of the partial test results in Table 10 indicates that the significance level for the learning motivation variable is .000, which is less than .050. Therefore, there is a significant influence of learning motivation on interest in entrepreneurship. Similarly, the creativity variable yielded a significance level of .000, also less than .050, indicating a significant effect of creativity on interest in entrepreneurship.

Table 10
Partial test results (t-test)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Teachin_factory (Constant)	3.556	9.260		.384	.702
Learning Motivation	.570	.064	.768	8.927	.000
Creativity	.471	.064	.634	7.375	.000

a. Dependent Variable: Interest_enterpreneurship

Table 11
F-test results (f-test)

Model	Sum of Squares	df	Mean Square	F	Sig.
Teaching_factory Regression	607.205	2	303.602	46.775	.000 ^b
Residual	499.783	77	6.491		
Total	1106.988	79			

a. Dependent Variable: Interest_enterpreneurship
b. Predictors: (Constant), Creativity, Learning Motivation

After testing the first hypothesis regarding the significant effect of each variable, the F-test was conducted to assess the combined impact of learning motivation and creativity on interest in entrepreneurship. The results of the F-test in Table 11 indicate that the significance level of the influence of learning motivation and creativity on interest in entrepreneurship is .000, which is less than .050. Therefore, based on this hypothesis test, it can be concluded that there is a significant influence between learning motivation and creativity on interest in entrepreneurship.

Table 12
Determination test results (r²-test)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Teaching_factory	.741 ^a	.549	.537	2.548

a. Predictors: (Constant), Creativity, Learning Motivation

After testing the hypothesis and establishing that learning motivation and creativity significantly impact interest in entrepreneurship, the coefficient of determination test is conducted. This test aims to quantify the extent of the contribution of learning motivation and creativity to the influence on interest in entrepreneurship. According to the determination test in Table 12, the r^2 result is .573, which falls within the range of 0 to 1, indicating a value closer to 1. The combined influence of learning motivation and creativity on interest in entrepreneurship is 57.3%, categorizing it as medium.

This research was conducted on students at Kartanegara Wates Vocational High School by implementing teaching factory learning, which simulates a real work environment. The study involved 80 students who were engaged in activities resembling real work tasks in their fields. Through this approach, students had the chance to participate in practical exercises mirroring professional settings. The initiative aimed to address the insufficient work ethic observed in former graduates by reintroducing and fostering this essential trait through teaching factory learning.

Through project-based learning in the factory setting, all students are provided with equal opportunities to engage in hands-on activities to create goods and services within their respective fields. The practical tasks undertaken by students are not merely assigned; they are supported to enhance and monitor their production skills. Emphasis is placed not only on students' capabilities but also on the quality of their output. The products created by students are evaluated based on quality standards, ensuring they meet consumer expectations. This approach enables students to develop strong work ethics and practical skills that align closely with real-world employment demands.

Student involvement in teaching factory learning is also assessed through their learning motivation and encouragement. Additionally, the creativity of each student plays a crucial role in product creation and execution. Therefore, understanding these two aspects is essential to gauge their impact on students' entrepreneurial interest. This study aimed to evaluate how motivation and creativity affect student learning outcomes throughout teaching factory learning activities. The level of motivation can significantly influence the students' engagement and commitment to the learning process, ultimately impacting their overall performance. Moreover, creativity is a key factor in fostering innovation and problem-solving skills, which are essential for students to excel in entrepreneurial endeavors. By examining the interplay between motivation, creativity, and learning outcomes, this study provides valuable insights into enhancing the effectiveness of teaching factory programs and nurturing students' entrepreneurial spirit.

After the research was completed, the results revealed a significant correlation between motivation and creativity with the entrepreneurial interest of students at Kartanegara Wates Vocational School. Motivation plays a crucial role in inspiring students to engage in learning. These findings align with a study by Widjaja (2019) which demonstrated the substantial impact of learning motivation on students' entrepreneurial aspirations. To sustain motivation, it is essential to cultivate a supportive, competitive, secure, and comfortable learning environment that caters to students with diverse interests. Additionally, recognizing and rewarding both academic and non-academic achievements can further encourage students (Widjaja, 2019).

Not only motivation, but research results also indicate that creativity plays a significant role in influencing students' interest in entrepreneurship at Kartanegara Wates Vocational School. This aligns with a study by Agustin, Pratiwi, and Mulyati (2023) demonstrating the impact of creativity on entrepreneurial interest. Furthermore, both motivation and creativity concurrently affect students' interest in entrepreneurship. This corresponds with a study by Junus *et al.* (2023) confirming that motivation and creativity jointly influence entrepreneurial interest. The research also highlights that higher levels of motivation and creativity lead to a stronger influence on entrepreneurial interest.

We also compared the results of the research we conducted with research conducted by Nur *et al.* (2023) regarding the influence of teaching factory learning on interest and motivation in entrepreneurship. The findings in their research showed that the teaching factory learning strategy had a positive influence on students' interest and motivation in entrepreneurship. It is important to note that this research specifically focuses on interest and motivation in entrepreneurship. Other studies we have reviewed also emphasize these aspects. However, we have not come across research that simultaneously addresses motivation, creativity, and interest.

CONCLUSION

In conclusion, it was observed that teaching factory learning played a significant role in enhancing the interest of students at Kartanegara Wates Vocational School in entrepreneurship. This impact is further influenced by individual factors, specifically learning motivation and creativity. The findings of the study indicate that both learning motivation and creativity affect the interest in entrepreneurship. Moreover, the research has demonstrated that they collectively impact entrepreneurial interest. The conclusion drawn from the research is the substantial influence of learning motivation and creativity in teaching factory learning on students' entrepreneurship interest at Kartanegara Wates Vocational School.

RECOMMENDATION

Given the findings in this study, we offer recommendations for future research. Having an interest in entrepreneurship is crucial for post-graduation success in the workforce. The utilization of teaching factory learning showed a significantly positive impact in this study. Additionally, factors like creativity and entrepreneurship play a vital role in fostering success. For upcoming research, delving into additional factors that could enhance students' entrepreneurial interest, such as problem-solving abilities, social skills, collaboration, and other supporting elements, would be beneficial.

REFERENCES

- Agustin, C. E. V., Pratiwi, N. M. I., & Mulyati, A. (2023). Pengaruh pendidikan kewirausahaan, kepercayaan diri dan kreativitas terhadap minat berwirausaha pada mahasiswa Fakultas Ekonomi dan Bisnis Untag Surabaya. *Jurnal Untag SBY*, 2(2), 482-493. <https://jurnal.untag-sby.ac.id/index.php/sosialita/article/view/9193>
- Agustini, F. (2014). Peningkatan motivasi hasil belajar dan minat berwirausaha siswa melalui pembelajaran kimia dengan pendekatan chemoentrepreneurship (CEP).

Seminar Nasional Implementasi Pembelajaran Tematik dalam Mengoptimalkan Kurikulum 2013.

- Ardiansyah, R. S., Yohana, C., & Fidhyallah, N. F. (2021). Faktor-faktor yang mempengaruhi minat berwirausaha siswa SMK Negeri di Jakarta. *Jurnal Bisnis, Manajemen, Dan Keuangan*, 2(2), 484-496.
- BPS. (2023, November). Keadaan ketenagakerjaan Jawa Timur Agustus 2023. *Berita Resmi Statistika*.
- Chrysolouris, G., Mavrikios, D., & Rentzos, L. (2016). The teaching factory: A manufacturing education paradigm. *Procedia CIRP*, 57, 44-48. <https://doi.org/10.1016/j.procir.2016.11.009>
- Gozali, G., Dardiri, A., & Soekopitojo, S. (2018). Penerapan teaching factory jasa boga untuk meningkatkan kompetensi entrepreneur siswa sekolah menengah kejuruan. *JSHP (Jurnal Sosial Humaniora Dan Pendidikan)*, 2(1), 46. <https://doi.org/10.32487/jshp.v2i1.264>
- Guilford, J. P. (1970). *Creativity research: Past, present, and future*. University Southern California.
- Hariyani, D., & Syamwil. (2022). Pengaruh edupreneurship, kreativitas siswa dan praktik pengalaman industri terhadap minat berwirausaha siswa di SMK Negeri 1 Enam Lingsung. *Jurnal Salingka Nagari*, 1(2), 243-255.
- Junus, N. R., Ismail, Y. L., & Abdussamad, Z. K. (2023). Pengaruh motivasi dan kreativitas terhadap minat wirausaha. *Jurnal Ilmiah Manajemen Dan Bisnis*, 5(3), 1218-1228. <http://ejournal.ung.ac.id/index.php/JIMB>
- Muhitasari, R., & Purnami, A. S. (2022). Manajemen pembelajaran teaching factory dalam mewujudkan jiwa kewirausahaan pada siswa. *Media Manajemen Pendidikan*, 4(2), 194-202. <https://doi.org/http://dx.doi.org/10.30738/mmp.v4i2.8206>
- Nur, H., Arfandi, A., & Fadhilah, N. A. (2023, July). The influence of the teaching factory learning program on the interests and motivation in entrepreneurship of vocational high school students. In *2nd World Conference on Social and Humanities Research (W-SHARE 2022)* (pp. 68-76). Atlantis Press. <https://doi.org/10.2991/978-2-38476-084-8>
- Puspita, D. A., Muchlas, M., & Kuat, T. (2020). The implementation of teaching factory to improve student interest in entrepreneurship at multimedia competencies. *Journal of Technology and Humanities*, 1(2), 42-50. Retrieved from <http://ejournal.jthkkss.com/index.php/jthkkss/article/view/31>
- Putri, Y. E., Nuraina, E., & Styaningrum, F. (2019). Peningkatan kualitas hard skill dan soft skill melalui pengembangan program teaching factory (Tefa) di SMK Model PGRI 1 Mejayan. *PROMOSI (Jurnal Pendidikan Ekonomi)*, 7(2), 26-33. <https://doi.org/10.24127/pro.v7i2.2511>
- Rahmadan, R., Kristiawan, M., & Sasongko, R. N. (2022). Teaching factory management for dressing, catering, beauty and SPA Program. *AL-ISHLAH: Jurnal Pendidikan*, 14(4), 6575-6586. <https://doi.org/10.35445/alishlah.v14i4.2317>
- Rangkuti, I. M., & Wahidah, S. (2017). Hubungan motivasi belajar dan hasil belajar rias wajah sehari-hari dengan minat berwirausaha siswa tata kecantikan kulit SMK Negeri 1 Beringin. *Jurnal Pendidikan Teknologi Dan Kejuruan*, 19(1). <https://doi.org/10.24114/jptk.v19i1.7154>
- Sardiman, A. M. (2016). *Interaksi dan motivasi belajar mengajar*. PT. Raja Grafindo.
- Sholahuddin, A. Y., Djaelani, A. R., & Apriyanto, N. (2021). Pengaruh teaching factory dan produk kreatif kewirausahaan terhadap minat berwirausaha kelas XII TBSM SMK

- Bina Utama Kendal. *Journal of Vocational Education and Automotive Technology*, 3(1), 119-128.
- Sudiyanto, S., Sampurno, Y. G., & Siswanto, I. (2013). Teaching factory di SMK ST. Mikael Surakarta. *Jurnal Tanaman Vokasi*, 1(1), 9-19. <https://doi.org/https://doi.org/10.30738/jtv.v1i1.134>
- Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif, dan R&D*. CV. Alfabeta.
- Suryati, L., Ganefri, Ambiyar, Yulastri, A., & Fadhilah. (2023). Penerapan program teaching factory dalam mempersiapkan kompetensi kewirausahaan siswa pada pendidikan vokasi. *Jurnal Penelitian Dan Pengembangan Pendidikan*, 7(1), 58-66. <https://doi.org/10.23887/jppp.v7i1.58257>
- Sutianah, C. (2021). Peningkatan kompetensi kerja berbasis integrasi soft skills, hard skills dan entrepreneur skills program keahlian kuliner melalui penerapan teaching factory SMK. *Jurnal Ekonomi, Sosial & Humaniora*, 2(8), 152-167. Retrieved from <https://jurnalintelektiva.com/index.php/jurnal/article/view/596>
- Uno, H. B. (2008). *Teori motivasi dan pengukurannya*. Bumi Aksara.
- Widjaja, W. (2019). pengaruh motivasi belajar terhadap minat berwirausaha siswa SMA XYZ di Jakarta Barat. *Jurnal Ilmu Manajemen*, 8(2), 37. <https://doi.org/10.32502/jimn.v8i2.1819>