

Industry-Oriented Experiential Learning Model to Enhance Vocational High School Students' Job Readiness

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ARTICLE INFO

Article history:

Received November 18, 2022 Revised November 22, 2022 Accepted March 10, 2023 Available online August 25, 2023

Kata Kunci :

Model, Experiential Learning Berorientasi Industri (EL+i), Kesiapan Kerja

Keywords:

Model, Industry-Oriented Experiential Learning (EL+i) , Job Readiness,



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ABSTRACT

A B S T R A K

Tingkat pengangguran tertinggi di Indonesia masih didominasi lulusan SMK. Pengangguran terjadi karena kesiapan kerja siswa SMK rendah. Penelitian ini bertujuan untuk mengembangkan model experiential learning berorientasi industri dan menguji keefektifannya. Penelitian ini menggunakan desain penelitian dan pengembangan (R&D) dari Richey dan Klein. Tahapan penelitian meliputi tahapan analisis kebutuhan, validasi internal dan validasi eksternal. Subyek penelitian yang digunakan adalah guru, siswa jurusan teknik otomotif SMK Muhammadiyah 1 Salam dan praktisi industri otomotif yang berjumlah 44 orang. Teknik pengumpulan data yang digunakan adalah wawancara, kuesioner dan tes kinerja. Peneliti menganalisis secara deskriptif untuk menghasilkan kesimpulan dari angket kelayakan dan model pembelajaran. Setelah dianalisis, hasil angket dan tes unjuk kerja praktik dikategorikan untuk menghasilkan kesimpulan pada masing-masing instrumen. Hasil penelitian menunjukkan bahwa model experiential learning berorientasi industri sangat cocok diterapkan pada pembelajaran kejuruan. SMK dapat bekerjasama secara luas dengan industri, guru dan siswa memperoleh ilmu dan keterampilan sesuai kebutuhan dunia kerja dan timbul motivasi untuk membuat replika industri sarana pembelajaran.

The highest unemployment rate in Indonesia is still dominated by SMK graduates. Unemployment occurs because the work readiness of SMK students is low. This study aims to develop an industrial-oriented experiential learning model and test its effectiveness. This study used a research and development (R&D) design from Richey and Klein. The research stages include the stages of needs analysis, internal validation and external validation. The research subjects used were teachers, students majoring in automotive engineering at SMK Muhammadiyah 1 Salam and automotive industry practitioners, totaling 44 people. Data collection techniques used were interviews, questionnaires and performance tests. Researchers analyzed descriptively to produce conclusions from the feasibility of questionnaires and learning models. After being analyzed, the results of the questionnaire and practical performance tests were categorized to produce conclusions for each instrument. The result of the study show that industrial-oriented experiential learning model is very suitable to be applied to vocational learning. Vocational schools can broadly collaborate with industry, teachers and students gain knowledge and skills according to the needs of the world of work and motivation arises to make industrial replicas of learning infrastructure.

1. INTRODUCTION

Unemployment in Indonesia is still a national problem which until now has not been resolved (Hohlova & Rivža, 2021; Prayitno & Kusumawardani, 2022; Ruchba & Hadiyan, 2019; Suharti et al., 2021). Moreover, after the pandemic, economic sectors experienced a crisis which resulted in an increase in the number of unemployed (Haldar & Sethi, 2022; Su et al., 2022). The Central Statistics Agency (BPS) provides data that in August 2022, the Open Unemployment Rate (TPT) was 8.42 million people out of a total of 143.72 million people. Of these, graduates from Vocational High Schools (SMK) contributed the highest number of unemployed, namely 9.42%. This statement is inversely proportional to the purpose of SMK which is held to create a ready-to-use workforce according to their field of expertise (Burhan & Arifin, 2020; Lawitta et al., 2017). The high unemployment rate for SMK graduates is the impact of the low work readiness of SMK students (Afriadi et al., 2018; Sudarsono, 2022; Syofyan, 2022). Vocational students' work

readiness is the result of the learning process in vocational schools which includes aspects of attitude, knowledge, and skills competence (Ali, 2021; Mustikawanto et al., 2019; Rahmah & Muslim, 2019; Yuliani & Yuniarsih, 2019). Attitude, knowledge and skill competencies will be formed if the learning process is directed at analytical skills, extracting new information and applying industry-based skills (Cadenas et al., 2020; Smith et al., 2020; Wagiran et al., 2022).

Improvement efforts have been made by SMK administrators to increase the work readiness of SMK students. The most frequent improvement is the improvement of the learning process by developing learning models. The learning model that is currently being pressured to be implemented in SMK is the experiential learning model. The experiential learning model is a learning model that facilitates students to improve their ability to analyze problems to gain new knowledge from their experiences (Cheng et al., 2020; Dernova, 2015). The experiential learning model will involve students with real conditions and experiences so as to produce the desired competencies (Akhtar, 2020; Garlick, 2014; Kong, 2021; Wang et al., 2021). The experiential learning model includes, (a) Concrete Experience; (b) Reflective Observations; (c) Abstract Conceptualization; and (d) Active Experimentation (Arakawa & Anme, 2020; Kolb & Kolb, 2005). The Concrete Experience stage is the stage where students are introduced to real problems/cases in the industry. Reflective Observation is a stage where students are stimulated to find solutions to problems/solutions they face. Abstract Conceptualization contains activities that stimulate students to think and make other alternatives if the first solution cannot solve the problem. Active Experimentation is a stage that provides space for students to apply alternative solutions to problems.

The experiential learning model that has been applied so far has several weaknesses. According to previous study the experiential learning model has weaknesses in terms of participation in the industrial world and the world of work (Mc Pherson-Geyser et al., 2020; Nguyen, 2022). The learning experiences that have been provided to students so far have come entirely from the teacher, not the needs of the industrial world. Not only that, the work environment used is still fully carried out at school. It is better to get the optimal quality of experience, learning is carried out in the industry so that the work culture will be formed independently (Arakawa & Anme, 2020; McPherson-Geyser et al., 2020; Nguyen, 2022).

Based on the weaknesses above, researchers developed an experiential learning model that is integrated with the competencies, needs and culture of the industrial world or called the Industry Oriented Experiential Learning Model (EL+i). The EL+i model is the development of an experiential learning model in which learning is carried out in industry with competency standards according to the needs of the industrial world. The purpose of developing the EL+i model is to establish work readiness for vocational students who have aspects of industrial competence and are able to adapt to industrial work culture. The EL+i model is not fully implemented in an integrated manner with the curriculum in schools, meaning that the EL-Bi model is not fully implemented in industry. The process of implementing the EL+i model is carried out with the initial stages of providing theory in schools. After the material is completed implemented at school. The next stage is that students carry out learning that is carried out in the industry and with the guidance of industrial practitioners. Not all of the material provided in schools is implemented in industry. The material provided is tailored to the job competencies required by the industry.

2. METHODS

This research is a development research (R&D) by adopting Richey and Klein's research which aims to develop learning models that can improve the work readiness of vocational students. The stages of this research consist of the stages of needs analysis, internal validation and external validation (Mardapi, 2008; Richey, R. C. & Klein, 2009). The stages of needs analysis aim to determine the current condition of vocational learning, aspects of competence needed by the industry and the development of an industry-based learning model. The internal validation stage aims to test the feasibility of the model from the expert's point of view. While external validation contains trial activities that aim to determine the effectiveness of the learning model in increasing student work readiness. The stages of the research can be seen in Figure 1.

The research subjects used in this study were 4 teachers, 34 students majoring in automotive engineering at SMK Muhammadiyah 1 Salam and industry practitioners from 6 light vehicle automotive repair shops. The research sites used were the Barokah workshop and the Jogjakarta Center Automotive workshop. Collecting data using interview techniques, questionnaires and performance tests. The research instrument used was a non-test instrument consisting of interview sheets, questionnaires and tests. Before being used the instrument was tested for validity and reliability. The validity test used was content validation using vocational learning experts as a validator and it was concluded that the lay instrument was feasible to use as a data collection tool. The reliability test used the Cronbach Alpha (α) statistical test and the results of the instrument were consistent for use. The needs analysis stage contains focus group

discussion (FGD) activities whose results are explored using interview techniques. The interview guideline can be seen in Table 1.



Figure 1. Research Stages

Table 1. Interview Guidelines Grid

No.	SMK Teacher	Industrial Practitioner
1	Current condition of SMK graduates	Current condition of SMK graduates
2	Aspects of competence expected by teachers	Competency aspects needed by the industry/world of work.
3	Subject matter to be emphasized	Job competencies that are currently important for SMK students
4	Weaknesses of current SMK graduates	Weaknesses of current SMK graduates
5	The solution overcomes the weakness regarding the low work readiness of SMK graduates	The solution overcomes the weakness regarding the low work readiness of SMK graduates
6	The best learning model to be applied at this time and able to improve the work readiness of vocational students	The best learning model to be applied at this time and able to improve the work readiness of vocational students

The internal validation stage aims to test the feasibility of the learning model with the help of vocational education material experts. The internal validation questionnaire grid was developed from literacy studies of vocational learning and input from vocational and industrial learning experts. The internal validation grid of the learning model can be seen in Table 2.

Table 2. Learning Model Validation Questionnaire Grid	

Media Validation Questionnaire Indicator				
Effectiveness in solving problems				
Compatibility with the material				
Ease in Preparing Learning Devices				
Easy to Understand Model				
Easy to Implement Model				
Easy Model to Evaluate Learning Outcomes				
-				

The next stage is external validation which contains pre-test activities, limited trials and expanded trials. This stage aims to determine the effectiveness of the learning model in increasing the work readiness of SMK students. Furthermore, from the results of internal and external validation, researchers analyzed descriptively to produce conclusions from the feasibility of questionnaires and learning models. After being analyzed, the results of the questionnaire and practical performance tests were categorized to produce conclusions for each instrument. Categorization can be seen in Table 3.

Table 3. Categorization of Questionnaires and Practical Performance Tests

Formula	Score	Category
X≥ x +1.SBx	X ≥ 3.00	Very good
$x + SBx > x \ge x$	$3.00 > X \ge 2.50$	Well
$x > x \ge x - 1.SBx$	$2.50 > X \ge 2.00$	Pretty good
X < x - 1.SBx	X< 2.00	Not good

3. RESULT AND DISCUSSION

Results

Stages of Needs Analysis

The needs analysis stage aims to determine the current condition of vocational learning, competency aspects needed by the industry and the development of an industry-based learning model. The needs analysis stage was carried out twice with FGD participants from automotive engineering vocational school teachers and automotive industry practitioners. The results of the needs analysis can be seen in Table 4.

Table 4. Needs Analysis Results

No.	SMK Teacher	Industrial Practitioner
1	SMK learning requires industrial participation.	SMK openly involves industry to improve the quality of SMK graduates, especially in the learning process.
2	Industry trust in SMK graduates is low. SMK graduates need to get an emphasis on soft skill competencies.	SMK graduates need to get an emphasis on soft skill competencies.
3	Aspects of competence expected by teachers include an attitude of responsibility, integrity and cooperation. Knowledge of work processes and skills regarding timely completion of work.	Aspects of competence expected by the industry include integrity, cooperation, responsibility and honesty. The knowledge needed about the work process, reading literacy and skills regarding the completeness of the work.
4	The subject matter that must be emphasized is related to petrol motorbike tune-ups, EFI, AC systems and painting.	Job competencies that are urgently needed by the industry today are gasoline engine maintenance, EFI system tune-ups and automotive electricity
5	Vocational High Schools need a learning model that provides opportunities for students to gain knowledge and experience from the industry	SMK learning should be aligned with the needs of the world of work and industry.

From the results of the needs analysis, it can be concluded that SMK and industry agree: (a) The main problem regarding SMK graduates is their job readiness, especially in the soft skills aspect. (b) Aspects of competence that must be owned by SMK graduates are aspects of attitude competence which include attitudes of integrity, responsibility, cooperation and honesty. Knowledge includes knowledge about reading literacy and the field of work. Skills include completeness in completing work. (c) Developing a learning model that can align with industry needs by providing opportunities for industry to participate in the SMK learning process. The results of the needs analysis can be seen in Table 5 and Figure 2.



Table 5. Competency Aspects Required by the Industrial World



Internal Validation

The internal validation stage aims to test the feasibility of the model from the expert's point of view. The results of the experts are used as a basis for improving the learning model. The experts used consisted of one academic and one industry. Experts state that the learning model is well applied to learning in SMK. The results of an internal validation questionnaire from experts, model stages and pictures of hypothetical industrial-oriented experiential learning (EL+i) models can be seen in Table 6, Table 7, and Figure 3.

Table 6.	Model	Validation	Results f	from Experts

Mode	l Validation Questionnaire Indicator	Average Score	Information
Model Purpose Effectiveness in solving problems		2.60	Well
	Compatibility with the material	2.60	Well
Preparation	Ease in Preparing Learning Devices	2.80	Well
Application	Easy to Understand Model	2.60	Well
	Easy to Implement Model	2.80	Well
Evaluation	Evaluation of Learning Outcomes is Easy to Do	2.80	Well

The results of the expert validation questionnaire concluded that the EL+i learning model was well implemented because it was in accordance with the learning objectives, preparation was easy to implement, easy to understand and easy to evaluate SMK learning. There are several expert inputs on the stages of the EL+i model, namely, (1) the EL+i model must contain stages that stimulate problem-solving skills; (2) the EL+i model in all its stages involves industrial practitioners; (3) Teachers are placed in the process of monitoring the stages of preparing worksheets. The results of expert input can be explained in Table 7.

Table 7. Differences Between the Stages of the Industry Oriented Experiential Learning Model (EL+i) and
the Existing Experiential Learning Model (Already Implemented)

No.	Stagos	Industry Oriented Experiential Learning Model (EL+i)		Existing Models	
	Stages	Activity Description	Perpetrator	Activity Description	Perpetrator
1	Concrete Experience (looking for new	Learners observe about problems that exist in the	Industrial Practitioner	Students are introduced to problems/cases	

	Stages	Industry Oriented Experiential Learning Model (EL+i)		Existing Models		
No.		Activity Description	Perpetrator	Activity Description	Perpetrator	
	experiences and knowledge)	environment or are given by teachers/industrial practitioners Learners are stimulated to find solutions and		î		
2	Reflective Observation (observation)	problem solving of the problems they find/face. Solutions are obtained from various data sources, literature and references. Students think	Industrial practitioners and teachers	Learners are stimulated to look for solutions to problems/solutions	Teacher	
3	Abstract Conceptualization (thinking)	about compiling problem-solving steps in worksheets.	Industrial practitioners and teachers	Students think and make alternatives	Teacher	
4	Active Experimentation (Action)	Students apply student worksheets.	Industrial Practitioner	Students apply alternative solutions to problems	Teacher	
School (industrial practitioner) Concrete Experience Industry (industry practitioner) Active Experimentation Reflective Observation Industry (industrial practitioners) and teachers)						
Abstrack Conceptualization Industry (industrial practitioners and teachers)						

Figure 3. Hypothetical Industry-Oriented Experiential Learning (EL+i) Model

External Validation

The external validation stage aims to test the effectiveness of the learning model in increasing student work readiness. External validation contains the implementation of the EL+i model which consists of pretests, limited trials and expanded trials. The pretest is used to measure the effectiveness of the EL+i model without applying the model. Limited trials were used to test the effectiveness of the EL+i model with

a limited number of 10 students. While the expanded trial aims to test the effectiveness of the EL+i model with more subjects, namely 44 students. The results of external validation and improvement of each trial can be seen in Table 8, and Figure 4.

Aspect	Competency Indicator	Pretest	Limited Trial	Extended Trial
Attitude	integrity	1,9	2	2,8
	Responsibility	1.5	2,2	3
	Cooperation	1.75	2,2	3,2
	Honesty	1,9	2,2	3,2
Knowledge	Reading Literacy in the Field of Work	2	2,4	3,6
Skills	Completeness in completing work	2,2	2,4	3,6



Figure 4. Improving the Result of Implementing the EL+i Model

The results of the external validation stages can be concluded that all competency indicators which include: integrity, responsibility, cooperation, honesty, reading literacy in the field of work and completeness in completing work have increased from the less good category to the very good category. The final stage after the external validation stage is revision. In the trial process no problems were found in the application of the model and the revision of the stages of the EL+i learning model. So that the Hypothetical EL+i learning model is an Implementative EL+i learning model that is ready to be applied.

Discussion

The experiential learning model is a model that is suitable for vocational education levels that have characteristics in solving work problems. The experiential learning model has weaknesses, namely: the problems given do not come from experiences that are in accordance with industry needs, are not guided by people who have experience in real work fields and are not trained to conceptualize problem solutions into work steps (Nguyen, 2022; Roberts, 2018). Model LearningIndustry-Oriented Experiential Learning (EL+i) is a learning model developed from the experiential learning model. The difference lies in aspects of industry-based competence, industry competency standards, participation of industry practitioners and the learning process implemented in the industry. The EL+i model that is integrated with industry-based and industry-standard competency aspects will produce an effective learning pattern. This is in accordance with research from previous study which states that experietial learning models integrated with the industrial world will increase competence and effective thinking patterns in analyzing and solving problems (Prastawa et al., 2020). Not only that, industrial participation with direct industrial learning in the learning process will provide real and up-to-date experiences for SMK students. This is in accordance with the results of previous research which states that the introduction of industry-standard experience and work processes has a very good influence on the work readiness of SMK students (Rahdiyanta et al., 2019). Other study states that the industrial-oriented experiential learning model shapes the character and competencies expected of the industrial world. Students will be faced with patterns, standards and aspects of competence that are always evolving (Pamungkas et al., 2020).

ModelLearningIndustry-Oriented Experiential Learning (EL+i) which was tested twice showed that the EL+i model was well applied to vocational learning and was able to increase the effectiveness of vocational students' work readiness. The Industry Oriented Experiential Learning (EL+i) learning model is proven to be able to improve the competence aspects of integrity and honesty. Integrity is a consistent attitude in carrying out tasks. While honesty is the attitude of being trusted. Attitudes of integrity and honesty are very difficult for vocational teachers to form so far. This statement is in accordance with the research which concluded that the toughest problem for a vocational educator is instilling character, especially related to integrity and honesty (M. Suud et al., 2019; Santoso et al., 2020). ModelEL+i is very suitable to form an attitude of responsibility and cooperation. Improved attitude of responsibility and cooperation increased in two trials. Increased responsibility and collaboration are more easily formed with practical learning models and integrated with industry. This statement is supported by previous study that learning focuses on the integration of the school curriculum and the industrial world will form an attitude of responsibility towards work and be able to cooperate with various parties in the work environment (Sutiman et al., 2022).

The EL+i model is very suitable to be applied to form aspects of knowledge competence with reference seeking competence. In the EL+i model stage, there are stages of finding solutions to the problems encountered. Activities carried out can be in the form of looking for references via handbooks or the internet. This stage indirectly supports the formation of knowledge competency aspects. This statement is in accordance with previous study which states that literacy knowledge and work field references will be well formed by direct practice in the work industry (Misbah et al., 2020; Mustikawanto et al., 2019). Furthermore, the EL+i model is suitable for forming aspects of competence in skillscomplete all the work well and finished on time. Industry-integrated learning forms productive abilities for SMK students. The introduction, implementation, and evaluation of learning with experience, competency standards and the participation of practitioners in the industry form optimal competencies. This statement is in accordance with the results of previous research which states that learning with the environment and real work in the industry will shape students' ability to know the ideal working procedures and timeliness in completing work (Castañer & Oliveira, 2020; Melovic et al., 2019).

The implication of this study provide overview related to the industry-oriented experiential learning (EL+i) Learning Model which requires good planning on the part of the Vocational High School organizers to select reference industries that meet graduation criteria and are able to collaborate actively. Moreover SMKs thoroughly prepare administration, complete infrastructure facilities in SMKs and industry so that after implementing the EL+i model, SMKs can implement it independently in schools according to industrial follow-up plans. Industries have different competency needs so that each implementation of the EL+i model is prepared for a needs analysis stage to determine competency aspects and competency standards needed by the industry.

4. CONCLUSION

The Industry-Oriented Experiential Learning Learning Model (EL+i) can be applied to vocational learning. The EL+i model that is applied effectively improves the competency aspects of work readiness for SMK students which include attitudes, knowledge and skills. The EL+i model has the advantages found inaspects of competency based on industry needs, competency standards used to measure the success of learning adapted to the industry, the learning process is directly provided by the participation of industry practitioners and the learning process is carried out in the industry. The EL+i model has a good impact on the development of SMK. Vocational schools can broadly collaborate with industry, teachers and students gain knowledge and skills according to the needs of the world of work and motivation arises to make industrial replicas of learning infrastructure.

5. ACKNOWLEDGE

This research is a research grant from the Independent Campus Independent Policy Research Program and Community Service Based on Research Results PTS 2021 with contract number: R/882/C.6/XII/2021. Funding is used for the development and implementation stagesIndustry-Oriented Experiential Learning Learning Model (EL+i) so that it can be useful for increasing the work readiness of SMK students. I do not forget to thank Ahmad Dahlan University and SMK Muhamadiyah 1 Salam for providing support in preparing accommodation and coordination infrastructure.

6. REFERENCES

- Afriadi, A., Sentosa, S. U., & Marwan, M. (2018). The Analysis of Vocational Studentsr Work Readiness in Pariaman and Padang Pariaman. *Advances in Economics, Business and Management Research*, 57(1), 529–538. https://doi.org/10.2991/piceeba-18.2018.1.
- Akhtar, R. N. (2020). Exploring Experiential Learning Models and developing an EL based ERE cycle in teaching at higher education in Pakistan. *International Journal of Experiential Learning & Case Studies*, 5(2). https://doi.org/10.22555/ijelcs.v5i2.44.
- Ali, M. (2021). Vocational students' perception and readiness in facing globalization, industry revolution 4.0 and society 5.0. *Journal of Physics: Conference Series*, 1833(1), 0–7. https://doi.org/10.1088/1742-6596/1833/1/012050.
- Arakawa, H., & Anme, T. (2020). The effect of an experiential learning program on motivations and activity involvement among dementia supporters in Japan. *PLoS ONE*, 15(12 December), 1–12. https://doi.org/10.1371/journal.pone.0244337.
- Burhan, N., & Arifin, Z. (2020). The implementation of block-system learning on the expertise competence of automotive lightweight vehicle engineering in vocational high school. *Jurnal Pendidikan Vokasi*, 10(1), 80–92. https://doi.org/10.21831/jpv.v10i1.30378.
- Cadenas, G. A., Cantú, E. A., Lynn, N., Spence, T., & Ruth, A. (2020). A programmatic intervention to promote entrepreneurial self-efficacy, critical behavior, and technology readiness among underrepresented college students. *Journal of Vocational Behavior*, *116*, 103350. https://doi.org/10.1016/j.jvb.2019.103350.
- Castañer, X., & Oliveira, N. (2020). Collaboration, Coordination, and Cooperation Among Organizations: Establishing the Distinctive Meanings of These Terms Through a Systematic Literature Review. *Journal of Management*, 46(6), 965–1001. https://doi.org/10.1177/0149206320901565.
- Cheng, Y. C., Huang, L. C., Yang, C. H., & Chang, H. C. (2020). Experiential learning program to strengthen selfreflection and critical thinking in freshmen nursing students during covid-19: A quasi-experimental study. *International Journal of Environmental Research and Public Health*, 17(15), 1–8. https://doi.org/10.3390/ijerph17155442.
- Dernova, M. (2015). Experiential Learning Theory As One Of The Foundations Of Adult Learning Practice Worldwide. *Comparative Professional Pedagogy*, *5*(2), 52–57. https://doi.org/10.1515/rpp-2015-0040.
- Garlick, A. (2014). Experiential learning: rationale, approaches and implications for practice in Events Management and Hospitality courses. *Investigations in University Teaching and Learning*, 9, 8–14. https://repository.londonmet.ac.uk/id/eprint/326.
- Haldar, A., & Sethi, N. (2022). The Economic Effects of Covid-19 Mitigation Policies on Unemployment and Economic Policy Uncertainty. *Buletin Ekonomi Moneter Dan Perbankan*, 25(15), 61–84. https://doi.org/10.21098/bemp.v25i0.1833.
- Hohlova, V., & Rivža, B. (2021). The impact of the covid-19 pandemic on the unemployment rate in Latvia. *Research for Rural Development*, 36(December), 137–143. https://doi.org/10.22616/rrd.27.2021.020.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. Academy of Management Learning and Education, 4(2), 193–212. https://doi.org/10.5465/AMLE.2005.17268566.
- Kong, Y. (2021). The Role of Experiential Learning on Students' Motivation and Classroom Engagement. *Frontiers in Psychology*, *12*(October), 10–13. https://doi.org/10.3389/fpsyg.2021.771272.
- Lawitta, R., Sihaloho, L., & Arianti, J. (2017). Vocational High School in Indonesia Facing ASEAN Economic Community (AEC). Advances in Social Science, Education and Humanities Research, 158, 950–957. https://doi.org/10.2991/ictte-17.2017.28.
- M.Suud, F., Sutrisno, S., & Madjid, A. (2019). Educational Honesty: The Main Philosophical Value in School. *TARBIYA: Journal of Education in Muslim Society*, 6(2), 141–154. https://doi.org/10.15408/tjems.v6i2.11769.
- Mardapi, D. (2008). Teknik Penyusunan Instrumen Tes Dan Non Tes. Mitra Cendikia Offset.
- Mc Pherson-Geyser, G., de Villiers, R., & Kavai, P. (2020). The use of experiential learning as a teaching strategy in life sciences. *International Journal of Instruction*, *13*(3), 877–894. https://doi.org/10.29333/iji.2020.13358a.
- Melovic, B., Milovic, N., Backovic-Vulic, T., Dudic, B., & Bajzik, P. (2019). Attitudes and perceptions of employees toward corporate social responsibility in western Balkan countries: Importance and relevance for sustainable development. *Sustainability (Switzerland)*, 11(23). https://doi.org/10.3390/su11236763.

- Misbah, Z., Gulikers, J., Dharma, S., & Mulder, M. (2020). Evaluating competence-based vocational education in Indonesia. *Journal of Vocational Education and Training*, 72(4), 488–515. https://doi.org/10.1080/13636820.2019.1635634.
- Mustikawanto, A., Mukhidin, Gafar, A., & Bachtiar, H. (2019). Effect of Competency, Work Motivation, Industrial Work Experience and Facilities on the Readiness of Work for Senior High School Graduates in Electro Expertise Programs. *Sciences and Technology (GCSST)*, 2(1), 433–447. https://doi.org/10.17509/invotec.v15i1.16045.
- Nguyen, N. N. (2022). Research on the effect and effectiveness of experiential learning for university students. *Journal of Positive School Psychology*, 6(8), 4183–4192. https://www.journalppw.com/index.php/jpsp/article/view/10573.
- Pamungkas, S. F., Widiastuti, I., & Suharno. (2020). 21st century learning: Experiential learning to enhance critical thinking in vocational education. *Universal Journal of Educational Research*, 8(4), 1345– 1355. https://doi.org/10.13189/ujer.2020.080427.
- Prastawa, S., Akhyar, M., Gunarhadi, & Suharno. (2020). *The Effectiveness of Experiential Learning Based on Creative Industry to Improve Competency of Entrepreneurship of Vocational High School Students*. 397(Icliqe 2019), 25–33. https://doi.org/10.2991/assehr.k.200129.004.
- Prayitno, A. R. D., & Kusumawardani, D. (2022). Open Unemployment Rate in The Province of East Java. *The Winners*, 23(1), 11–18. https://doi.org/10.21512/tw.v23i1.7047.
- Rahdiyanta, D., Nurhadiyanto, D., & Munadi, S. (2019). The effects of situational factors in the implementation of work-based learning model on vocational education in Indonesia. *International Journal of Instruction*, 12(3), 307–324. https://doi.org/10.29333/iji.2019.12319a.
- Rahmah, L., & Muslim, S. (2019). Implementation of Competence Certification Test for the Improvement of Vocational School of Work Graduation Readiness. *Advances in Economics, Business and Management Research*, 379(1), 230–237. https://doi.org/10.2991/assehr.k.191217.038.
- Richey, R. C. & Klein, J. D. (2009). *Design and Development Research: Methods, Strategies and Issues*. Lawrence Erlbaum Associates,.
- Roberts, J. (2018). From the editor: The possibilities and limitations of experiential learning research in higher education. *Journal of Experiential Education*, 41(1), 3–7. https://doi.org/10.1177/1053825917751457.
- Ruchba, S. M., & Hadiyan, F. (2019). Analysis on Unemployment and Inflation in Indonesia for The Periode of 1980 -2016 using Philipps Curve Approach. *Proceeding of The 3rd International Conference on Accounting, Business & Economics*, 111–122. https://journal.uii.ac.id/icabe/article/view/14699.
- Santoso, F. P., Mulyoto, Djono, & Hanif, M. (2020). Inculcating character values to the student of polytechnic AtMI Surakarta vocational school. *Universal Journal of Educational Research*, 8(3D), 79–89. https://doi.org/10.13189/ujer.2020.081712.
- Smith, M. J., Mitchell, J. A., Blajeski, S., Parham, B., Harrington, M. M., Ross, B., Sinco, B., Brydon, D. M., Johnson, J. E., Cuddeback, G. S., Smith, J. D., Jordan, N., Bell, M. D., McGeorge, R., Kaminski, K., Suganuma, A., & Kubiak, S. P. (2020). Enhancing vocational training in corrections: A type 1 hybrid randomized controlled trial protocol for evaluating virtual reality job interview training among returning citizens preparing for community re-entry. *Contemporary Clinical Trials Communications*, *19*, 100604. https://doi.org/10.1016/j.conctc.2020.100604.
- Su, C. W., Dai, K., Ullah, S., & Andlib, Z. (2022). COVID-19 pandemic and unemployment dynamics in European economies. *Economic Research-Ekonomska Istrazivanja*, 35(1), 1752–1764. https://doi.org/10.1080/1331677X.2021.1912627.
- Sudarsono, B. (2022). Development of Work-Based Learning Models Based on Work Readiness (WBL-WoRe). Jurnal Iqra', 7(1), 44–62. https://journal.iaimnumetrolampung.ac.id/index.php/ji/article/view/2118.
- Suharti, S., Naufal, M. D., & Paiman, F. L. (2021). Inflation Effect on Unemployment in Indonesia: A Comparative Studies Between Sharia and Conventional Economic Perspectives. *Jurnal Bisnis Strategi*, 30(2), 127–138. https://doi.org/10.14710/jbs.30.2.127-138.
- Sutiman, S., Sofyan, H., Arifin, Z., Nurtanto, M., & Mutohhari, F. (2022). Industry and Education Practitioners' Perceptions Regarding the Implementation of Work-Based Learning through Industrial Internship (WBL-II). *International Journal of Information and Education Technology*, *12*(10), 1090–1097. https://doi.org/10.18178/ijiet.2022.12.10.1725.
- Syofyan, R. (2022). The Effect of Self-Efficacy on the Work Readiness of Universitas Negeri Padang Students during the Covid- 19 Pandemic. Advances in Economics, Business and Management Research, 659(1), 391–393. https://doi.org/10.2991/aebmr.k.220702.059.
- Wagiran, W., Suharjana, S., Nurtanto, M., & Mutohhari, F. (2022). Determining the E-Learning Readiness of Higher Education Students: A Study During the COVID-19 Pandemic. SSRN Electronic Journal,

8(June 2021), e11160. https://doi.org/10.2139/ssrn.4153216.

- Wang, T., Ramdeo, J., & McLaughlin, C. (2021). Experiencing and experimenting: An exploration of teacher agency in an international collaborative teacher professional development programme using experiential learning. *Teaching and Teacher Education*, 104, 103389. https://doi.org/10.1016/j.tate.2021.103389.
- Yuliani, L., & Yuniarsih, T. (2019). Influence of Industrial Work Practices and Learning Achievements on Students Work Readiness. Advances in Economics, Business and Management Research, 65(1), 188– 191. https://doi.org/10.2991/icebef-18.2019.45.