HASIL CEK_Development Model, Industry- Oriented Experiential Learning (EL+i) , Job Readiness, Vocational High School Students'

by Bambang Sudarsono Development Of An Industry

Submission date: 21-Dec-2022 03:18PM (UTC+0700)
Submission ID: 1985412907
File name: bambang_JERE_sinta_2.pdf (467.82K)
Word count: 5891
Character count: 33919

Journal of Educational Research and Evaluation
Volume xx, Issue xx,2022, pp. xx-yy
P-ISSN: 2597-422x E-ISSN: 2549-2675
OpenAccess: https://dx.doi.org/10.23887/jere.v6i1

Development of an Industry-Oriented Experiential Learning (EL+i) Learning Model to Enhance Vocational High School Students' Job Readiness

Bambang Sudarsono[1*], Fatwa Tentama[2], Fanani Arief Ghozali[3], Prabandari Listyaningrum[4]
[1]Automotive Technology Vocational Education Department, Ahmad Dahlan University, Yogyakarta City, Indonesia
[2]Psychology Department, Ahmad Dahlan University, Yogyakarta City, Indonesia
[3]Electronic Engineering Vocational Education Department, Ahmad Dahlan University, Yogyakarta City, Indonesia
[4]Educational Research and Evaluation Graduate School, Yogyakarta State University, Yogyakarta, Indonesia

ARTICLEINFO

Article history:
Received March 04, 2021
Revised March 05, 2021
Accepted April 24, 2021
Available online May 25, 2021

Keywords *: Pengembangan Model, Experiential Learning Berorientasi Industri (EL+i), Kesiapan Kerja, Siswa Sekolah Menengah Kejuruan*

Keywords:
Development Model, Industry-Oriented Experiential Learning (EL+i) , Job Readiness, Vocational High School Students'

ABSTRAK

Tingkat pengangguran tertinggi di Indonesia masih didominasi dari lulusan SMK. Pengangguran terjadi karena kesiapan kerja siswa SMK yang rendah. Penelitian ini bertujuan mengembangkan model pembelajaran experiential learning berorientasi industri dan menguji keefektifannya. Penelitian ini menggunakan desain penelitian dan pengembangan (R&D) dari Richey and 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, angket dan tes unjuk kerja. Model pembelajaran experiential learning berorientasi industri sangat sesuai diterapkan pada pembelajaran SMK. Model pembelajaran experiential learning berorientasi industri yang diterapkan dalam dua kali ujicoba menghasilkan skor peningkatan aspek kompetensi sikap, pengetahuan dan ketrampilan.

ABSTRACT

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. The industrial-oriented experiential learning model is very suitable to be applied to vocational learning.

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 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

*Corresponding author.
Email addresses: author1@email.com (First Author)

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 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. The experiential learning cycle of the learning model can be seen in Image 1.

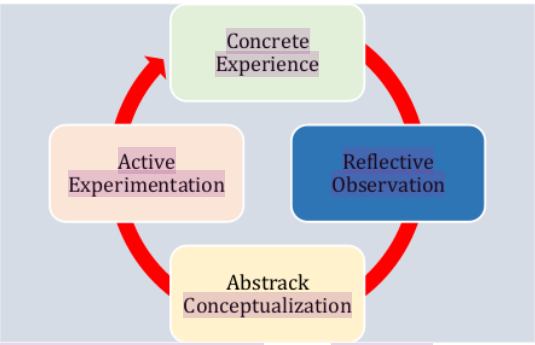

Figure 1. Experiential Learning Model Cycle(Kolb & Kolb, 2005)

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 Arakawa (2020), McPherson (2020) and Nguyen (2022), the experiential learning model has weaknesses in terms of participation in the industrial world and the world of work. 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 the 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 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. 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 2.

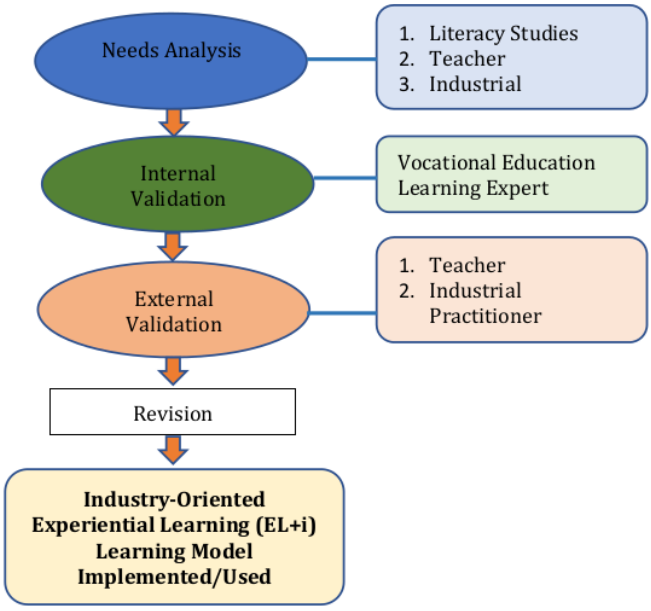

Figure 2. Research Stages(Richey, RC & Klein, 2009)

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 as 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.

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	
Model Purpose	Effectiveness in solving problems
	Compatibility with the material
Preparation	Ease in Preparing Learning Devices
Application	Easy to Understand Model
	Easy to Implement Model
Evaluation	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. The formula used is as follows:

$$x = \sum x/n$$

x = average score
∑x = total respondents
n = total answer score

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 ≥ x	3.00 > X ≥ 2.50	Well
x> x ≥ x - 1.SBx	2.50 > X ≥ 2.00	Pretty good
X < x – 1.SBx	X< 2.00	Not good

(Mardapi, 2008)

X = final score
x= average score
SBx = Standard deviation
x = (1/2) (ideal max score – ideal min score)
SBx= (1/6) (ideal max score – ideal min score)
Ideal Max Score =∑item x the highest score
Ideal Min score =∑item x the lowest score

3. RESULTS 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 3.

Table 5. Competency Aspects Required by the Industrial World

Performance Test Aspects (Practice Examination)		Description
Attitude	Integrity	Consistent in carrying out work
	Responsibility	Be serious in carrying out work
	Cooperation	Work together with others
	Honesty	Can be trusted
Knowledge	Reading literacy in the field of work	Knowledge seeking references
Skills	Completeness in completing work	Complete all work properly and finish on time

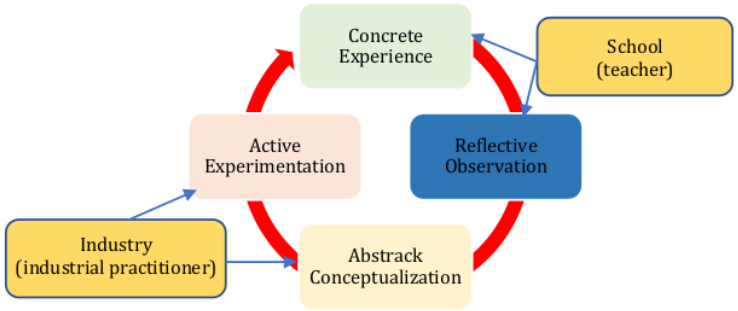

Figure 3. Conceptual Industry-Oriented Experiential Learning (EL+i) Learning Model

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 4.

Table 6. Model Validation Results from Experts

Model Validation Questionnaire Indicator		Average Score	Information
Model	Effectiveness in solving problems	2.60	Well
Purpose	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

(Mustikawanto et al., 2019)

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	Stages	Industry Oriented Experiential Learning Model (EL+i)		Existing Models	
		Activity Description	Perpetrator	Activity Description	Perpetrator
1	Concrete Experience (looking for new experiences and knowledge)	Learners observe about problems that exist in the environment or are given by teachers/industrial practitioners	Industrial Practitioner	Students are introduced to problems/cases	Teacher
2	Reflective Observation (observation)	Learners are stimulated to find solutions and problem solving of the problems they find/face. Solutions are obtained from various data sources, literature and references.	Industrial practitioners and teachers	Learners are stimulated to look for solutions to problems/solutions	Teacher
3	Abstract Conceptualization (thinking)	Students think 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

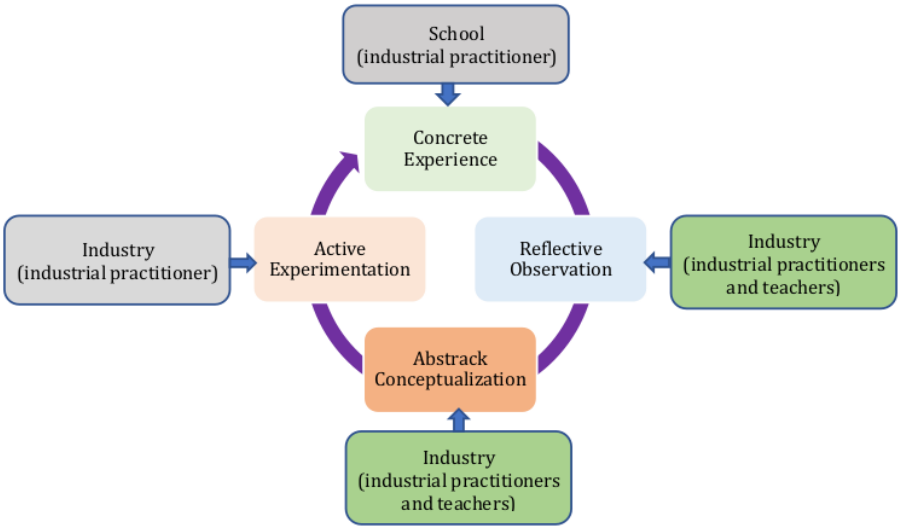

Figure 4. Hypothetical Industry-Oriented Experiential Learning (EL+i) Model

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 5.

Table 8. Results of Implementing the EL+i Model

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 Skills	Reading Literacy in the Field of Work	2	2,4	3,6
	Completeness in completing work	2,2	2,4	3,6

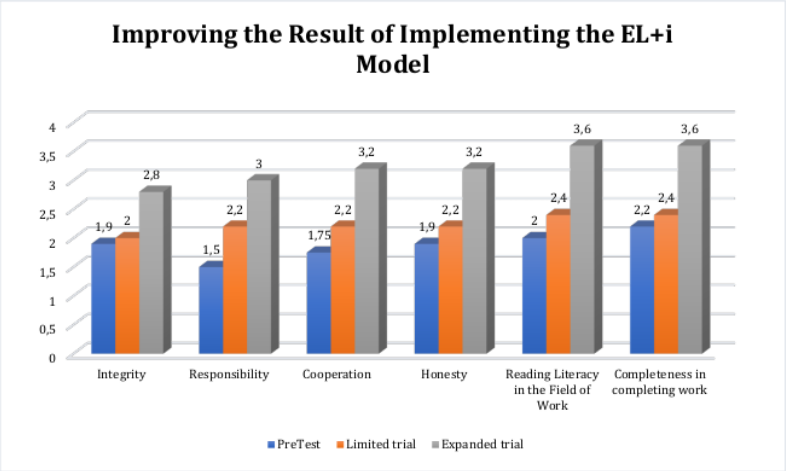

Figure 5. Improving the Result of Implementing the EL+i Model

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). ModelLearningIndustry-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 Singgih Prastawa (2019) 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 Dwi Rahdiyanto's research (2019) 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). Pamungkas (2020) 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 by Santoso (2020) and Su'ud (2019) 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 Sutiman (2022), learning that 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 Zainun Misbah's research (2020) which states that literacy knowledge and work field references will be well formed by direct practice in the work industry (Misbah et al., 2020). 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 research by Melovic (2019) and Castañer (2020) 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)

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 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.

The Industry-Oriented Experiential Learning (EL+i) Learning Model 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. Not only that, 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.

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 self-reflection 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://doi.org/10.1016/j.jhlste.2015.03.001

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://doi.org/10.3389/fpsyg.2021.709699

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://doi.org/10.1016/j.jefas.2015.01.003

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://doi.org/10.25217/ji.v7i1.2118

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/10.25217/ji.v7i2.2636

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

HASIL CEK_Development Model, Industry- Oriented Experiential Learning (EL+i) , Job Readiness, Vocational High School Students'

ORIGINALITY REPORT

20%	17%	8%	5%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	journal.iaimnumetrolampung.ac.id Internet Source	7%
2	Submitted to Visayas State University Student Paper	3%
3	jurnal.ustjogja.ac.id Internet Source	1%
4	ejournal.undiksha.ac.id Internet Source	1%
5	www.ijicc.net Internet Source	1%
6	www.hrpub.org Internet Source	1%
7	C P Bhakti, F A Rahman. "Android application development of exploration career based on Multiple Intellegence: A model hypothetical", Journal of Physics: Conference Series, 2020 Publication	<1%

8	staff.uny.ac.id Internet Source	<1 %
9	Submitted to Bath Spa University College Student Paper	<1 %
10	www.abrj.org Internet Source	<1 %
11	I Maryani, I N Fitriani, D Sulisworo. "The science encyclopedia based on characters to improve the natural science concepts understanding in elementary school students", Journal of Physics: Conference Series, 2019 Publication	<1 %
12	library.oapen.org Internet Source	<1 %
13	ojs.unm.ac.id Internet Source	<1 %
14	download.atlantis-press.com Internet Source	<1 %
15	N Rachmita, A Wibowo, R H Koestoer. "Spatial Patterns of Expertise Suitability in the Ruminant SubSector of Subang Regency, West Java Province", IOP Conference Series: Earth and Environmental Science, 2021 Publication	<1 %
	www.e-iji.net	

16	Internet Source	<1%
17	"Innovative Technologies and Learning", Springer Science and Business Media LLC, 2022 Publication	<1%
18	Alain Tshibungu Nkulu, Alain Pauly, Achik Dorchin, Nicolas J Vereecken. "The Megachilidae (Hymenoptera, Apoidea, Apiformes) of the Democratic Republic of Congo curated at the Royal Museum for Central Africa (RMCA, Belgium)", Cold Spring Harbor Laboratory, 2022 Publication	<1%
19	jurnal.untidar.ac.id Internet Source	<1%
20	jurnalp4i.com Internet Source	<1%
21	repository.usd.ac.id Internet Source	<1%
22	Kasyfi Rifqi Mouromadhoni, Zuhdan Kun Prasetyo, Sri Atun. "Development Student Activity Sheet of Natural Sciences with Authentic Inquiry Learning Approach to Improve Problemsolving Skills of Junior High School Students", Journal of Physics: Conference Series, 2019	<1%

	Publication	
23	ejournal.unesa.ac.id Internet Source	<1 %
24	jurnaliainpontianak.or.id Internet Source	<1 %
25	un-pub.eu Internet Source	<1 %
26	www.atlantis-press.com Internet Source	<1 %
27	www.degruyter.com Internet Source	<1 %
28	www.journaltocs.ac.uk Internet Source	<1 %
29	L Sukariasih, A S Ato, S Fayanto, L O Nursalam, L Sahara. "Application of SSCS model (Search, Solve, Create and Share) for improving learning outcomes: the subject of optic geometric", Journal of Physics: Conference Series, 2019 Publication	<1 %
30	Stephanus Fajar Pamungkas, Indah Widiastuti, Suharno. "Vocational Student's Attitude and Response Towards Experiential Learning in Mechanical Engineering", Open Engineering, 2021 Publication	<1 %

31	repub.eur.nl Internet Source	<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		