Jurnal Kependidikan:
Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran
https://e-journal.undikma.ac.id/index.php/jurnalkependidikan/index

Vol. 10, No. 3 : September 2024
E-ISSN: 2442-7667
pp. 920-930
Email: jklppm@undikma.ac.id

Development of a Workplace Learning Model to Improve Skills Competency of Vocational School Students

Yulia Rahmawati
Culinary Education Study Program, Faculty of Technical and Vocational Education, Universitas Pendidikan Indonesia.
*Corresponding Author. Email: yuliarahmawati@upi.edu

Abstract: This research aims to develop a workplace learning model to improve the catering skills of tourism vocational school students by building a conceptual foundation that considers the industrial situation. This development research uses Design-Based Research (DBR) comprising planning, learning interactions, and evaluation stages for students, supervisors, and instructors. This study analyzes data using qualitative and quantitative descriptive methods. This research produces industrial practical learning tools (WPL) in the form of guidebooks for teachers, instructors and students. How to study in industry, the implementation process, ideal criteria, and completion of study contracts are outlined. Increasing student catering skills competency through industrial learning based on a measurable field approach. How students can absorb, adopt tacit and explicit knowledge in industry is a value in itself. Research findings and concepts can be used for further development so that the quality of vocational education graduates can be considered.

Article History
Received: 18-06-2024
Revised: 20-07-2024
Accepted: 23-08-2024
Published: 18-09-2024

Key Words:
Catering Skill Competency; Workplace Learning Model; Vocational High School.

How to Cite: Rahmawati, Y. (2024). Development of A Workplace Learning Model to Improve Skills Competency of Vocational School Students. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran, 10*(3), 920-930. doi:https://doi.org/10.33394/jk.v10i3.11977

https://doi.org/10.33394/jk.v10i3.11977

Introduction

The process of education and training in vocational high schools has not touched on the essence of the goals of vocational schools as an institution that prepares its graduates for work (Hermanto et al., 2019; Okolie et al., 2020). The competence of vocational high school graduates has not met industry standards as a ready-to-use workforce at the middle level, so vocational high school graduates must be educated or retrained (Nuryanto & Eryandi, 2020). Criticism of the low competency of vocational school graduates was also expressed by the Research and Development Agency of the Ministry of Education, Culture, Research and Technology, which stated that vocational school graduates were unable to adapt to changes in the world of work, only being single. or specific skills that are quickly exhausted, and difficult to retrain, slow career mobility, and inability to develop oneself (Rahmadhani & Suryati,2022). Competency-based learning and training are limited to skill competencies, so it does not allow for real-life situations for those with extraordinary abilities and who do not have specialization or expertise (Bah & Dietzen, 2019).

The performance of Tourism Vocational School students in catering skills competency is still unsatisfactory, both in the production and service sectors. The professionalism of Tourism Vocational School graduates is still low, work speed is still slow, work accidents are still high, they lack a sense of responsibility, are less able to maintain cleanliness in handling food, and have an unkempt appearance (Akbari, 2018; Mínguez et al., 2021). Several research results show the fact that the work readiness of graduates of Tourism Vocational Schools majoring in food services is still unable to compete in the world of work

(Sari et al., 2022; Andriani, 2021). Weaknesses in fieldwork practices do not appear to be unique to Indonesia (Benaraba et al., 2022). The role of practical learning in the world of work is important but has not been implemented optimally and synergistically.

Practical learning in the world of work in the future must be the driving force for an integrated learning model between schools and industry (Smith et al., 2019). The workplace learning model must be an alternative choice in building an integrated vocational high school education system (Kanwar et al., 2019). his is also one of the principles of professional education that can be applied to vocational high schools. The success students achieve in vocational practice is the extent to which they are maintained as outsiders and on the periphery of 'workers', rather than being perceived as less experienced 'workers'. If students want to learn competent vocational practices, they must be able to engage fully in practical work, depending also on their experience (Pambudi & Harjanto, 2020; Tapani & Salonen, 2019). Therefore, the responsibility for the success of teaching and learning situations in relation to vocational education lies with teachers, students and employers (Taguma & Barrera, 2019; Calero López & Rodríguez-López, 2020).

Implementing industrial practices requires students to have competencies in their respective areas of expertise; therefore, implementing learning in schools requires teachers to transfer knowledge to students so that students truly master the skills needed when they enter the industry. This solution is to integrate learning models that suit the needs of students at school. One learning model that can be implemented is the workplace learning model. Students can leverage the theoretical knowledge they learn in class with practical applications in the world of work. This helps strengthen their understanding and makes learning more meaningful. Workplace learning allows students to develop industry-relevant skills, such as technical skills, time management, team collaboration, and communication. This makes them better prepared to enter the world of work after graduation. When students see how their knowledge and skills are applied in real situations, they tend to be more eager to learn and achieve higher academic achievement.

The aim of this research is to produce a workplace learning model (WPL) which is expected to improve the catering skills competency of Tourism Vocational School Culinary Study Program students based on a conceptual foundation that supports taking into account conditions in the field. This research uses a research and development approach, namely developing a Workplace Learning model. Another reason is that it can guarantee the birth of industrial practice models that can be implemented in accordance with curriculum policies, both the 2006 curriculum and the 2013 curriculum. The relevance of the model to curriculum policy lies in the WPL model being relevant to competency-based curricula (Gerhardt & Annon, 2023; Heim et al., 2023). This is different from the research conducted by the researchers above which explains the low skill competency of vocational school students and the role of practical learning in industry. The WPL model currently being developed describes the learning process in industry which consists of three stages, namely planning, implementation or learning interaction and evaluation. Each stage has its own strategy or implementation method. Stages of learning activities or syntax in the world of work or industry that must be followed by students, teachers and industrial instructors. Apart from that, this research produced an industrial practical learning tool in the form of a guidebook for supervising teachers, industrial instructors and students as a guide on how to learn in industry, the procedures that must be followed, and the criteria to be achieved. After that, students enter into a learning contract. In contrast to the evaluation tools used to assess student performance in industry as a place of practice which only assesses the final results when the instructor has finished carrying out industrial practice, this evaluation uses

evaluation tools at all stages starting from the first month of implementation. out practical learning, mid to late industrial practice.

The WPL model as an output of this research is expected to improve the competency of vocational school students' catering service skills. The concept of land built through learning by doing is based on a field approach. Activities with real learning situations in the workplace with planning, implementation and evaluation procedures as well as techniques for how students can absorb, and adopt tacit and explicit knowledge that exists in industry are discussed in this article. Researchers and educators can use this model as a solution to develop student skills in accordance with industry demands.

Research Method

The method used in this research is Design-Based Research (DBR). The research stages start from analyzing problems in the field, developing a model as a solution to the problems found, testing cycles to determine the level of contribution of the model developed to the agreed output, and reflection on the resulting model. The DBR method in this research refers to the DBR model of Amiel & Reeves (Amiel & Reeves, 2008). Details of the research stages are presented in Figure 1.

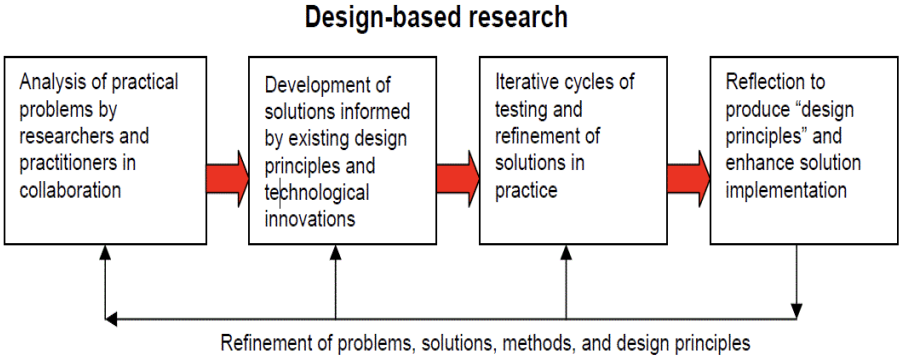

Figure 1. Design-Based Research

Figure 1 presents the design for the development of the WPL model in increasing the skills competency of vocational school students based on curriculum development to produce graduates who are ready to work and able to compete in the job market, by optimizing learning activities in the field. workplace. This model was developed by involving various related parties such as industry to minimize discrepancies between the expectations of educational institutions and the reality on the ground. The first stage of this research is a study of catering skill competency needs according to Indonesian national work competency standards. The qualitative methods used were interviews and observation surveys. The second stage is the design and development of the WPL model based on the characteristics and results of the needs analysis. The next stage is a feasibility test to find out whether the model can be used or needs improvement based on user input and test results. This stage is carried out repeatedly to refine and improve the model being developed.

To evaluate the contribution of the WPL model to learning outcomes, researchers tested users, in this case students, in limited trials and extensive trials. Apart from that, industrial work practice teachers and catering industry instructors were also research participants at the needs analysis and model testing stages as observers. More complete research participants are in Table 1. The number of industrial work practice teachers is 2 people, the number of catering industry instructors is 2 people, the limited testing students are 130 people from SMK Negeri 9 Bandung, SMK Negeri 2 Baleendah, and SMK Negeri 3 Cimahi.

Table 1. Research participants

Research Stages	Participant	Numbers
Problem Analysis	Industrial Work Practice Teacher	2
	Catering Industry Instructor	2
Limited Trial Model	Students of SMK Negeri 9 Bandung	20
	Students of SMK Negeri 2 Baleendah	20
Extensive Trials Model	Students of SMK Negeri 9 Bandung	30
	Students of SMK Negeri 2 Baleendah	30
	Students of SMK Negeri 3 Cimahi	30

Techniques for data analysis in this study include qualitative and quantitative descriptive analysis. The qualitative descriptive method is used to describe the findings of a literature review for the development of a workplace learning model to be implemented in schools. Data from limited trials and extensive trials of workplace learning models implemented in schools are processed using quantitative descriptive methods. The percentage calculation technique is used in quantitative analysis, with the following formula:

$$p = \frac{F}{N} x100\%$$

P = percentage
F = frequency (respondent answers)
N = number of cases (number of respondents)

Furthermore, it was determined whether there were differences in the implementation of industrial work practices for vocational school students in the Catering study program with the application of the WPL method. Considering these differences, a statistical hypothesis test was carried out using the t-test (partial). If t-count > t-table, then it is significant and accepted or the hypothesis is accepted. If t-count < t-table then it is not significant or in other words there is no difference. The research hypothesis is as follows:

H_0 = The difference in knowledge competence before and after using the WPL model is not significant (no difference)

H_1 = The increase in knowledge competence is significant both before and after the application of the WPL model (there is a difference).

Results and Discussion

Workplace Learning Model Development Stage (WPL)

Lifelong learning will be critical for TVET students, who will need continuous upskilling and reskilling to keep up with unpredictable industry changes and technological advances. Lifelong learning is gaining increasing attention in the context of the Sustainable Development Goals (SDGs), which feature prominently in SDG4 in the field of education (Kanwar et al., 2019). Graduates who have work experience can enter the world of work more smoothly. Work experience is not learned in school but is best gained in the workplace (Herbert, et al., 2020). The structure of the vocational education curriculum has an important impact on future labor market outcomes, so the skills developed during vocational education must be relevant and of high quality (Panth & Maclean, 2020). TVET programs require curricula developed in collaboration with industry and require large allocations for workplace learning (Eiríksdóttir, 2020). School-based programs without work-based learning (Taylor & van der Bijl, 2018), dual programs that are too short, or dual programs that are too narrow will not provide adequate human resources to enhance work experiences and drive positive impact. Figure 2 shows the design of the Workplace Learning (WPL) model which describes a system consisting of input, process and output dimensions in the context of industrial

practical learning as a Vocational School program. The mechanism for implementing the WPL model is divided into three stages, namely the planning stage, the implementation stage and the Evaluation stage, which can be explained as follows:

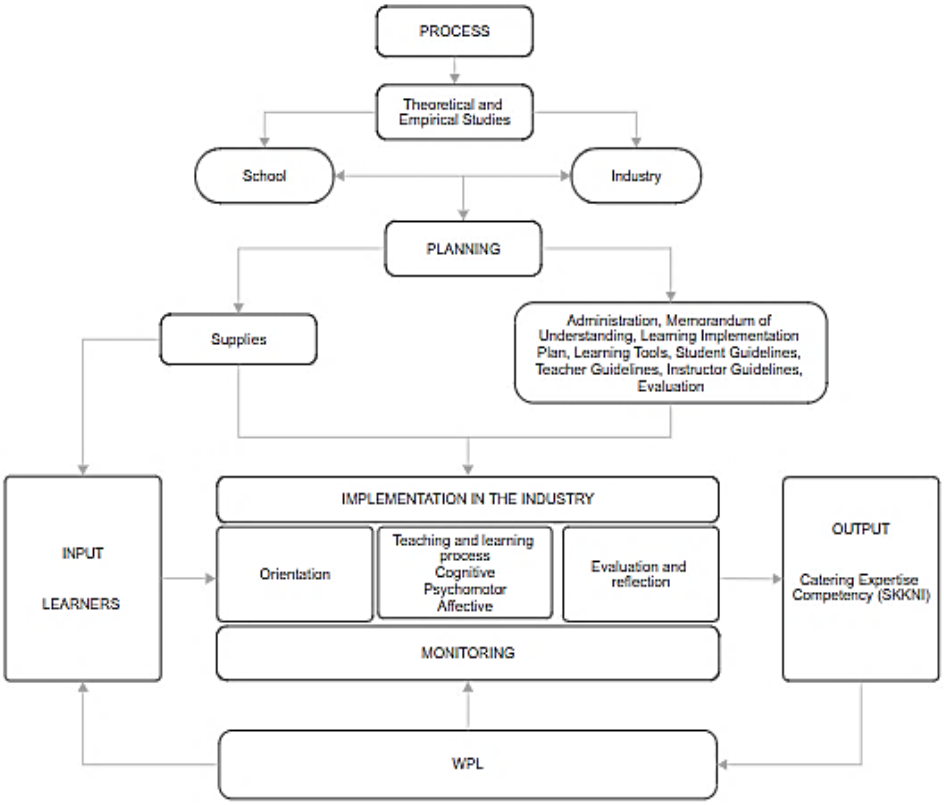

Figure 2. The design of the Workplace Learning (WPL)

Preparation / Planning stage: (i) Completion of administration, correspondence/correspondence and communication carried out by schools and industry which will be used as partners in Industrial Work Practices for vocational high school students. (ii) Provision of students at school. In this stage, all learning tools (handbooks and lesson plans) must have been prepared, distributed and socialized to students, supervising teachers, and industrial instructors so that they can learn the competencies and mentoring instructions that must be carried out. Learning tools must be prepared before carrying out practical learning in the workplace, namely lesson plans, guidance manuals for teachers, instructors and students. While the substance relates to the provision of students, is the phase of conveying all information, both academic and administrative, including the provision of other basic skills needed by students before students are placed in the industry. The successful implementation of learning is very dependent on effective planning (Nurtanto et al., 2021). Achievement of learning objectives can be measured by learning planning. The learning plan functions as a guide for teachers so that the learning scenario cannot be separated from the context that has been prepared. The phenomenon of losing direction during the learning process can be overcome with complete learning tools (Girvan, et al., 2016). This competency is part of the core competency that teachers must have, namely pedagogical competency.

Implementation / Implementation Stage: The industrial orientation and observation stage, including at this stage is an introduction to the situation in the industry, and the scope of the student's work while carrying out work practices; The supervising teacher provides

direction to students, conveys learning targets, outlines material that needs to be studied in industry and gives assignments to record data in a log book. Instructors in industry provide guidelines for assigning competencies that students must learn, condition the workplace as a learning environment, and provide information about the rules that apply in the local industry. Trainers must have several roles, both in pedagogical and social approaches. The trainers are teachers at schools who provide initial provisions when preparing to carry out industrial work practices, and trainers. The practical implementation stage itself is training for students who are guided by industrial instructors to carry out a practical agenda in the workplace for 4 months with system blocks in accordance with the curriculum and achievement of specified competencies. The competency dimensions in the work practice learning process include cognitive, affective and psychomotor aspects (planning, coordination, implementation and reflection) in the field of the Catering Services expertise program which refers to the Indonesian National Work Competency Standards in the field of Catering Services in preparing and serving food and drinks.

The monitoring phase of the implementation of workplace learning is carried out by the supervising teacher by using guidebook signs. The supervisor can see clearly when students carry out learning in the workplace. At this stage the teacher's role is to monitor work practice learning activities once a month so four visits to the industry are carried out by the supervising teacher, namely to provide direction and guidance, especially in carrying out learning strategies in the workplace, provide motivation to students by working alone, discovering themselves, and construct their own knowledge and new skills in the industry, and raise students' awareness of the new equipment technology used in the industry. The internship mechanism, which is basically the stages of the prakerin implementation, includes: 1) Internship planning. In planning, industrial work practices involve several parties, namely the school, students, parents of students, and partner institutions. 2) Organizing prakerin is one of the efforts to optimize existing resources at school and in partner institutions. 3) Organizing internships (Nugraheni et all., 2022).

Evaluation stage: The three main activities at this stage are: (i) The discussion and reflection stage about the experiences while students are taking part in industrial practice, namely exploring various information from all of the students' experiences, so that the results of the students' reflections are obtained. while following industry practices. internship obtained. (ii) Internal evaluation stage by industrial instructors using evaluation instruments in accordance with the Indonesian National Occupational Catering Services Competency standards. (iii) Student competency testing stage by schools in collaboration with food service industry associations so that the competencies achieved by students can be better validated.

Results of Workplace Learning Limited Trial

Table 2 displays students' knowledge competencies based on the results of the WPL limited trial. The increase in students' knowledge competency before and after using the WPL model can be seen in Table 2. The knowledge competency of students at SMKN 9 and SMKN 2 has increased from 44.55 to 49.30. The t-count value = -5.44 < t-table value = 2.093 so that H0 is rejected, which means there is a significant increase in students' knowledge competency after implementing the WPL model design. Analysis of the two-way paired sample correlation test (t-test) shows that the correlation value for students' knowledge competency levels before and after learning with the WPL model is r2 = (0.839)2 = 0.704 = 70.4%. This means that the WPL model implemented at SMKN 9 and SMKN 2 Baleendah contributed to increasing students' knowledge competency by 70.4%, while the remaining 29.6% was considered to be determined by other variables.

Table 2. Knowledge Competencies Before and After Implementing the WPL Model

School Name	Activity	Number of Sample (N)	Mean	Standard Deviation	T_{count}	Df	t_{table}
SMK 9	Before	20	44.55	3.76	5.44	19	2.093
SMK 2	After	20	49.30	6.48			

Table 3 shows the increase in students' work attitude competencies (employability skills) before and after using the WPL model. The average increase in students' work attitude competence (employability skills) before and after using the WPL model is presented. Work attitude competency (employability skill) has increased from 13.45 to 23.45 for students at SMKN 9 and SMKN 2. The t-count = -25.596 < t-table value = 2.093, so H0 is rejected. This means that there is a significant increase in students' attitudinal competence (work skills) before and after using the WPL learning model design. The results of the two-way paired sample correlation test (t-test) show that the correlation value for students' competency levels before and after learning with the WPL model is r2 = (0.883)2 = = 0.779 = 77.9%. This means that the WPL model used in SMK 9 and SMK 2 as a whole has an average contribution of 77.9% to increasing student competency, while the remaining 22.1% is determined by other variables.

Table 3. Work Attitude Competency (Employability Skills) Before and After Implementing the WPL Model

School name	Activity	Number of Sample (N)	Mean	Standard Deviation	T_{count}	Df	t_{table}	r
SMK 9	Before	20	13.4500	1.98614	25.596	19	2.093	0.883
SMK 2	After	20	23.4500	2.03845				

Extensive Trial Results of the Work Place Learning Model

The increasing knowledge competence of learners based on the results of the pre-and post-objective tests of the WPL Model can be seen in Table 4. Table 4 shows the increase in students' knowledge competence before and after the WPL model is implemented in extensive trials. Students at SMK N 9, SMK N 3, and SMK N 2 have increased their knowledge competency from 42.53 to 48.65. T value count = 15.625 < t-table value = 1.99 so H_0 is rejected. This means that students' knowledge competence has increased significantly following the application of the WPL model design. The paired sample correlation two-way test (t-test) results show that the correlation value of students' competency level before and after learning with the WPL model is $r^2 = (0.858)^2 = = 0.735 = 73{,}6\%$. This means that the WPL model at SMK 9, SMK 3, and SMK 2 contributes to an increase in student competence of 73.6%, while other variables determine the remaining 26.4%.

Table 4. Extensive Trials Results of Knowledge Competencies Before and After Implementing the WPL Model

School Name	Activity	Number of Sample (N)	Mean	Standard Deviation	T_{count}	Df	t_{table}	r
SMK 9 SMK 3 SMK 2	Before	90	42.53	4.26	15.62	89	1.99	0.858
	After	90	48.65	5.41				

Table 5 shows how students' competence in work attitudes (employability skills) improved before and after model design implementation. Increasing students' competence in work attitudes (employability skills) in three SMKs before and after the WPL model is implemented. According to the data processing results shown in Table 5. The competence of

work attitudes (employability skills) of students at SMK N 9, SMK N 3, and SMK N 2 increased from 13.97 to 23.88. The value of t count = -50.767 < the value of t table = 1.99 so H_0 is rejected, indicating a significant increase in students' attitude competence (employability skills) before and after the application of the WPL learning model design. The paired sample correlation two-way test (t-test) results show that the correlation value of students' competency level before and after learning industrial practice with the WPL model is $r^2 = (0.868)^2 = = 0.753 = 75{,}3\%$. This means that the WPL-based learning model at SMK 9, SMK 3, and SMK 2 as a whole contributes to 75.3% of student competence, while other variables determine the remaining 24.7%.

Table 5. Extensive Trials Results of Work Attitude Competency (Employability Skill) Before and After Implementing the WPL Model

School Name	Activity	Number of Sample (N)	Mean	Standard Deviation	T_{count}	Df	t_{table}	r
SMK 9 SMK 3 SMK 2	Before	90	13.97	1.64	50.76	89	1.99	0.868
	After	90	23.88	1.75				

The assessment of learning outcomes for each competency standard contained in the WPL is the result of evaluating students' WPL at this stage. In general, the procedures and criteria used in this evaluation process step include several learning objectives in a competency. Validation tests were carried out using empirical tests which showed that the WPL process had occurred since students entered the industrial world. Student learning activities are identified through the following indicators: (1) adaptation to the work environment, (2) activities that are relevant to the aspects being studied, (3) trying new things, (4) willingness to do the same work, (5) ability to work collaboratively. independence, (6) ability to work as a member of a group, (7) serious self-involvement, (8) interaction with instructors, (9) interaction with special work tools, (10) interaction with materials (11) ability to work according to work procedures, and (12) work by example. Workplace learning is a learning approach that utilizes the workplace (in the world of business/industry) to structure the experiences gained in the workplace to contribute to social, academic and student career development (Anjum, 2020).

The WPL model that is currently being developed describes the learning process in the industry, which is divided into three stages: planning, implementation or learning interaction, and evaluation. Each stage has its implementation strategy or method. The stages of learning activities or syntax in the workplace/industry must be followed by students, teachers, and industrial instructors. Furthermore, this study generates industrial practice learning tools (WPL) as guidebooks for supervising teachers, industrial instructors, and students as a reference on how to learn in the workplace/industry, procedures that must be followed, and criteria to be met. Following that, students complete a learning contract. Unlike the evaluation tool used to assess student performance in the industry as a place of practice, which only assesses the final result after the instructor has completed carrying out industrial practice, this evaluation uses evaluation tools at all stages, beginning with the first month of implementing practical learning and continuing until the end of industrial practice.

An important principle in WPL studies is that workplace learning is shaped and embedded in the work context (Ceelen, et all., 2023). Social interaction is an important part of the learning process. Student learning and participation are embedded in work contexts and depend on student participation in work-related activities. The process of becoming a vocational practitioner in the workplace involves social participation and interaction. Pedagogical practices in workplace learning contexts are shaped by social invitations from

experienced colleagues to participate in and observe daily work activities (Sjöberg & Holmgren, 2021).This study is expected to improve the competence of vocational students' catering skills in workplace learning based on an on-site approach which provides activities with real learning situations in the workplace with planning, implementation, and evaluation procedures, as well as addressing techniques on how students can absorb, adopt tacit and explicit knowledge in the industry

The workplace learning model (WPL), which is expected to improve the competency of food service skills of students in the Tourism Vocational School Culinary Skills study program, is based on a supporting concept that considers conditions in the field. This research uses a research and development approach, namely developing a Workplace Learning model to improve the competency of food service skills of students in the Catering Skills Vocational School study program. Another reason is that it can guarantee the birth of industrial practice models applicable in the field through curriculum policies. The relevance of the model to curriculum policy lies in the WPL model, which is relevant to the Competency-Based Curriculum (Rogers, 2021). In contrast to research conducted by previous researchers, which explained the low skill competency of vocational school students and the importance of practical learning in the workplace (WPL), the WPL model being developed now describes the learning process in the industry, which consists of three stages, namely planning, implementation or learning interaction. And evaluation. Each stage has its strategy or method for implementing it. Stages of activities or learning syntax in the workplace/industry that must be followed by students, teachers, and industrial instructors. Apart from that, this research produced industrial practical learning tools (WPL) in the form of guidebooks for supervising teachers, industrial instructors, and students to understand how to learn in the workplace/industry, the procedures that must be followed, and the criteria to be achieved. After that, students enter into a learning contract.

In contrast to the evaluation tool used to assess student performance in the industry as a place of practice, which only assesses the final results when the instructor has completed industrial practice, this evaluation uses evaluation tools at all stages, starting from the first month of carrying out learning practice, mid to late until the end of the industrial practice period (Rampoa et all., 2020). This research is expected to improve the competency of vocational school students' food service skills when learning in the workplace (workplace learning) based on a location approach, namely providing activities with real learning situations in the workplace with planning, implementation, and evaluation procedures, as well as a touch of how-to techniques. Students can absorb and adopt tacit and explicit knowledge that exists in industry.

Conclusion

The WPL model developed describes the learning process in industry which is divided into three stages: planning, implementation or learning interaction, and evaluation. Each stage has its own strategy or implementation method. The developed model has been tested in a limited and extensive manner. The results of testing the applied model contribute to increasing student competency, both knowledge competency and student work skills competency. WPL's contribution to achieving learning goals tends to be higher in achieving affective competence than knowledge competence.

Recommendation

There are numerous advantages that can be gained by both students and instructors via the application of the learning model in the workplace. As a result, schools can continue to work

together with industry and form relationships with local businesses and organizations in order to better equip students with workplaces. The existence of synergy between educational institutions, private businesses, and the government at the local level might make the implementation of learning models in the workplace simpler and more readily attainable.

References

Akbari, S. I. (2018). Tourism vocational high school students' and teachers' perception of foreign languages in communicative competencies and the 21st century skills in Yogyakarta. Jurnal Pendidikan Vokasi, 8(3), 277-288..

Amiel, T., & Reeves, T. C. (2008). Design-based research and educational technology: Rethinking technology and the research agenda. Journal of educational technology & society, 11(4), 29-40..

Andriani, D. (2021). A critical review of the labor competitiveness as human capital in Indonesia. International Journal of Research in Business and Social Science (2147-4478), 10(5), 52-65..

Anjum, S. (2020). Impact of internship programs on professional and personal development of business students: a case study from Pakistan. Future business journal, 6(1), 2.

Bahl, A., & Dietzen, A. (2019). Work-based Learning as a Pathway to Competence-based Education. management..

Benaraba, C. M. D., Bulaon, N. J. B., Escosio, S. M. D., Narvaez, A. H. G., Suinan, A. N. A., & Roma, M. N. (2022). A comparative analysis on the career perceptions of tourism management students before and during the COVID-19 pandemic. Journal of Hospitality, Leisure, Sport & Tourism Education, 30, 100361.

Calero López, I., & Rodríguez-López, B. (2020). The relevance of transversal competences in vocational education and training: a bibliometric analysis. Empirical Research in Vocational Education and Training, 12(1), 12..

Ceelen, L., Khaled, A., Nieuwenhuis, L., & de Bruijn, E. (2023). Pedagogic practices in the context of students' workplace learning: a literature review. Journal of Vocational Education & Training, 75(4), 810-842..

Eiríksdóttir, E. (2020). Program coherence and integration of school-and work-based learning in the Icelandic dual vocational education and training (VET) system. Education Sciences, 10(11), 314.

Gerhardt, T., & Annon, P. (2023). Towards conceptual clarity: Pedagogical liminality. International Journal of Work-Integrated Learning, 24(2), 209-225.

Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. Teaching and teacher education, 58, 129-139.

Heim, M., Schulz, C. M., Schneider, F., Berberat, P. O., Gartmeier, M., & Schick, K. (2023). Measuring informal workplace learning outcomes in residency training: a validation study. BMC Medical Education, 23(1), 549..

Herbert, I. P., Rothwell, A. T., Glover, J. L., & Lambert, S. A. (2020). Graduate employability, employment prospects and work-readiness in the changing field of professional work. The International Journal of Management Education, 18(2), 100378..

Hermanto, F. Y., Sutirman, S., Hidayati, B., & Sholikah, M. A. (2019). The need of practical teaching in vocational high school of Automation and Office Management Program. Jurnal Pendidikan Vokasi, 9(3), 238-248

Kanwar, A., Balasubramanian, K., & Carr, A. (2019). Changing the TVET paradigm: new models for lifelong learning. International Journal of Training Research, 17(sup1), 54-68..

Mínguez, C., Martínez-Hernández, C., & Yubero, C. (2021). Higher education and the sustainable tourism pedagogy: Are tourism students ready to lead change in the post pandemic era?. Journal of Hospitality, Leisure, Sport & Tourism Education, 29, 100329.

Nugraheni, D. P., Basyirun, B., & Supraptono, E. (2022, October). Development of Job Instruction on Student Readiness in Carrying out Internship in the Automotive Engineering Skill Competency. In International Conference on Science, Education, and Technology (Vol. 8, pp. 1143-1151).

Nurtanto, M., Kholifah, N., Masek, A., Sudira, P., & Samsudin, A. (2021). Crucial Problems in Arranged the Lesson Plan of Vocational Teacher. International Journal of Evaluation and Research in Education, 10(1), 345-354.

Nuryanto, A., & Eryandi, K. Y. (2020, February). The 21st century ideal skills for vocational high schools. In International Conference on Educational Research and Innovation (ICERI 2019) (pp. 142-147). Atlantis Press.

Okolie, U. C., Nwajiuba, C., Binuomote, M. O., Ehiobuche, C., Igu, N., & Ajoke, O. (2020). Career training with mentoring programs in higher education: facilitating career development and employability of graduates. Education Training, 62(3), 214-234.

Pambudi, N. A., & Harjanto, B. (2020). Vocational education in Indonesia: History, development, opportunities, and challenges. Children and Youth Services Review, 115, 105092..

Panth, B., & Maclean, R. (2020). Anticipating and Preparing for Emerging Skills and Jobs: Key Issues, Concerns, and Prospects..

Rahmadhani, S., & Suryati, L. (2022). Vocational high school students' competency needs to the world of work. Mimbar Ilmu, 27(2), 349-355..

Rampoa, Y., Tampangb, B. L., & Oliic, D. (2020). Assessment of Industrial Internship Instruments for Students of Machine Engineering Education. Assessment, 11(12).

Rogers, A. P. (2021). Exploring secondary teachers' perspectives on implementing competency-based education. The Journal of Competency-Based Education, 6(4), 222-232.

Sari, R. P., Nuswantara, D. A., & Iriani, S. S. (2022). Vocational School Readiness To Support Creative Industry Development. Journal of Innovation Research and Knowledge, 1(12), 1645-1652.

Sjöberg, D., & Holmgren, R. (2021). Informal workplace learning in Swedish police education–a teacher perspective. Vocations and Learning, 14(2), 265-284.

Smith, E., Callan, V., Tuck, J., & Smith, A. (2019). Employer training in Australia: current practices and concerns. International Journal of Training and Development, 23(2), 169-183.

Taguma, M., & Barrera, M. (2019). OECD future of education and skills 2030: Curriculum analysis. Dispon. Su Httpswww Oecd Orgeducation2030-Proj.--Learn. Pdf.

Tapani, A., & Salonen, A. O. (2019). Identifying teachers' competencies in Finnish vocational education. International journal for research in vocational education and training, 6(3), 243-260.

Taylor, V., & van der Bijl, A. (2018). Work-integrated learning for TVET lecturers: Articulating industry and college practices. Journal of Vocational, Adult and Continuing Education and Training, 1(1), 126-145.