

# Industry-Based Learning Management in Increasing the Competence of Vocational High School (SMK) Graduates. (Case Study of The Jayakarta Suites Hotel Bandung Collaboration with YPPS Sumedang Vocational School and Putra Gununghalu Vocational School West Bandung Regency)

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## Abstract

This research is motivated by the lack of competence of vocational high school (SMK) graduates to meet the needs of the industrial world. The emergence of a gap in the number of graduates with employment levels is a negative stigma for SMK graduates as the largest contributor to unemployment. The general objective of the research is to provide an overview and examine industry-based learning management in increasing competency SMK graduates, the specific objectives are to examine: planning, organizing, implementing, supervising, problems and solutions to industry-based learning problems in improving the competency of SMK graduates. This research is based on management theory according to GR Terry which divides management functions into four functions, namely planning, organization, actuating and controlling. To strengthen the theoretical basis of management, other theories and concepts are added, namely theological, philosophy, the six value systems (theological, physical-physiological, ethical, logical, aesthetic, teleological) and learning. The research method uses a qualitative approach with the type of case study research. Data collection techniques use interview techniques, observation and documentation studies. Data validity validation uses source triangulation. The results of industry-based learning management research in improving the competence of SMK graduates show that: 1) planning, preparing the basic agreements contained in the joint agreement (MOU) between schools and the business/industry world (DUDI), curriculum alignment, programs industrial work practicum, industrial visits, teacher training, guest teachers and competency tests 2) organizing, preparation of the organizational structure including the division of tasks and work steps for each part in the organizational structure 3) implementation concerning the recruitment of students, introduction to the work environment, scheduling, learning theory and practice, work culture and learning evaluation. 4) supervision regarding evaluation instruments, schedules, evaluation implementation, evaluation results and evaluation follow-up 5) problems. problems that arise regarding: facilities and infrastructure, curriculum, schedules, human resources, learning materials, learning media and coordination with industry. 6) solutions to problems that arise can be resolved even though not entirely. In conclusion, industry-based learning management in

increasing the competence of SMK graduates has been carried out in accordance with the planning, organization, implementation and supervision based on six value systems.

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### Keywords

Management, Learning, Competence

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The form of education that continues to be developed following the dynamics of industrial development and the industrial world (iduka) at the middle level is the Vocational High School (SMK), which prioritizes the abilities and skills of students in the field of expertise they are interested in. Vocational High Schools in Indonesia receive special attention, based on the spirit that vocational education can produce skilled workers who are ready to work. in the world of business and industry, meaning that SMKs can contribute to economic movement by producing competent human resources.

Given the positioning of SMK in Indonesia as an educational unit on which to build skilled human resources, the government has done many positive things and provided better support. In the last SMK strategic plan it is explicitly stated that in preparing skilled and competent graduates from SMK, the government will add learning facilities by adding new school units, new classrooms and other supporting infrastructure facilities.

In accordance with the Ministry of Education and Culture's 2021-2024 Strategic Plan for vocational education, especially Vocational High Schools, is to increase SMK education with industry standards with performance indicators: a) increasing the number of Vocational teachers and principals who obtain competency certification programs from industry b). Increasing the percentage of SMKs that are developed into Centers of Excellence (COE) per area of expertise c) Increasing the percentage of SMKs whose resources are utilized by stakeholders in the context of professional cooperation d) Increasing the percentage of SMKs obtaining BLUD status e). Increasing the percentage of SMKs that organize Teaching Factory. The final SMK Strategic Plan generally describes the support and seriousness in improving the quality and alignment of graduates with the needs of the business world and the industrial world. This raises optimism for the revival of SMK from all its shortcomings to become an excellent

institution that meets the expectations of society.

SMK is a school formed to hone students' real abilities or skills (hard skills), aiming to provide graduates who are ready to work. According to Mulyasa (2017: 4) education is life, for that learning activities must be able to equip students with life skills (life skills or life competency) that are in accordance with the living environment and the needs of students. As an educational institution that is proclaimed to produce superior graduates, SMK needs to make efforts that are based on aspects of education management, one of which is learning management that is implemented in education.

Learning management as a process of administering, setting, or structuring an activity or learning process carried out by the teacher before conveying and presenting information to students. This means that learning management aims to control the learning process in the classroom through planning, implementing and evaluating learning.

Education is very closely related to social transformation, because education is also part of the social system, and therefore the relevance between the world of education and the real world is an urgent need to be realized. The phenomenon that occurs between the world of education and community development is not matched or aligned and there is a significant gap, this is triggered by the not yet optimal application of learning management.

Regarding creating links and alignment between SMK graduates with the needs of industry and the industrial world (link and match), Sumbodo et al (2018) stated that industrial-based SMK management includes eleven aspects (propositions), namely: (a) Vocational High Schools (SMK) will be more effective if it has industrial partners that are relevant to the skills program it is developing, (b) SMK partnerships with industry will be effective if it is oriented to industry needs, (c) SMK is an industrial partner in preparing

human resources, therefore SMK will be more effective when only preparing graduates who are ready to work , (d) The learning and training process organized by SMKs must be identical to the types of jobs applied in partner industries , (e) SMK partnerships with industry will be meaningful if they can support industrial growth in the global era , (f) SMK partnerships with industry will continue if there are benefits obtained by partnering parties , (g) Benefits that can perpetuate SMK partnerships with industry include : benefits of developing human resources, benefits of access, benefits of product quality, and efficiency , (h) The existence of SMK will be more beneficial for industry if it is able to prepare its graduates to be able to work in certain fields of work as required by the partner industry , (i) Partnership between SMK and industry requires mutually agreed agreements , (j) Partnership between SMK and industry allows several processes learning/training to be implemented in industry, therefore schools and industries need to allocate partnership funds , (k) Optimum utilization of SMK partnerships with industrial information systems can streamline the planning, implementation and evaluation of partnership programs, one of the efforts is to organize industry-based learning with good governance.

## Method

This study used a qualitative approach with case study design. The research locations were YPPS Sumedang Vocational School and Putra Gununghalu Vocational School. Collecting data in this study using interview techniques, observation, and documentation. Sources of data are school principals, deputy principals, class teachers, and students. Validation of the validity of the data is carried out through source triangulation and technical triangulation.

## Results and Discussion

### Research Findings

The results of this study indicate that there are interesting facts accompanied by problems that demand improvement regarding industry-based learning management in increasing the

competency of vocational high school graduates. The findings of this study include the following matters:

### Planning

Industry-based learning planning at Sumedang YPPS Vocational School and Putra Gununghalu Vocational School is carried out by preparing the basic agreements contained in the joint agreement ( MoU) , curriculum alignment, industrial work practice programs, visiting teachers, teacher/intern training in industry and industrial visits. the results of interviews, observations and documentation of industry-based learning planning at YPPS Sumedang Vocational School and Putra Gununghalu Vocational School include: 1) MoU , both SMKs do with the same industry, namely The Jayakarta Suites Bandung hotel. The contents of the MoU contain several things about industry-based learning in the form of an agreement programs and corporate grants to schools. 2) Curriculum alignment. The two SMKs partner with the same industry so that the curriculum alignment is also the same industry, namely The Jayakarta Suites Bandung hotel.

Curriculum alignment is structured based on industry needs so that the orientation of learning outcomes is towards use in work. Technically curriculum alignment, SMK YPPS Sumedang and Putra Gununghalu Vocational School hold curriculum alignment at The Jayakarta Suites hotel Bandung. Curriculum alignment is carried out every two years. 3) Work practice program industry (prakerin). Sumedang YPPS Vocational School organizes internships for class XI students for six months. The location of the internship is determined by the school, both in Sumedang and outside the city of Sumedang. 4). Guest teachers from industry. The two SMKs in this study invited guest teachers with the same goal of providing learning for students about the world of industrial work based on direct experience from practitioners. 5) Teacher training/ apprenticeships were held at The Jayakarta Suites Bandung hotel involving teachers of productive and non-productive subjects.

### Organizing

Organizing industry-based learning is the basis for running the program well. YPPS Sumedang

Vocational School and Putra Gununghalu Vocational School started by compiling an organizational/committee structure including the division of tasks and the work steps of each part in the organizational structure.

YPPS Sumedang Vocational School created an organizational structure for an industry-based learning program in collaboration with The Jayakarta Suites Hotel Bandung involving school principals, vice principals for curriculum, deputy principals for industrial relations, heads of expertise programs and teachers. Each position was given assignments based on their fields. The school principal is in charge of the program, the vice principal in the field of curriculum as the chief executive is assisted by the vice principal in the field of industrial relations and teachers. Standard operating procedure (SOP ) is a reference in carrying out the duties and responsibilities of each field, Sumedang YPPS Vocational School does not yet have a standard SOP for this program.

Putra Gununghalu Vocational School has an organizational structure for the SMK Center of Excellence program committee, this organizational structure is used for industry-based learning programs. The school principal is responsible, assisted by the vice principal for curriculum, deputy principal for industrial relations and the head of the expertise program. The division of tasks and responsibilities already exists but has not been effectively carried out by all sections according to their duties. The standard operating procedure (SOP) document is not yet owned so that the implementation of duties and responsibilities is based on the policy of the school principal.

### **Implementation**

The implementation of industry-based learning includes recruiting students, introducing the work environment, scheduling, learning theory and practice, work culture and learning evaluation. The implementation of industry-based learning at SMK YPPS Sumedang begins with the selection of prospective new students. This selection is more focused on interests and talents students. Some of the competency competency options that students can choose from at this school are hospitality and

(culinary) catering. All of these expertise programs have implemented industry-based learning. SMK YPPS Sumedang provides equal opportunities for all students to take part in learning programs The introduction of the work environment by industry becomes material in the introduction of the school environment (MPLS) with the hope that new students at SMK YPPS Sumedang will have the character of an earlier work culture. Learning scheduling at SMK YPPS uses a block system, namely rotation of lesson hours every six days based on completeness. Evaluation of learning is carried out in two forms, namely evaluation of student learning outcomes and evaluation of student attitudes. The implementation of industry-based learning at Putra Gununghalu Vocational School is intended for students who take hospitality expertise competencies, interests and talents are directed so that students will determine their choice of area of expertise based on passion. Introduction to the industrial work environment and instilling a work culture delivered by productive subject teachers . Scheduling theory and practical lessons have not been properly scheduled. The portion of theory is 30% and practice is 70% not fulfilled. Evaluation of learning is carried out in two forms, namely evaluation of student learning outcomes and evaluation of student attitudes.

### **Supervision**

Supervision of industry-based learning has been carried out which includes: evaluation of students and evaluation of learning programs as well as follow-up of evaluation results. YPPS Sumedang Vocational School and Putra Gununghalu Vocational School conduct joint evaluations with the industrial world including evaluation instruments, scheduling, evaluation implementation, evaluation results and action further evaluation results.

### **Problems**

The problem is the lack of local government support, support from the business/industrial world, community participation (parents), human resources, curriculum, guest teachers, teacher apprenticeships, facilities and infrastructure.

## Solution

Solutions to the problem of lack of local government support, business/industry support, community participation (parents), human resources, curricula, guest teachers, teacher apprenticeships, facilities and infrastructure.

## Discussion

Based on the research findings and conclusions that have been discussed, this research is expected to have implications for industry-based learning management to improve the competency of vocational high school graduates. The following are some of them.

### Industry-based learning planning.

Industry-based learning planning in SMK includes: 1) MOU as the basis for program implementation, 2) curriculum alignment and preparation, 3) industrial work practice programs (prakerin), 4) teacher training/internships in industry, 5) scheduling guest teachers from industry, 6) industrial visits for students. This is in accordance with the Decree of the Minister of Education and Culture Number 17/M/2021 concerning the Center of Excellence Vocational High School Program that learning and assessment in SMKs implementing the Center of Excellence Vocational High School Program principally involve the world of work (link and matches). Viewed from the value system presented by Ahmad Sanusi, industry-based learning planning contains 6 (six) value systems: theological, logical, physical/physiological, aesthetic, ethical and teleological. This is described from the planning process and products in the form of findings in the field, namely 1) the preparation of the MOU, at least contains theological values, namely the human intellectual foundation to drive the main pillars, namely truth and goodness, 2) curriculum alignment, in the view of the six value systems at least - lack of aesthetic value, namely harmony, harmony and harmony in life, 3) preparation of industrial work practice programs (prakerin), contain at least physical-physiological values, namely tools that produce values in everyday behavior, 4) training/ teacher apprenticeship in industry contains ethical values, namely the principle of compliance with

rules, honesty and trustworthiness, 5) scheduling guest teachers from industry, at least contains teleological values, namely containing benefits, efficiency, effectiveness and productivity, 6) industrial visits for participants students, at least contain logical values, namely the activities of thinking, understanding, listening and remembering.

### Organizing industry-based learning.

The organization of industry-based learning begins with the formation of: 1) organizational structure, 2) division of tasks and responsibilities and the preparation of 3) standard operating procedures (SOP). This is in accordance with GR Terry's management theory that organizing is the process of grouping activities to achieve goals and assigning each group to a manager who has power and oversees the members of the group.

### Implementation of industry-based learning.

The implementation of industry-based learning has been carried out by both SMKs with the fulfillment of indicators: student recruitment process, introduction to industrial work environment, preparation of theoretical and practical learning schedules and programs for instilling the character of industrial work culture in schools and evaluation of learning. 1) Recruitment of students. Recruitment of students carried out by schools is not limited to just a few people, the recruitment process is only a formality to measure the knowledge and interest of students. This is in line with research conducted by Suroto (2017: 209) which states that student selection ( recruitment ) for prospective industry standard class participants is a very important stage because to get students who have interest and academic abilities and high skills, so that educational goals can be achieved. 2) Introduction to the industrial work environment. The introduction of the industrial work environment at the beginning of learning by involving the industry as a speaker. The purpose of introducing the industrial work environment for students is to increase their insight and get closer to the world of work. This is in accordance with the philosophical foundation of progressivism, namely the flow that wants progress quickly. 3) Preparation of a learning schedule. Preparation of a learning schedule combining theory and practice, 4)

implementation of learning theory and practice of productive, adaptive and normative subjects as well as schedules for industrial visiting teachers, 5) Cultivating the character of industrial work culture in schools in the form of discipline, courtesy, hospitality and neat appearance . 6) Learning evaluation is carried out as an effort to measure learning outcomes in the form of daily evaluations, semesters and competency tests.

### **Industry-based supervision of learning.**

Evaluations carried out by school principals on learning programs that are carried out regularly and consistently, are not only intended to determine the level of absorption and ability of students, the most important thing is how to use the results of the learning evaluation to improve and perfect the learning process. Therefore, the evaluation function is very important in order to improve the quality of student learning outcomes and school quality which is reflected in the competence of graduates.

The findings in the field illustrate that the two SMKs evaluate industry-based learning programs by evaluating learning instruments, scheduling, evaluation implementation, results and follow-up of the evaluation. This is in accordance with the value system proposed by Ahmad Sanusi. Theological value evaluation shows that humans are driven by two main pillars, namely truth and goodness. Evaluation is another form of improvement towards truth and goodness.

### **Industry-based learning problems.**

Industry-based learning faces problems which include: 1) Local Government Support. Support from local governments is still not optimal in industry-based learning. The regional government believes that this program is absolutely assistance from the central government and the industrial world. 2) Support from the industrial world. The support from the industrial world for this program is not yet optimal, both in terms of policy support, facilities, infrastructure and guest teachers. The industrial world does not yet understand industry-based learning programs and considers this program to only benefit the school. 3) Community support (people old). There are still many parents who think that direct learning in industry or industrial work

practices is not important, for some parents they think that school is important. There are still parents who don't want to pay for practical learning in industry. 4) Human Resources (Organizers) .There are still teachers who do not understand industry-based learning. Not all teachers have participated in the teacher apprenticeship program in industry. There are still productive subject teachers who do not have industrial experience. 5) Guest teachers from industry do not yet have pedagogic competence. Instructor educational background in There are still some in the industry who are not college graduates. 6). Curriculum. Curriculum results from alignment with the industrial world have not been fully implemented. 7) Schedule. Scheduling of productive and non-productive subjects (adaptive, normative) is still not in sync. 8). Facilities and infrastructure. Not all learning facilities and infrastructure are of good quality according to standards, and learning facilities have not been updated according to developments in information technology. 9) Coordination with the industrial world. Monitoring of learning programs by schools has not been consistent.

### **Solutions to industry-based learning problems.**

Solutions to overcome problems in industry-based learning include: 1) Local Government Support. Less optimal solutions are support from local governments using their own costs from students, developing production units/ teaching factories , partner company CSR ( corporate social responsibility ) funds , proposals to the central government such as: assistance for the implementation of industrial classes in SMKs, assistance for developing SMKs based on industry/regional excellence, assistance for developing tourism SMKs and other central governments through the Ministry of Education and Culture. 2). Support from the Industrial World. Carry out a continuous approach and communication to foster understanding between the two parties. Providing understanding / educating the industrial world that industry-based learning programs benefit both parties, not just the interests of the school, among the advantages of the industry is having a source of labor that fits industry criteria. 3) Community support (parents).

Providing understanding to parents that the learning experience in the industry as the obligation of students with the aim of more open work opportunities. The school said that the costs incurred by parents would all return to the students and the form of investment would later return to them. 4). Human resources (Organizers). The school continues to conduct outreach in the form of in-house training. Gradually teachers are included in trainings organized by the industrial world and the government in order to add insight into industrial work culture. Teachers are involved in activities related to the industry, such as industrial visit programs, monitoring student apprenticeships and student competency test activities. 5) Guest teachers. Make guidelines for guest teachers from industry regarding operational standards of learning. Schools conduct consultations and supervision in the learning process .6) Curriculum. Together - together between the school and the industrial world to coordinate the implementation of the curriculum alignment results. 7) Schedules. Gradually completing the shortage of learning facilities and infrastructure according to school capabilities. 9) Coordination with the Industrial World. Monitoring and evaluation is carried out every month.

## Conclusion

The process of managing industry-based learning at YPPS Sumedang Vocational School and Putra Gununghalu Vocational School is in accordance with management functions, namely planning, organizing, implementing and evaluating, although not all items are carried out in accordance with learning management theory. Industry-based learning planning includes preparing the basics - the basis for the agreement contained in the joint agreement (MOU) between the school and the business/industry world (DUDI), curriculum alignment, industrial work practice programs, industrial visits, teacher training, guest teachers and competency tests. The organization of industry-based learning includes the preparation of organizational/committee structures including the division of tasks and work steps for each part in the organizational structure. The implementation of industry-based learning has been carried out, namely

recruiting students, introducing the work environment, scheduling, learning theory and practice, work culture and evaluation of learning. Supervision of industry-based learning includes evaluation of evaluation instruments, schedules, implementation of evaluations, evaluation results and follow-up evaluations .

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