

THE NEED OF PRACTICAL TEACHING IN VOCATIONAL HIGH SCHOOL OF AUTOMATION AND OFFICE MANAGEMENT PROGRAM

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Abstract

The success of vocational education cannot be separated from the proper management of learning by its objectives. This study aims to explore the pitfalls and the needs of practical teaching in the Vocational High School of Automation and Office Management Program (AOMP) in Yogyakarta city. This research uses a descriptive method with a qualitative approach. The data obtained were analyzed by using the qualitative analysis model of Miles and Huberman with stages: data reduction, presenting data, verifying data, and concluding data. The results of this study show that the complex equations that are occurred in practical learning of the Vocational High School of AOMP are including the absence of practical teaching materials that are relevant to the industry, there is no specific time for practical learning, lack of facilities and infrastructures, deficiency tools and time to use office laboratories, and there are new types of jobs in the office workforce that are difficult to be followed. Moreover, these matters are complicated for schools to be embodied in the form of practical learning, resulting in poorly trained vocational students in doing their duty that fit the areas of expertise learned. This hardship implies that vocational students become less confident in doing their jobs in the industry either during an internship program or when working in the industry. This research is limited to pitfalls that occur in Yogyakarta City and in schools, which are the subject of this research.

Keywords: *practical learning needs, vocational high school, automation and office management program (AOMP)*

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INTRODUCTION

The high number of vocational high school graduates who have not yet worked has become an irony for vocational education in Indonesia. Kusuma (2019) states that the Indonesian Central Statistics Agency in 2019 noted that around 8.63% of unemployment in Indonesia is dominated by vocational graduates.

Whereas, vocational education is specifically designed to prepare competent graduates in adherence to the needs of the workforce (Murniati & Usman, 2009, p. 2). To prepare graduates who qualify the requirements of the industry, Clarke and Winch, 2007 (p. 9) state that the experience provided must include practical skills and techniques that support the area of expertise learned. Sutirman, Muhyadi, and Surjono (2017, p. 94) explain that vocational school's learning must be managed by doing a lot of practical activities following the need of the industry.

Based on the revised version of the 2013 curriculum, vocational learning is more directed on balance between theory and practice. There are some adjustments and additional basic competencies that need to be taught to students to increase relevance to the requirements of the industry. This concept is in line with the idea of Thomson (1972, p. 111), which states that vocational education provides information, work experience, awareness in working and trains students' psychomotor abilities following the area of expertise learned in schools and the industry.

In order to be competent, Woodruffe (1993, p. 29) states that a person must have a series of experiences that have been carried out and make him skilled for completing the tasks that are his responsibility. He also illustrates that competency is a dimension of human behavior that is constantly trained. If someone is declared competent, he must represent what he did for his work following the expected competence. Deist and Winterton (2005, p. 27) add that competency can be obtained through collective learning, both directing practice and illustrating the profession carried out to improve skills by integrating the capabilities that they have. Therefore, to improve the competency of vocational students, teachers should do practical learning so that students directly practice their skills that can be done repeatedly.

The relevant competency reference used for vocational education is the Indonesian National Work Competency Standards issued by the National Professional Certification Board in 2012. In the Indonesian National Work Competency Standards, it is explained in detail about the capability standard relating to knowledge, skills, and minimum work attitudes that must be possessed by someone to be able to work or occupy a certain position. Based on the competency reference, vocational education can focus on shaping the ability of students to meet the competency standard that must be possessed by a worker in Indonesia.

The efforts to shape the ability of students is started with providing knowledge to students, and training continuously so that they can do something that they have learned. Piaget (Bodner, 1986, p. 873) states that knowledge is obtained through experiences done by students in a certain learning process. Bozkurt (2017, p. 210) adds that knowledge was actively gained through planned mechanisms. Furthermore, referring to Vygotsky's constructivism theory, Turuk (2008, p. 246) states that knowledge acquiring is very dependent on what has been planned by the teacher to make the classroom situation active to explore students' abilities in meaning-makers and problem-solvers. Turuk (2008, p. 246) also adds that knowledge is obtained not through interactions that occur, but it is in the interaction itself. Therefore, in providing knowledge to students, it will be more effectively done by forming a suitable learning environment so that students can actively carry out the learning process and can construct their understanding following the experience they have gained (Liu & Chen, 2010, p. 64). Thus, ideally, to provide certain knowledge or competencies to vocational students, learning is packaged with certain practical activities where students can do their work repeatedly and continuously so that they can construct their understanding through practical activities in which students are fully involved in learning.

The objectives of vocational education, according to Yoto and Widiyanti (2017, p. 586), is to prepare students to enter the workforce, choose a career, build competencies, and equip useful experiences in the workforce. It is mentioned by Mardiyah and Supriyadi (2013, p. 321) that vocational schools aim to equip their students with skills that are following

their interests so that it will be useful when they work in the industry. Narwoto and Soeharto (2013, p. 223) add that vocational education is education aimed to prepare students who can work in certain fields with the competencies based on their interests.

Based on the opinion, practical learning is crucial for vocational students. Through practical learning, direct experience can be provided to vocational students to practice their abilities to be competent in their fields. To make students competent in their fields of expertise, Sutrisno and Siswanto (2016, p. 112) state that educational patterns must be made as close as to the conditions of the workforce and can be done repeatedly and sustainably. Thus, the mindset and skills of students can be suitable for the field of work that they will encounter in the workforce, so they can compete with the competencies they have in the area of expertise they are engaged in.

However, the unavailability of learning practices in line with industry needs is a major obstacle faced by vocational schools. Practical teaching materials provided by schools and the government also do not fully support students to improve their competency in the field of expertise. Besides, Widiyanto (2010, p. 104) explain that there was still a lack of laboratory facilities that could be provided by schools so the graduates were not adaptive to the workforce. It causes the graduates produced by vocational schools not having sufficient competence to enter the workforce. Judisseno (2008, p. 17) states another problem found in his study, that vocational school did not want to pay attention to the developmental needs of the industry so that it becomes a serious pitfall for vocational high schools in Indonesia, such as the reluctance or lack of trust from industry to use vocational school graduates. On the other hand, based on the argument from Setiawati and Sudira (2015, p. 326), one of the learning achievements of students in vocational schools is the attainment of competency in vocational practice that will become a provision for the workforce. Thus, it is ironic if practical learning with some facilities that should be fulfilled by the vocational school in supporting the improvement of student competencies cannot be provided so that it becomes an unemployment problem created by the vocational school because it cannot equip students to enter and compete in the professional workspace.

The problems are summarized as follows: (1) the lack of practical teaching materials provided, (2) the deficiency of workshop facilities that can be used, and (3) schools are less adaptive to industry needs also become a major obstacle experienced by the Vocational High School of Automation and Office Management Program (AOMP) for conducting practical learning. The teaching materials provided are still widely based on knowledge and are textual, and very rarely found practical teaching materials based on practical activities can make students active in the learning process with meaning-maker and problem-solver principles, moreover practical teaching materials that are in line with needs industry.

According to Vygotsky's constructivism theory, students will acquire long recorded knowledge in memory and become a certain competency that they have by arranging the active classroom situation in the learning process to explore students' abilities. It can be realized in practical learning repeatedly and sustainably. Through practical activities, students will obtain full knowledge and experience so that they will be competent in their fields. Reviewed from previous studies on vocational education, practical activities are the largest contributor in improving the ability of students needed in the industrial world. Like the research conducted by Lestari and Siswanto (2015, p. 190), namely: the learning outcomes of productive education and training significantly influence the work readiness of vocational students. Besides, Setiawati and Sudira (2015, p. 337) state that the factors that influence the learning achievement of vocational students are achievement motivation, learning discipline, the experience of internship, facilities, and infrastructure, teacher performance, and parent support.

Based on the analysis of various phenomena that occur at vocational school, it can be seen that the problem of teaching materials lies in the infrastructure variable that must be prepared to provide practical learning that fit industrial needs. The availability of practical teaching materials is very important for students, teachers, industries, and academics as an effort to improve the competency of vocational students and to be in line with industry needs. Thus, learning practices carried out in schools to improve the competency of vocational students can qualify industry needs.

It is interesting to be investigated so that it can be known with certainty what the learning needs of the practical learning in the Vocational High School of AOMP to be able to realize learning in line with the industry. In addition, this research can be used as a reference by vocational schools or other vocational institutions in preparing practical learning which is needed to improve student competencies before entering the workforce.

RESEARCH METHOD

This study was conducted using descriptive methods with a qualitative approach to accomplish the research's objective. This study is intended to investigate information regarding the practical learning needs of the Vocational High School of AOMP in Yogyakarta City.

The subjects of this study were productive teachers of the Vocational High School of AOMP in Yogyakarta City selected by purposive sampling. The selected teachers became the source of the data in this study representing public and private schools in Yogyakarta City originating from State Vocational High School 1 in Yogyakarta, State Vocational High School 7 in Yogyakarta, BOPKRI Vocational High School 1 in Yogyakarta, and PIRI Vocational High School 3 in Yogyakarta.

The selection of participants is based on consideration of understanding the problems faced by schools in conducting practical learning, experiencing cooperating with industry, and representing some of the positions that they have in the school.

In fulfilling the research mission, this study used deep interviews and documentation to seek information about particular topics. This study analyses the data collected through Miles and Huberman's models, namely: data reduction, data presentation, data verification, and conclusion. Data presentation uses a matrix to display data so that it can be easily understood and get its substance (Miles & Huberman, 1994).

RESULTS AND DISCUSSION

Results

Based on the results of interviews and documentation conducted, several findings indicate the pitfalls experienced by teachers for

filling the needs of practical learning in the Vocational High School of AOMP. Then, the data obtained were analyzed using Miles and Huberman model and presented in the matrix or table.

There are some practical learning problems in vocational schools that still cannot be solved by teachers and education management to construct practical experience for students following the needs of the industry. For more details, consider Table 1.

Table 1 shows that there are problems experienced by teachers in practical learning in the Vocational High School of AOMP. It does not mean that schools are not able to provide curriculum demands and industry requirements. However, it requires the involvement of certain parties in order to be able to solve the hardships occurring for learning in vocational school, such as the education service, industry service, and other government-owned institutions which is still needed to link the necessities of schools and industries so that they can solve the complex equations occurring in the implementation of practical learning to improve vocational student competencies.

Based on Table 1, it can be seen that there are opportunities for teachers and education practitioners to fulfill the requirements for practice learning at vocational schools. First, they can create practical teaching materials in schools through integrated basic competencies. In addition to students should be given a specific time to undertake practical activities sustainably. It is intended to meet the learning needs of students in honing their competence. Second, facilities and infrastructure in schools such as office-specific laboratories, office equipment necessary for office activities must be established to support student learning practices in schools that have been adapted to the industry required.

The problem of learning this practice is almost faced by all Vocational High Schools of AOMP in Yogyakarta City. Besides, schools also have not found the right way yet to array practical learning that supports the improvement of student competencies that fit the fields of expertise in office automation and governance. Learning practices that have been carried out by teachers in schools are presented in Table 2.

Table 1. Problems of Practical Learning in Vocational High School Corresponding to Industrial Needs

Learning problems	Requirements that must be fulfilled in learning	Opportunities
No practice teaching materials corresponding to industry Separate practice learning materials between competency and others No specific time for practical activities	Conveyed the basic competence in the curriculum	Learning with integrated competencies
Practice in an industry directly based on the workforce There are new jobs that have been applied in industries, yet schools are unable to teach	Student competencies in handling specific work following industry	
No office laboratory Difficult to follow the development of tools used by industry Limited office equipment in the school	Utilization of the internet to access information on how to use office equipment needed	Facilities and infrastructures that support office learning
Office Laboratory is Computers Laboratory which is used to other skill competency programs Utilization of Laboratories for Exam Activities	The intensity of laboratory use for maximum practice	

Table 2. Practice Learning Conducted by Vocational High School

Learning Process	Requirements that must be fulfilled in learning	Opportunities
Using the teacher's lecture method Give assignments to students Presentations conducted by students Discussion of the presented material	Basic competency of theory	School and industry collaboration to integrate curriculum and learning materials
Practice each subject in the computer laboratory Conducting practice with basic competencies in each subject	Basic competence of practice	
Jobs performed by students during the internship program in the industry	Adaptive student competencies with office work	

From the detailed information in Table 2, it can be seen that schools still rely heavily on practical activities undertaken by students in industry, yet practical learning conducted at school is more likely to be achieved in delivering material, not in enhancing the competency of students. It is evident from the practice learning process that does not emphasize the achievement of student competencies that suitable for industry needs. Meanwhile, when practicing in industry, vocational students are not fully involved, and the work done is limited to technical matters.

With all the limitations possessed and underwent by teachers in schools on setting practical learning to students, some opportunities can be alternative for schools through teachers or authorities to be able to work closely with industry in planning and implementing learning practices that are appropriate with the required competencies. It is relevant to be done since cooperation in organizing vocational education stated in Presidential Instruction No. 9 of 2016 on Revitalization program of Vocational High School (VHS). The regulation states that ministries related to vocational edu-

cation such as ministries of education and culture, industry, labor, domestic, finance, research and technology, transportation, maritime affairs and fisheries, state-owned enterprises, energy and mineral resources, health and all regional heads in Indonesia are encouraged to do things considered necessary and prepare appropriate instruments to provide learning that can improve the competency of vocational students.

In addition, the Ministry of Education and Culture is specifically asked to heighten cooperation with the department and industry in organizing learning in vocational schools that are in line with the current industry required. Table 3 presents what and how the cooperation between vocational high school and industry can be perceived.

The implementation of this cooperation between schools and industry is an application on the internship program, industrial visit, special skills test, the opportunity to participate in a selection in a particular industry, and the opportunity to take part in the job fair held by the school. From some of the aforementioned cooperation, an internship program is one of the special programs to meet the needs of practical activities of students who are required to work in the industry. However, internship activities in the industry face several obstacles due to the lack of flexibility of the school to collaborate with industry, so the school cannot determine

together with the industry related to the material, time, and practical experience by students.

As a result, students cannot fully explore their abilities in the industry to become certain competencies mastered by students. Besides, the implementation of industrial visits and special skills tests by schools and industries is conducted conditionally and sometimes only once or twice, not intensively. The opportunity to participate in industry selection and take part in a job fair can only be held at schools with the special job market, which has collaborated with industry.

Based on the data of interviews and documentation obtained, the collaboration between schools and industries has complex equations, namely: on the intensity and flexibility of schools in conducting and determining cooperation type with industry. Schools have difficulty determining the type of cooperation with industry because the role of related offices and local government is not optimal in facilitating the learning needs of school practice with industry requirements. There are no specific regulations from the regional government or offices that make schools flexible in establishing cooperation with industry. For example, in internship activities, schools tend to be afraid of not getting partners when asking for full student involvement in practical activities in the industry.

Table 3. Collaboration between Vocational High School and Industry

The Collaboration Hitherto	Requirement that must be Fulfilled in Learning	Opportunities
Cannot determine materials of internship program prepared by students Cannot determine the time of Internship program that fit the student's needs enhancing their competence in the industry Not many opportunities for students to learn in industry in an internship program	Internship program runs with the appropriate intensity of time and material	Rules that provide authority and connect learning between industry and schools
Limited activities to do during industry visits	Providing students understanding regarding the field of work done	
Implementation of special skills tests in school	Objective assessment according to student competency	Rules that prioritize vocational graduates to work in their fields of expertise
Opportunity to follow work selection Opportunity to join job fair in schools	Get priority opportunities	

Table 4. Practical Teaching Materials that Can be Provided

Forms of Teaching Materials	Requirements that Must be Fulfilled in Teaching Materials	Opportunities
Practice teaching materials with integrated competence	Existing competencies in curriculum and competencies required by industry	Special teaching materials for practical activities
Support independent learning process	Effectiveness of time and facilities used	
Many practical activities Similar to the duty in the industry	Existing jobs in private and public offices	Simulation or Role Playing Model
The division of work within and between groups is clear Collaboration between students in intergroup and intragroup Evaluation of group results	Conceptualized several offices with multi interactions	
There is an introduction of materials	Based on basic competencies used	

On the other hand, the industry also does not intensively pay special attention to vocational education because this is not considered to be its responsibility. The cooperative relationship that occurs between schools and industry is more likely to be the necessities of one party.

In facing challenges, there are opportunities for vocational schools such as related offices and local governments to facilitate the learning needs of student practice through the issuance of special regulations by the central and regional governments related to the authority of schools and industries in implementing practical learning in industry. In addition, the central and regional governments can issue special rules that prioritize vocational graduates to work in their areas of expertise so that high school students have more opportunities available for them. Thus, students can fully get the opportunity to improve and apply their competence in the workplace.

In fulfilling the needs of practical learning up to now it has not been able to be fully realized by the schools or related education offices, because of some problems that occur, researchers see one opportunity that is by providing practical teaching materials that are following industry requirements. The practical teaching materials that can be used by students to support the achievement of certain competencies can be seen in Table 4.

The results of interviews and documentation presented in the form of the data matrix in Table 4 imply that the practical learning needs can be circumvented by providing practical teaching materials that contain integrated basic competencies and fit the industry needs. Besides, practical teaching materials needed that support the student's independent learning process consisting of selected material based on the curriculum to enhance competencies.

Based on this, practical teaching material models that can be created are those that contain material or practical instructions using simulated learning methods or role-playing so that they can directly illustrate various types of work in the office industry and can be studied intensively by students. In this way, the needs of practical learning in vocational students of AOMP can be fully realized in the depiction of duty in the office industry.

Discussion

Based on the results of the study, it can be seen that there are still many problems that occur in the Vocational High School of AOMP related to practical learning. It starts from the lack of practical teaching materials that are relevant to the industry, there is no specific time for practical learning, deficiency of facilities and infrastructure, limited tools and time for using office laboratories, and there are new types of jobs in the industries that are difficult

to follow. It is in line with Judisseno (2008, p. 17), who states that vocational schools in Indonesia do not actively observe the development of industry needs. Practical learning in schools is applied in modest ways and facilities and tends to be far from the requirements of industrial work. It causes the industry to lack confidence in vocational school graduates to get the opportunity to work in the industry.

Murniati and Usman (2009, p. 2) specifically state that vocational education is indeed designed to prepare competent graduates following the needs of the workforce. The vocational school still has several technical hardships in enhancing student competency. Moreover, industrial challenges are difficult for schools to follow in providing practical learning to students, such as new types of work that utilize technological sophistication, competencies integrated with other competencies outside of the competencies taught at school, and students' affective abilities in doing responsibilities in the industry. If learning practices that are taught in schools are far from the demands of work in the industry, students will face technical distress to get opportunities to work in certain industries. Therefore, the number of unemployed graduates from vocational school is a common thing when viewed from the learning process and learning materials that are acquired by students.

Practical teaching materials in the Vocational High School of AOMP are very limited, especially if requested with integrated basic competencies that are in line with the requirements of work in the office. In the office sector, the application of tasks uses the full competency of office employees. As with correspondence tasks, competencies that must also be mastered by office employees are filing competencies, computer operating competencies, and general administrative competencies. Meanwhile, learning in schools, the competencies are separated based on subjects, and basic competencies taught. Based on the findings, practical teaching becomes less relevant if it must be integrated with the industry.

In line with the aforementioned idea, Sutirman et al. (2017, p. 94) and Thomson (1972, p. 111) state that vocational education aims to provide information, work experience, work awareness, and train students' psychomotor abilities following industry needs. Yoto and Widiyanti (2017, p. 586), Mardiyah and

Supriyadi (2013, p. 321), and Narwoto and Soeharto (2013, p. 223) clearly mention that vocational education goals prepare students to be able to enter the workforce, choose a career, build a career, build a career, competence, and equip experiences that will be useful in the industry from the subjects they have learned. Therefore, schools are still having trouble to create appropriate practice learning, because no practice teaching material is suitable for work in the industry.

This issue occurs since there is indeed no practice teaching material that is suitable for employment in the industry. The main problem of other problems, such as there is no specific time for practical learning, deficiency of facilities and infrastructure, and the limited tools and time to use office laboratories. It has become a unity of problems that are relevant to each other because it is indeed a result of the absence of practical teaching materials that are relevant to the needs of the business world or industry. It also makes practice learning as long as it is carried out only to achieve basic competencies according to the national curriculum and not to consider the needs of the industry. Therefore, the competencies possessed by vocational students are not yet fully trusted by the industries, because they consider that schools are less adaptive to the needs of the industry for producing graduates.

In learning at the Vocational High School of AOMP, four types of competencies should be given to students, namely: (1) basic competency theory, (2) basic competency practice, (3) understanding the different fields of work performed and (4) the novelty of office work that follows developments. Competencies that must be mastered by each employee or prospective worker are listed in Indonesian National Work Competency Standards issued by the National Professional Certification Board in 2012. By complying with these standards, schools can innovate learning to advance competencies required by vocational graduates so they can be accepted and competed in the industry.

Besides, schools can collaborate with industry to design and implement practical learning. The application of cooperation must consider the requisites of learning in schools and industry. In this way, learning in vocational schools can take place by the demands of the curriculum and industry, for example, there

is a novelty of types and equipment of job, so the fulfillment of office equipment training in schools can be dealt by active and comprehensive cooperation between schools and industries. Clarke and Winch (2007, p. 9) state that the proximity between the school and industry partners will support the learning practices that are beneficial to students' experiences in the field of expertise. Yoto and Widiyanti (2017, p. 585) present examples of collaboration between schools and industry by building together learning based on the class cooperation model. The statement of Yoto and Widiyanti (2017, p. 596) implies that through class cooperation, Vocational High School graduates will become more confident and ready to compete in the world of work, and the problem of unemployment in Indonesia can be resolved.

Based on the results of the study, the problem of cooperation with industry has not been solved yet in achieving the competency of vocational students of AOMP. Practical cooperation is only on the internship activities, industrial visits, special skills tests, opportunities to participate in selection in certain industries, and opportunities to take part in Job Fairs held by schools. Opportunities to take part in job fairs and certain job selections are only provided by Vocational High Schools that have a special job market and actively collaborate with industry. This problem arises because the special job market owned by schools cannot fully provide the demands of cooperation in the provision of learning that involves industry.

In addition, the special job market of vocational school also still has difficulty in assisting vocational school graduates in applying for and in being accepted to work in the industry. The Regulation of the Minister of Manpower and Transmigration No. 07 of 2008 accounts that the role of the special job market of vocational school is to establish cooperation among the industry with the missions of creating practical learning and work placements that match their field of expertise. Directorate of Vocational Development (n.d.) adds that special job market of vocational school activities other than those aforementioned programs are synchronizing curriculum, establishing cooperation with the Department of Manpower and Transmigration on internship program, working placement for graduates, creating job vacancies, and creating a database of graduates who have or have not worked.

Based on this issue, there are two point opportunities that can be done by education providers through the relevant ministries or government to support learning in Vocational High Schools: (1) issuance of special regulations regarding the authority of schools and industries in implementing practical learning in industry through central and regional governments, (2) issuance of special regulations that prioritize vocational graduates applying and working in their area of expertise. Deist and Winterton (2005, p. 27) state that to obtain a certain competency, the teacher or education provider can apply collective learning with hands-on practice and show a depiction similar to reality to increase students' skills. Piaget (Bodner, 1986, p. 873) explains in more detail that competence is acquired from knowledge taught through a structured process based on the student experience in a learning process. Referring to the theory of constructivism, Vygotsky (Turuk, 2008, p. 246) states that competence is obtained through knowledge planned by the instructor to present an active classroom situation to explore the abilities of students. Woodruffe (1993, p. 29) adds that a person is considered competent if he has a series of experiences that make him skilled in completing his task as his responsibilities.

Regarding the Regulation of the Minister of Manpower and Transmigration No. 07 of 2008, Directorate of Vocational Development (n.d.), and the aforementioned competency theories, cooperation between schools and business parties is one of solutions to improve vocational student competencies, but the communication ineffectiveness between school and industry has a direct impact on students during the implementation of practical activities in the industry. It is impossible to solve the pitfall of cooperation in a relatively short time, but it can be overcome by learning practices that can describe the atmosphere and work of the office exactly as it is in reality and apply it flexibly in school. It can be realized through the creation of practical teaching materials that contain integrated basic competencies and appropriate with industry needs. It aims to support the students' independent learning process, especially the content of books and practical instruction using simulation learning methods or role-playing. This teaching material is intended so that students can study it intensively and obtain a real illustration of jobs in the office industry.

Moreover, these practical teaching materials are expected to increase their knowledge, experience, and competency through practical activities conceptualized similar to work in the industry. Thus, the practical learning needs of Vocational High School of AOMP can be met by schools, and students can prepare themselves to be able to compete in the industry.

CONCLUSION

The needs of practical learning in the Vocational High School of AOMP are still not fully provided by the school. This study pinpointing issues that occur in practical learning is the absence of practical teaching materials relevant to industry, lack of specific time for practical learning, deficiency of supporting facilities and infrastructure, limited tools and time to use office laboratories, and there are new type of job in office work that is difficult for schools to follow.

The solution to the difficulties in the provision of practical learning is cooperation between schools and industry. Besides, another important problem faced by schools related to cooperation with industry is cooperation formed through the special job market of Vocational High Schools, which are inflexible in designing and implementing learning with industry.

These constraints hamper schools in seeking opportunities for students through learning practices following industry criteria. As a result, students are less trained to do the work in the area of expertise they are engaged. These difficulties cause vocational students to become less confident in doing their work in the industry. The impact is that vocational high school students and graduates are deemed inadequate to meet the qualifications and competencies during internship activities or when working in the industry.

Referring to those obstacles, the alternative in providing practical learning in the Vocational High School of AOMP is creating practical teaching materials that can describe the atmosphere and office work like a reality that can be learned independently by students. With practical teaching materials intended to provide knowledge and experience on student learning that can improve competence. Adequate competence can be used to work both at the time of the internship program and when they have graduated.

The limitation of this study is restricted in the cases in Yogyakarta City and schools as research subjects. Future studies should use other research methods and other regions, and broad research subjects so they can describe more comprehensively the practical learning needs of Vocational High School of AOMP in Indonesia.

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