The implementation evaluation of school-industry cooperation to strengthen the vocational school students' competence

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Abstract

This research aims to conduct an evaluation of the implementation of school-industry cooperation in form of internship program. The evaluation focused on the aspects of (1) context in terms of the purpose of the agreement, (2) input in terms of readiness of cooperation, (3) process in terms of the quality of implementing cooperation, and (4) product in terms of benefits gained from school partner industry cooperation to strengthen the vocational students' competencies. This research is an evaluation research viewed from the Context, Input, Process, and Product (CIPP) components. The research data were obtained from a questionnaire given to students, supervisors, internship working group teams, and school industry partners of the Electric Power Installation Engineering Department of SMK Negeri 1 Windusari. The results are, (1) the context variable got a positive result, (2) the input variable got a negative result, (3) the process variable got a negative result, and (4) the product variable got a negative result. Therefore, the CIPP evaluation found positive, negative, negative, negative (+ - --) which made the CIPP variable is included in quadrant III of the Glickman quadrant. Thus, we found that implementation of school-industry cooperation to strengthen the students' competence was less effective. The school could use these findings to improve the performance of the cooperation implementation.

Keywords: CIPP, evaluation, school-industry cooperation, vocational school

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INTRODUCTION

Education is a conscious and planned effort to create an atmosphere of learning and learning process so that students actively develop their potential to have religious-spiritual strength, self-control, discipline, intelligence, noble character, and the skills needed by themselves, society, nation, and country (Setneg, 2003). Vocational High School (SMK/Sekolah Menengah Kejuruan) is a high school that organizes vocational education by prioritizing preparing students to enter the workforce and developing professional attitudes (MOEC, 1998). Dual system education (PSG=Pendidikan Sistem Ganda) or now called internship or field work practice (PKL=Praktik Kerja Lapangan) is a form of vocational skills education that systematically and synchronously integrates educational programs in vocational high schools with skills mastery programs obtained from working directly in partner institutions, to achieve a certain level of professional expertise (MOEC, 1998). Pair industry is the business world of the industrial world, both private or government institutions, which produce

goods and or services and have resources together with SMKs to hold internship (MOEC, 1998).

Cooperation that exists between the world of education with industrial a good idea and does not give loss effectively and efficiently. The partnership can improve *skills* in their communities and can improve people's lives (Syari et al., 2018). The improvement in cooperation between the industrial world and vocational schools is made to enhance the competitiveness of vocational graduates to obtain employment (Khurniawan, 2017). The obstacle of not absorbing vocational graduates in the industry could be due to the incompatibility of the area of expertise learned that is not connected (Khurniawan, 2017). Another factor of the problem of the non-functioning of industrial cooperation with SMKs is that graduates of educational institutions are not ready to work because they only master the theory, lack of skills (MOEC, 2018).

Program evaluation is a structured process of activities that is valuable and valuable and is capable of making decisions (Muryadi, 2017). Evaluation measurement is directed to the extent to which the evaluation process is carried out and developed to achieve goals and results (Sukmadinata, 2017). Readiness is an essential requirement in implementing a program to provide answers or responses in a situation (Slameto, 2010).

CIPP, stands for Context, Input, Process, and Product, is an evaluation model that uses a management-oriented approach. The CIPP model supports organizational development in obtaining maximum work results with available resources (Owen & Rogers, 1999). *Context* evaluation helps plan a decision, determine the needs, be achieved, and formulate a program (Kurniadin & Machali, 2016). *Input* evaluation *is* used to measure the type of program that suits the objectives and take the most appropriate strategy for decision making (Sukmadinata, 2017). *Process* evaluation is the implementation of programs to achieve goals (Sukmadinata, 2017). *Product* evaluation is a measurement to measure the feasibility of the plan (Sukmadinata, 2017).

The objectives to be achieved in this study are (1) knowing the evaluation of the *context in* terms of the objectives of cooperation, (2) knowing the evaluation of *inputs in* terms of the readiness of the collaboration, (3) knowing the evaluation of the *process in* terms of the quality of the implementation of the collaboration, and (4) knowing the evaluation of the *product* reviewed from the benefits of cooperation.

RESEARCH METHOD

The research method used is the evaluation method with the CIPP (Context, Input, Process, Product) model developed by (Stufflebeam, 1971). The study was conducted at SMK Negeri 1 Windusari, Magelang. The study was conducted in February to May of the 2018-2019 school year. The subjects in this study were students of class XI of the Electric Power Installation Engineering program that involved 30 students of fieldwork practice, five tutors, four people field workgroup, and eight industrial partner schools. The applied research procedures include evaluation of context, input, process, and product.

The data collection technique used in this study was the questionnaire method. The questionnaire was carried out to extract quantitative data from all research indicators by giving or disseminating a list of statements and or questions to all respondents. The data obtained is quantitative data obtained from a questionnaire. Then the data is processed using descriptive statistics by measuring the mean and standard deviation. Further, we classified the data based on research criteria with four categories, namely, very good, good, not good, and not suitable. The research stages are presented in Figure 1.

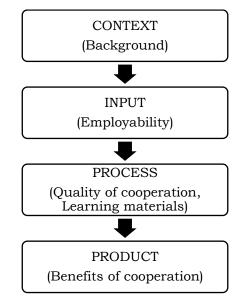


Figure 1. Evaluation stages

RESULTS AND DISCUSSION

Results

This research was conducted by distributing questionnaire instruments to related respondents, students, supervisors, workgroup teams, and industry partners. The instruments that have been distributed have been determined evaluation stages, starting from the context, input, process, and product. Evaluation of context to evaluate the background of implementing cooperation, the evaluation input evaluates the quality of the cooperation, evaluation process evaluates implementing the program implementation, and evaluation of products to evaluate the benefits of the program. The frequency distribution is done to group data based on predetermined categories to facilitate the presentation of data, easy to understand, and easy to analyze data.

Student respondent score calculation results

Data recapitulation of scores from student respondents produced data as listed in Table 1. The number of questions of student respondents was 64 questions divided into four variables. The number of questions in the context variable consists of 16 questions, 12 questions input variables, 25 questions process variables, and 11 questions product variables. The lowest score for each question is one, and the highest is 4. The number of respondents involved in this evaluation research is 30 respondents.

		1		
Variable Statistics	Context	Input	Process	Product
<i>The mean</i> Standard	47.10	32.00	66.37	25.63
Deviation	6.27	3.89	8.69	3.59
Minimum	33	26	50	20
Maximum	59	43	88	36
F +	15	14	11	14
F-	15	16	19	16
Results	+	-	-	-
Category	Well	Not good	Not good	Not good
Total Results	+ (Poor)			

Table 1. Student Respondent Evaluation Results

Teacher respondent score calculation results

Data recapitulation of scores from teacher respondents produced data as listed in Table 2. The number of items of teacher respondents was 37 items divided into four variables. The number of items in the context variable consists of 7 items, 9 item input variables, 12 item process variables, and 9 item product variables. The lowest score for each item is 1, and the highest is 4. The number of respondents involved in this evaluation study is as many as five respondents.

Variable Statistics	Context	Input	Process	Product
<i>The mean</i> Standard	19.80	28.80	36.40	27.20
Deviation	2.86	6.83	4.98	5.02
Minimum	16	22	31	23
Maximum	23	36	43	34
F +	3	2	2	2
F-	2	3	3	3
Results	+	-	-	-
Category	Well	Not good	Not good	Not good
Total Results	+ (Less Effective)			

Table 2. Evaluation Results of Supervising Teacher Respondents

Results of calculation of respondents score of PKL working group teams Data recapitulation of scores from the respondents working group internship produces data as listed in Table 3. The number of items from the working group team respondents was 28 items divided into four variables. The number of items in the context variable consists of 9 items, the input variable is six items, the process variable is seven items, and the product variable is six items. The lowest score for each item is 1, and the highest is 4. The number of respondents involved in this evaluation study is as many as five respondents.

Variable Statistics	Context	Input	Process	Product
<i>The mean</i> Standard	23.75	18.25	18.50	16.75
Deviation	4.34	4.03	3.87	2.75
Minimum	20	14	15	14
Maximum	28	23	24	20
F +	2	2	1	2
F-	2	2	3	2
Results	-	-	-	-
Category	Well	Well	Not good	Well
Total Results	+ + - + (less effective)			

Table 3. Evaluation Results of Respondents from PKL Working Group Teams

Results of Calculation of Respondents' Industry Scores for Couples

Data recapitulation score of industrial partner respondents to produce data, as shown in Table 4. The number of items of respondents working for group team as much as 38 items that are divided into four variables. The number of items in the context variable consists of 8 items, 7 item input variables, 15 item process variables, and 8 item product variables. The lowest score for each item is 1, and the highest is 4. The number of respondents involved in this evaluation study is as many as eight respondents.

Variable Statistics	Context	Input	Process	Product
<i>The mean</i> Standard	21.63	20.25	45.63	24.00
Deviation	4.10	4.55	9.07	4.98
Minimum	18	15	36	18
Maximum	28	27	60	32
F +	2	3	2	3
F-	6	5	6	5
Results	-	-	-	-
Category	Not good	Not good	Not good	Not good
Total Results	(Very Less Effective)			

Table 4. Results of Evaluation of Pair Industry Respondents

DISCUSSION

Context discussion

The background prepared before the implementation of fieldwork practices is the application of discipline in the home and school environment. A good experience can realize the objectives of fieldwork practices by the purposes of the Vocational School; namely, students can know the performance processes contained in the workplace, including products, labor, discipline, and work safety. This is consistent with the results of research by Prabandari &

Table 5 . Recapitulation of context evaluation						
Pospondonto		Freque	Information			
Respondents	F +	F-	Results	Information		
Student	15	15	+	Positive		
Teacher	3	2	+	Positive		
Workgroup	2	2	+	Positive		
Team						
Industry	2	6	-	Negative		
Results + + + - Effective enough						

Rasyid (2015), who found that knowing the background of implementing cooperation had a positive and significant effect on student competency.

The overall context evaluation results are quite effective and can be used to evaluate other aspects so that the program produces a very effective category. This is supported by the results of research developed by (Mahmudi, 2011) that the context evaluation stage that needs to be done is identifying program goals, assessing needs, and identifying opportunities. These results are also supported by research conducted by (Jusmin, 2012) that there is an influence from the background of the collaborators on the readiness of fieldwork practices to realize students who are capable of entrepreneurship. The relationship with students who practice fieldwork practices is to form students' maturity in developing mental capacity and affect learning activities and levels of readiness at work. Besides, the results of this evaluation are also in line with research (Prabandari & Rasyid, 2015) that the background has a positive and significant effect on student competence.

The cooperation of SMK Negeri 1 Windusari with the industry of school partners in supporting the competence of students in the Electrical Power Installation Technique in terms of the context variable consists of the background of students who will conduct internship, the background of the teacher who can guide the process of implementing internship, the background of the street work team groups, and the background behind the pair industry. The results of T scores (+) and (-) are analyzed and converted in percentage form. The results obtained from student respondents the percentage F + = 50% and the percentage F- = 50%. It can be said that the evaluation of cooperation between SMK N 1 Windusari with the partner industry of student respondents is effective, in terms of the T score +15 and T score -15.

The percentage of T scores obtained from the supervising teacher respondents is F + = 60% and F - = 40%. The difference between F + and F - is 20%. These results can be concluded that the evaluation conducted by the teacher supervising respondents is effective, can be viewed from T score +3 and T score -2.

The percentage of T score obtained from the working group team respondents obtained an F + value of 50% and an F-value of 50%. These results can be concluded that the evaluation that comes from the respondents working group internship is effective; it can be seen from the results of the calculation of T score +2 and T-2.

Percentage of T score obtained from partner industry respondents obtained an F + value of 25% and an F value of 75%. The difference between F + and Fproduced is 50%. It can be concluded that the evaluation of cooperation taken from partner industry respondents is less effective. These results are viewed from the calculation of T score +2 and T score -6. The calculation results obtained from the student respondents were positive; the teacher was positive; the PKL working group team was negative; the pair industry was negative (+ + - -). Overall context evaluation gets positive results (+). The conclusion that can be drawn from the collaboration between SMK Negeri 1 Windusari with the school partner industry in supporting the competence of students in Electrical Power Installation Techniques from context variables is positive (+) or effective.

Discussion on Input

Preparations are made before carrying out fieldwork practices, namely, analyzing work, selecting and training trainers, preparing training materials, establishing cooperation with industry, and evaluating previous activities and making updates (Tripathi & Chaurasia, 2014). Input evaluation indicators that can be assessed are readiness to support program implementation, the preparedness of funding sources, the readiness of fieldwork practice programs, the readiness of the mentoring process, and readiness of students in carrying out fieldwork practices (Adi, 2018).

Respondents		Frequ	Information	
	F +	F-	Results	mormation
Student	14	16	-	Negative
Teacher	2	3	-	Negative
Workgroup	2	2	1	Positive
Team			т	
Industry	3	5	-	Negative
Res	sults		+ -	Less Effective

Table 6. Recapitulation of Input Evaluations

Input evaluation is used to measure the type of program that matches the objectives in accordance with the objectives that have been set and take the most appropriate strategy to make a decision from a program plan (Sukmadinata, 2017). Preparations made during the process of carrying out fieldwork practices are provisioning conducted by schools for internships, providing additional supporting material to facilitate students in implementing internships, preparing work agreements between schools and industry, and preparing tools and materials that can be used by students while implementing internships.

The results of the research that have been carried out are supported by research conducted by Adi (2018) that the evaluation of inputs conducted has five indicators namely supporting facilities, readiness of funding sources, the readiness of fieldwork practice programs, readiness of the guidance process, and readiness of students in carrying out fieldwork practices. Input evaluation regarding students' readiness in carrying out fieldwork practices is included in the category of being quite prepared. The preparation of the school guidance teacher is carrying out the task of mentoring students and the readiness of the industry in guiding students during the PKL process.

Evaluation of the implementation of cooperation between SMK Negeri 1 Windusari with the industry of school partners in supporting the competence of students of Electrical Power Installation Engineering in terms of the input variables as a whole is less effective. The input variable is an evaluation of the implementation of the collaboration in terms of students' readiness to implement internships, teacher readiness in conducting the process of mentoring to internships students, workgroup team readiness to collaborate, and the readiness of the school partner industry in providing a place for internship students.

Analysis of the T score obtained was changed into a percentage form for easy analysis. The results obtained from student respondents are F + of 46.67% and F- of 53.33%. The difference between F + and F- is 6.66%. It can be said that the implementation of cooperation between SMK N 1 Windusari with partner industries is negative or less effective. These results are supported by the T scores obtained ie +14 and -16.

The results obtained from teacher respondents produce an F + value of 40% and an F- of 60%. The difference between F + and F- is equal to 20%, with negative results. The implementation of cooperation between SMK N 1 Windusari and the partner industry has gotten negative results, which means that the implementation of the collaboration carried out is less effective. This is supported by the results of the T score obtained ie +2 and -3.

The results obtained from the respondents working team internship that produce an F + value of 50% and F- by 50%. There is no difference between F + and F- so the results are positive. The cooperation that was established got positive results because the T scores obtained were +2 and -2.

The results of the last input variable, from respondents in the paired industry, produced a percentage of F + value of 37.5% and a percentage of F-value of 62.5%. The difference between F + and F-produced is 25%. It can be said that the implementation of the cooperation that was formed got a negative value. These results are supported by the acquisition of T score +3 and T score -5.

Calculation results obtained from student respondents produce negative values, from negative teacher supervisor respondents, from positive internship working for a team, and from industry respondents, the pairs are negative (- - + -). Evaluation of the implementation of cooperation carried out according to student respondents is less effective, from teacher respondents less effective, from working group respondents are effective, and from industrial partners less effective. Thus, the evaluation of the input obtained is negative or less effective. The implementation of cooperation needs to be evaluated or changes in the input variables to support the process of implementing cooperation that has been established.

Process Discussion

Stages of the implementation of internships can be in the form of pre-stage implementation of internships, the implementation of internships, and reporting the implementation of internships. Pre-internship can contain synchronization with industry, evaluation of industry feasibility, determination of industry, socialization, selection of industries by students, and making cooperation. Implementation of internships includes debriefing, submission, implementation, coaching, handling problem students, and withdrawal. PKL reporting includes the assessment and certification of PKL students and filing PKL records (Edi et al., 2017). The development of the *process* evaluation stage was developed through four stages, namely preparation for the implementation of fieldwork practices, implementation, *monitoring*, and finding obstacles during program implementation (Adi, 2018). The development of competency standards given to vocational students is not limited to the learning context but can also be provided through job training in the industry (Santosa & Sulisworo, 2018).

Table 7. Trocess Evaluation Recapitulation						
Frequency			Information			
F +	F-	Results	mormation			
11	19	-	Negative			
2	3	-	Negative			
1	3	-	Negative			
2 6 -		-	Negative			
Results			Very Less Effective			
	F + 11 2 1 2	Frequ F + F- 11 19 2 3 1 3 2 6	Frequency F + F - Results 11 19 - 2 3 - 1 3 - 2 6 -			

Table 7. Process Evaluation Recapitulation

Process evaluation that is carried out in the implementation of fieldwork practices includes first, pre- internships who have a side of industrial synchronization, evaluation of industry feasibility, the establishment of provisional industries, socialization, selection of industries by students, determination of industries, and making cooperation with industry. Second, the practice of fieldwork practices, including briefing, submission, training, mentoring, handling problem students, and withdrawing. Activity is the reporting of implementation, which includes the assessment and certification of students (Edi et al., 2017). The results of this study are supported by research (Arif & Suyanto, 2014), which explains that the results of the evaluation process in the implementation of fieldwork practices are included in both categories, which include the implementation of fieldwork practices and guidance processes. Four indicators developed in the process evaluation are preparation for program implementation, program implementation, monitoring, and program implementation obstacles (Adi, 2018).

The cooperation of SMK Negeri 1 Windusari with the industry of school partners in supporting the competence of students of the Electric Power Installation Technique in terms of process variables consists of several aspects, including the quality of the implementation of the internships conducted by students. The quality of the implementation of guidance conducted by the supervisor. The quality of the implementation of internships and the quality of the ongoing cooperation. The results of T scores (+) and (-) are analyzed and converted in percentage form. The results obtained from student respondents the percentage of F + = 36.67% and the percentage of F- = 63.33%. The difference obtained from the F + and F-values of 26.66%. These percentages get negative results. It can be said that the evaluation of cooperation between SMK N 1 Windusari and the paired industry of student respondents is less effective, in terms of T score +11 and T score -19.

The percentage of T scores obtained from the supervising teacher respondents is F + = 40% and F - = 60%. The difference between F + and F - at 20% is negative. These results can be concluded that the evaluation conducted by the teacher supervisor respondents is less effective; it can be seen from the T score +2 and T score -3.

The percentage of T score obtained from the working group team respondents obtained an F + value of 25% and an F value of 75%. The difference obtained between F + and F- is equal to 50% with negative results. These results can be concluded that the evaluation derived from the respondents working group internships are less effective value and can be viewed from the calculation results T score +1 and T score -3.

Percentage of T score obtained from partner industry respondents obtained an F + value of 25% and an F value of 75%. The difference between F + and Fproduced is 50%. It can be concluded that the evaluation of cooperation taken from partner industry respondents is less effective. These results are viewed from the calculation of T score +2 and T score -6.

The calculation results obtained from negative student respondents, negative tutor teachers, negative internships working for team, negative partner industry (- - - -). The process evaluation results obtained are negative or less effective. The conclusion that can be drawn from the collaboration between SMK Negeri 1 Windusari with the school partner industry in supporting the competence of students in the Electrical Power Installation Engineering of the process variable is that it is very ineffective. So, it is necessary to update the model of the implementation of internships in supporting the competency of students in Electrical Engineering Installation at SMK Negeri 1 Windusari.

Product discussion

Product evaluation is able to measure and interpret program achievements during program implementation. Fieldwork practice is able to provide opportunities and opportunities for students to develop attitudes, knowledge, skills, enlightenment, behavior, habits, and relationships from the experiences gained (Tri, 2012). The benefits of implementing fieldwork practices are able to improve students' expertise and work ethic (Arif & Suyanto, 2014).

Table 8. Product Evaluation Recapitulation					
Respondents		Freque	Information		
Respondents	F +	F-	Results	III0IIIatioII	
Student	14	16	-	Negative	
Teacher	2	3	-	Negative	
Pokja Team	2	2	+	Positive	
DUDI	3	5	-	Negative	
Results -			+ -	Less Effective	

Product evaluations should ideally measure and interpret program achievements during program implementation and at the end of the program. This stage is the final stage of evaluating the results of which will be known the achievement of a program, the suitability of the process with the objectives, and the accuracy of the actions given, as well as the impact of the program, implemented (Malik & Hasanah, 2015). Fieldwork practice is able to provide opportunities and opportunities for students to develop attitudes, knowledge, skills, enlightenment, behavior, habits, and relationships from experiences gained during the process of implementing fieldwork practices (Tri, 2012).

The results of the product evaluation research are supported by the results of the study (Arif & Suyanto, 2014) that the implementation of fieldwork practices results in benefits that are increasing students' skills and work ethics. During the process of implementing fieldwork practices, students will explore the capabilities they have but cannot be stated in the learning process in class. In addition, other benefits obtained by students during fieldwork practice are more responsible for the work available (Adi, 2018).

Evaluation of the implementation of the collaboration between SMK Negeri 1 Windusari with the industry of school partners in supporting the competence of students of Electrical Power Installation Engineering in terms of the overall product variable is less effective. The product variable is an evaluation of the implementation of the collaboration in terms of the benefits of the cooperation obtained by students, supervisors, PKL workgroup teams, and industry partners.

Analysis of the T score obtained was changed into a percentage form for easy analysis. The results obtained from student respondents are F + of 46.67% and F- of 53.33%. The difference between F + and F- is 6.66%. It can be said that the implementation of cooperation between SMK N 1 Windusari with partner industries is negative or less effective. These results are supported by the T scores obtained ie +14 and -16.

The results obtained from teacher respondents produce an F + value of 40% and an F- of 60%. The difference between F + and F- is equal to 20%, with negative results. The implementation of cooperation between SMK N 1 Windusari and the partner industry has gotten negative results, which means that the implementation of the collaboration carried out is less effective. This is supported by the results of the T score obtained ie +2 and -3.

The results obtained from the respondents working team internships that produce an F + value of 50% and F- by 50%. There is no difference between F + and F- so the results are positive. The cooperation that was established got positive results because the T scores obtained were +2 and -2.

The results of the last input variable, from respondents in the paired industry, produced a percentage of F + value of 37.5% and a percentage of F-value of 62.5%. The difference between F + and F-produced is 25%. It can be said that the implementation of the cooperation that was formed got a negative value. These results are supported by the acquisition of T score +3 and T score -5.

Product evaluation results obtained from student respondents produce negative values, from negative teacher supervisor respondents, from positive internship working group teams, and from industry respondents, the pairs are negative (- - + -). Evaluation of the implementation of cooperation carried out according to student respondents was valued less effective, from teacher respondents less effective, from respondents working team groups were effective, and from industrial partners less effective. The conclusion that can be drawn from product evaluation is negative or less effective. The implementation of the collaboration then needs to be evaluated or changes in product variables, so those involved or not involved in the implementation of the collaboration, both benefit.

Referring to the results of the study of a variable by variable in the research that has been carried out, it can be found that the evaluation of the implementation of industrial cooperation of school partners in supporting the competence of vocational students shows the results in quadrant III which is less effective.

CONCLUSION

Based on the results of research and discussion that has been described, the following conclusions can be drawn.

Context evaluation, in general, the implementation of industrial cooperation between school partners in supporting the competence of students in the Electrical Power Installation Technique at SMK Negeri 1 Windusari is quite effective (+). This means that the background of all respondents involved is quite appropriate and can support the implementation of cooperation.

Evaluation of inputs, in general, the implementation of industrial cooperation between school partners in supporting the competence of students

of Electrical Power Installation Engineering at SMK Negeri 1 Windusari is classified as less effective (-). This means that readiness in implementing cooperation needs to be improved so that it can support the process of implementing cooperation.

Process evaluation, in general, in the implementation of industrial cooperation school partners in supporting the competence of students of Electrical Power Installation Engineering at SMK Negeri 1 Windusari is classified as very ineffective (-). That is, the quality of the implementation of internships, the quality of the implementation of guidance, and the quality of the implementation of cooperation do not yet support the cooperation that exists between SMK Negeri 1 Windusari with partner industries.

Product evaluation, in general, the implementation of industrial cooperation of school partners in supporting the competence of students of Electric Power Installation Engineering at SMK Negeri 1 Windusari is classified as less effective (-). This means that the collaborative process is less useful. Thus, the evaluation of the implementation of the school partner industry cooperation in supporting the competence of students of Electric Power Installation Engineering at SMK Negeri 1 Windusari is included in quadrant III with results (+ - -) in the less effective category.

In the process of implementing cooperation between schools and industry, it is expected that good two-way communication will occur so as to provide benefits among the implementers of the collaboration. Schools get synchronization of competencies from industry and industry get workers who are competent and professionally ready to work. Vocational Schools are advised to use the results of this evaluation in carrying out or renewing the process of collaboration established with industry. Regarding the limitations of this evaluation research, it is hoped that further evaluations will be made to improve the collaborative process that exists.

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