

## Evaluation of industrial employment practices on multimedia skills program in vocational high school in South Minahasa

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### Abstract

This study aims to determine the implementation of industrial work practices and to find out the results of the implementation of industrial work practices at vocational high schools in South Minahasa Regency. This research is an evaluative study using the CIPP evaluation model approach. This research was conducted in the vocational high school multimedia expertise program in South Minahasa Regency. The subjects of this study were 50 students and 8 mentors. The research instruments used were documentation, open questionnaire and closed questionnaire, and observation. The research data obtained were then analyzed by descriptive statistics. The results of this study were 44 participants with a percentage of 88% the business world or the Industrial world Guidance stated that the category was moderate, so it was necessary to improve communication skills for students. School guidance as many as 32 students with a percentage of 64% stated that the category was moderate so it was necessary to increase the intensity of monitoring from the supervisor recommended by the school. The performance of students in implementing apprenticeship states that as many as 3 mentors with a percentage of 37% stated the moderate category, and as many as 5 mentors with a percentage of 63% stated the high category. The results of apprenticeship shows that the work readiness of 16 students with a percentage of 32% stated the medium category and as many as 34 students with a percentage of 68% stated the high category.

**Keywords:** industrial work practice

### Introduction

#### Background

Vocational secondary education must focus on preparing the workforce in accordance with the needs of the business / industrial world. Therefore, the government has implemented the link and match concept in the implementation of education in vocational high schools. This effort is made to improve the quality of SMK graduates in accordance with the needs of the workforce and the relevance of education.

Some of the problems that arise are: (1) Lack of student readiness due to a lack of understanding of internship procedures, (2) Not yet structured and fulfilled administration in internship, (3) mismatch between competence and jobdesk of students who carry out internship, (4) Ineffective monitoring and apprenticeship assessment. Therefore, there is a need for improvement in the learning process by holding an evaluation stage. Evaluation of the implementation of the apprenticeship program can be carried out gradually and continuously. Where from the results of observations that have been made there are several problems faced regarding industrial work practices, among others, 1) the place of apprenticeship is not relevant to the competencies of students, 2) the apprenticeship procedure is poorly understood because of unstructured debriefing, 3) monitoring of students who are outside the city is not routinely carried out, 4) the student's attitude is not good in carrying out the apprenticeship so that

it causes the student to move to the internship, 5) the form of assessment that is carried out is not good.

To determine the certainty of the implementation of the dual system education program whether it is running well or not, it is necessary to conduct an evaluation study using an evaluation model such as the analysis model: Context, Input, Process and Product (CIPP).

#### Research Focus

The main focus of this research is the evaluation of the implementation of the Vocational High School Industrial Practice Dual System Education program in South Minahasa Regency in the Multimedia expertise program. Meanwhile, the sub-focus of this research is the comparative evaluation of the quality of the implementation of the Vocational High School Industrial Practice Dual System Education program which is carried out on participating students in terms of the educational process and work practices in the business or industrial world. This research was conducted at vocational high schools in South Minahasa Regency which have a multimedia expertise program. This study intends to assess whether the implementation of vocational high school internships in the field of computer engineering and informatics expertise has been going well or not. Therefore, the researcher conducted a study on "Evaluation of the Implementation of the Student Industrial Work Practice Program for Multimedia expertise program at vocational high schools in South Minahasa Regency".

## Research Methods

### Place and Time of Research

This research was carried out in several vocational high schools in the South Minahasa district which have areas of expertise in Computer and Information Engineering, namely:

1. SMK Negeri 1 Tumpaan which is located at Matani Tumpaan Jln. Trans Sulawesi, Tumpaan District, South Minahasa Regency, North Sulawesi Province
2. SMK Negeri 1 Amurang Barat, which is located at Tewasen, Amurang Barat District, Minahasa Selatan Regency, North Sulawesi Province.
3. SMK Negeri 1 Sinonsayang, which is located at Poigar Dua, Sinonsayang District, South Minahasa Regency, North Sulawesi Province.
4. SMK Negeri 1 Motoling Timur, which is located at Wanga Picuan Baru Village, Motoling Timur District, South Minahasa Regency, North Sulawesi Province.

The time for the research was carried out in stages for 3 months, namely October-December 2019.

### Research, Approaches, Methods and Design

This study uses a quantitative descriptive approach with the CIPP evaluative descriptive method which aims to see the effectiveness of the dual system education program or internship. Evaluation is based on learning activities through several stages which include; context, input, process and output / product.

The use of the CIPP model is used for the following reasons: (1) the CIPP model can carry out evaluation activities of learning programs in secondary schools and can make basic comparisons between data in the field and the specified standards; (2) researchers can conduct evaluations and assessments of dual system education programs based on indicators of context, input, process and output; (3) the CIPP model is used to determine whether there is a difference between the objectives and the reality or the standards set.

## Results and Discussion

### Research Results

#### Guidance of the Business World or the Industrial World

In the Business World / Industrial World, mentoring plays an important role in the performance of students, so that communication between participants in industrial work practices and mentors is needed so that the work environment becomes more productive. Based on the research, the criteria for guidance carried out in the business or industrial world through 13 questions filled in by 50 respondents, with 5 Likert scale answers, with a maximum score of 62 and a minimum score of 38. The results of the study indicate that Business World / Industrial World guidance is 44 participants with a percentage of 88% stated the medium category and as many as 26 students with a percentage of 52% stated the high category.

#### School Guidance

Guidance in schools supports the performance of students, because if there are obstacles or obstacles faced by students during practice, they can be discussed together with the supervisor. This is due to the emotional bond of the supervisor at the school which is closer to the students. From the implementation of this internship, it can be

explained that the criteria for guidance carried out in schools, through 6 questions and filled in by 50 respondents, through 5 Likert scale answers, a maximum score of 27 and a minimum score of 15. The results of the study indicate that the school supervisor was 32 students with a percentage 64% stated the medium category, and as many as 18 students with a percentage of 36% stated the high category, and no students stated the low category.

### Student Performance

The performance of students in the implementation of internship is also one of the assessments of the success of the internship for the multimedia expertise program for the 2019/2020 academic year at vocational high schools in South Minahasa district. From the implementation of this internship, it can be explained that the performance of students in carrying out the internship program, through 23 questions filled in by 8 respondents, through 5 answers on a Likert scale, with a maximum score of 97 and a minimum score of 70. From the research results show that the assessment of the participant's performance is 3 Supervisors with a percentage of 37% stated that the category was moderate, and as many as 5 mentors with a percentage of 63% said that they were in the high category, and there was no supervisor who stated that the performance of the students was in the low category.

### Industrial Work Practice Results

After students carry out apprenticeship, it can be seen how much knowledge they gain from the business world / industrial world. Knowledge of understanding of technology, communication or cooperation with colleagues, knowledge of the work environment, Application of theories obtained from school to the world of business / industry. Over time, students will automatically have the readiness to work in a mature manner. The implementation of the apprenticeship program can be seen through the readiness of students' work, through 10 questions filled in by 50 respondents, through 5 Likert scale answers, with a maximum score of 45 and a minimum score of 30. From the calculation results of the research results show that there are 16 students' work readiness. Students with a percentage of 32% stated the medium category and as many as 34 students with a percentage of 68% stated the high category.

### Discussion

In mentoring the business world or the industrial world, students are required to be able to adapt to the work environment, cooperate with colleagues, synergize with superiors in the internship place. In this case, communication has an important role, one of which is to gain knowledge, provide direction, criticism and suggestions, monitor the results of student work, and get good grades from the results of internship. From the results of the pie chart and the DU / DI guidance table shows that as many as 44 participants with a percentage of 88% stated the moderate category and as many as 26 students with a percentage of 52% stated the high category. So it can be concluded that guidance in the business world and industry is considered moderate, so good communication is needed between students and DU / DI supervisors as well as the school as an internship organizer, so that it can be seen the suitability between the material needed and the work carried out at the internship.

School guidance aims to direct students in carrying out internship, making activity journals and reports, as well as monitoring the implementation of internships. From the data obtained, it can be explained that as many as 32 students with a percentage of 64% stated the moderate category, and as many as 18 students with a percentage of 36% stated the high category, and no students stated the low category. Overall, it can be seen that school guidance is in the medium category. Based on interviews with students, some of the contributing factors are the lack of monitoring of school supervisors in the implementation of internship so that students experience obstacles in solving problems faced when the internship takes place.

From the results of the study, it can be explained that the performance of students in carrying out the apprenticeship stated that as many as 3 mentors with a percentage of 37% stated the moderate category, and as many as 5 mentors with a percentage of 63% stated the high category, and no supervisor stated that the student's performance was in the low category. Overall the performance of students is categorized as high because it is caused by several factors, namely during the implementation of apprenticeship students always try to finish their work and always want to ask questions. In this case the basic knowledge in multimedia needs to be improved again.

After implementing internship, it is hoped that students can add insight into the world of work, so that when they graduate, students can have knowledge and an overview of how the world of work is, which is in accordance with the vision and mission of vocational high schools in general, namely ready to work and competent in their fields. From the results of the assessment showed that the work readiness of 16 students with a percentage of 32% stated the medium category and as many as 34 students with a percentage of 68% stated the high category. This illustrates that the results of apprenticeship are quite maximal where most students already have high work readiness.

## Conclusion

Based on the results of research on the evaluation of the implementation of the student industrial work practice program for the multimedia expertise program at vocational high schools in South Minahasa Regency, it can be concluded that the SMK industrial work practice program in South Minahasa Regency has been implemented in the context, input, process and results in accordance with the rules and curriculum. Which exists. Thus it can be concluded that:

1. Implementation of internship is carried out in class XII odd semester. Briefing is carried out before students carry out the internship. There are approximately 5 places for the internship for the multimedia expertise program. The guidance of 44 DU / DI participants with a percentage of 88% stated that the category was moderate, so it was necessary to improve communication skills for students. School guidance as many as 32 students with a percentage of 64% stated that the category was moderate so it was necessary to increase the intensity of monitoring from the supervisor recommended by the school.
2. The performance of students in carrying out the apprenticeship stated that as many as 3 mentors with a percentage of 37% stated the moderate category, and as many as 5 mentors with a percentage of 63% stated the

high category, and no supervisor stated that the students' performance was in the low category. From the research results, the students' performance is in the high category.

3. The results of apprenticeship shows that the work readiness of 16 students with a percentage of 32% stated the moderate category and as many as 34 students with a percentage of 68% stated the high category. This illustrates that the results of apprenticeship are quite maximal where most students already have high work readiness.

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