Program Evaluation on Work Industrial Practices at Vocational High School 6 Samarinda

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Abstract- This research discussed on the implementation of Industrial Work Practice at Vocational High School 6 Samarinda which the aim is to know the existing problems, such as 1) The legal basis for the implementation of Industrial Work Practice, 2) Resources in the implementation of Industrial Work Practice, 3) The stages of implementation of industrial work practices, 4) The achievement of graduated competence after Industrial Work Practice, 5) The rate of graduates working in Industrial and Business World. This research used a qualitative approach, through data collection as a key instrument of the researcher itself. Techniques of collecting data using interviews, observation and documentation. The process of data analysis available from various sources such as involved Students, Alumni, Tutor, Head of Program, Deputy Head of Industrial Relations Field, Deputy Head of The Curriculum, Industry Instructors and Industry Leaders which have been poured in field notes, personal documents, official documents, and photographs. The result of this research can be described that the Evaluation of Industrial Work Practice at Vocational High School 6 Samarinda is a real description of the findings of the researcher as an effort to give a comprehensive description of the implementation of Prakerin program, which includes Context Evaluation, Input Evaluation, Evaluation of The Process (Process Evaluation), Product Evaluation and Evaluation Outcome.

Keywords- Evaluation, Program, Industrial Work Practice, Vocational High School

A. Condition and Prospective toward Vocational High School in Indonesia

Achmad (2017) states that vocational high school (SMK) as a practiced school on specific disciplinary, government’s conviction and awareness were a requirement that must follow-up onwards. Considering a vocational high school which has concerned on practice instead of theoretical studies, so their preparation necessarily should be getting more consideration from neither school nor government side. These are truly difference rather than common schools. One kind of distinction could be seen in the application of Dual Educational System. Dual System is the educational performance and courses which been managed by two institutions. Two operators involved school and institution, then both of them are the sequence which cannot be separated who is purposed to on attaining competence of graduates that working fields needed (Mahmudi 2013).

Literally, Dual System was applied in the process of education, to be exact in 1994 through Work Industrial Practices (PRAKERIN). Come through PRAKERIN, vocation high school graduates have been expected to have some progression in the quality, efficiency, and relevancy in the middle of what their achieves in the school and what they did after being graduates. The continuation from PRAKERIN later was shown in the outline of the development program and improvement of vocational education that is a priority from educational development which is directing the enhancement of access, quality, relevancy, also efficiencies in a management of education. Afterward, these issues are in accordance with the constitution of Indonesia No. 20/2003 concerning on national education system. In those constitutions, there is an explanation that vocational high school (SMK) is the school who has prepared their graduates to have work in the certain field. Accentuation of Dual System in the school of vocation lies in learning by doing, which is multiplied by the practical aspect than theories.

The constitution No. 20/2003 also in accordance with a resolution of the Ministry of Education and Culture No. 0490/U/1992 and No. 080/U/1993 about the curriculum of vocation high school. In both regulations, there are descriptions in respect to the aim of vocational high school are providing
their graduates to be more productive, independent, in charge
with job vacancies which are available in the business world and
industries world as a middle-level workforce, corresponding with program and competence. Therefore, the
structure of vocational high school curriculum has made based
on the market needs in related with a middle-level workforce.
The vocational high school graduates must have both of hard
skill and soft skill with well-balanced and helpful when on
work later (Hidayati 2015). There are some of the government
rules related on vocational high school, which mean almost
same in comprehension and the intention, that intensifies the
quality of vocational high school’s graduates in term suitable
with the competences which taken by students and consorted
with market needs.

Nuria et al. (2012) claimed that:

“In developing countries, the education of youths with
practical oriented vocational skills is further considered and
a promising means to create flexible and self-responsible
learning attitudes, which might hence better prepare youths
for the requirements of the modern workplace”

The quote above has explained that the developing
countries like Indonesia tend to need the resources which have
specific abilities to compare with the resources that mastering
the theory. This matter causes the person that prevails on
certain competencies and more specific would be intent more
flexible and responsible. So, the preparation and role of many
parties in case preparing a curriculum that effected into
vocational school has due become one distinguish
thoughtfulness which did for better future of the school.

B. Triumph over Vocational High School

Success criteria over vocational high school can be
measured with the rate of graduate absorption within working
world. However, Central Bureau of Statistics (BPS) noted in
the 2012-2015 rating of unemployment vocational high school
graduates get higher than another level of education (BPS
2016). This fact could be reviewed with table 1 below:

<table>
<thead>
<tr>
<th>No</th>
<th>Completed of Highest Education</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elementary High School</td>
<td>3.69</td>
<td>3.44</td>
<td>3.04</td>
<td>2.74</td>
</tr>
<tr>
<td>2</td>
<td>Junior High School</td>
<td>7.80</td>
<td>7.59</td>
<td>7.15</td>
<td>6.22</td>
</tr>
<tr>
<td>3</td>
<td>Senior High School</td>
<td>10.34</td>
<td>9.72</td>
<td>9.55</td>
<td>10.32</td>
</tr>
<tr>
<td>4</td>
<td>Vocational High School</td>
<td>9.51</td>
<td>11.21</td>
<td>11.24</td>
<td>12.65</td>
</tr>
<tr>
<td>5</td>
<td>Diploma I/II/III</td>
<td>7.50</td>
<td>5.95</td>
<td>6.14</td>
<td>7.54</td>
</tr>
<tr>
<td>6</td>
<td>University</td>
<td>6.95</td>
<td>5.39</td>
<td>5.65</td>
<td>6.40</td>
</tr>
</tbody>
</table>

These conditions were contrary to the aim of vocational
high school which has been preparing their graduates being a
middle-level workforce that compatible with their expertise.
Pretty much the obstacles which cause high rates of
unemployment from the vocational high school of graduates.

Kind of graduates of skills and market needs which going
inappropriate could be the biggest reasons for the lack of
graduates of vocational high school which absorbed.

C. State Vocational High School of Samarinda (SMKN 6) as
Object of Research

This research conducted at SMKN 6 Samarinda on 6
packets of qualification respecting on the implementation of
PRAKERIN. Author do this research in order to understanding
and assessing what the PRAKERIN has gone well or not in
accordance with procedures and regulations, starting with a
search of industry, planning, the process of selection, execution
of PRAKERIN, until with monitoring and evaluating the
process. Eventually, the author very interested in doing
research about “Program Evaluation of Industrial Work
Practices (PRAKERIN) Vocational High School (SMK) 6
Samarinda”. The research question that would be next study in
this research comprise with: (1) what is the basis of the
implementation of Industrial Work Practices (PRAKERIN)?
(2) What kind of any components in the implementation of
Industrial Work Practices (PRAKERIN)? (3) How about the
process of the implementation of Industrial Work Practices
(PRAKERIN)? (4) How about competencies of graduates after
the Industrial Work Practices (PRAKERIN)? (5) How about
the absorption of the vocational high school of graduates in
industries?

II. METHODOLOGY

This research has been purposely in describing the
effectiveness of Implementation of PRAKERIN at the SMKN
6 Samarinda. As the evaluative research, the author will find
the components that affecting the effectiveness of PRAKERIN.
Operationally, this research was evaluated in the context, input,
product, and output. Such explanation before, the research was
held on SMKN 6 Samarinda with several points: (1) SMKN 6
Samarinda previously has never being a location of research;
(2) Located in Samarinda and make ease of author doing
research for the reason that accommodation lean to affordable;
(3) SMKN 6 Samarinda was applying ISO so that these school
can be said have Standard Operating Procedure (SOP) in each
of activities; (4) there is a cooperation with PT. Trakindo
Utama so the author could be observing the differentiation
among the student that received the theories and practice from
the industries directly and do not get on it; (5) SMKN 6
Samarinda has been the first school which released major of
mining geological engineering.

The approaches that used in this research are qualitative
approach. The reason for using this approach is because the
qualitative method is an easier method which been adapting
related to diverse reality and interconnecting (Guba & Lincoln
in Alwasilah 2002). The author seeing there is an informant
which been possessed of the information needed, then the
choice of the author has going thrive like the snowball,
Evolving convenient with necessity and constancy that
that qualitative research has to cover natural condition of
research so that researcher should direct down on field, output
data not by numeral formed but concerned with words and images, process more emphasized than product, analysis of data with inductive and also oppression into the meaning on the data which observed.

Furthermore, this research is using the evaluating design model program of CIPPO (Context, Input, Process, Product, Outcomes) which expanded by Stufflebeam 1971 like the illustration below:

![Evaluating Design Model Program CIPPO](image)

The Context of evaluation encompasses a problem of analysis that related to the environment of the program or the objective condition which will imply. Analysis of this pace containing power and weakness of particular object. Stufflebeam (1983) revealed that evaluation context as being a focus for the institution to identify the opportunities and evaluate the requirement. Input evaluation is an analysis that using the exertion of resources and alternative strategies which doing further. Analysis of input has a function to consider the most appropriate of strategy and action based on own resources. Evaluating process is an evaluation which been designed and used in the practice of implementation, including the procedural identification of problem as well as the sequence of events or performed activities. Every step or the procedure of activity would be seen by the alteration. Through those note, the resolution could be taking from the completion of early decisions.

The product of evaluation is a compilation of description and measurement outcomes which having relation with context, input, and the process which later interpreted with cost and merit which given (Stufflebeam and Shinkfield 1986). This evaluation was used to provide an analysis of the product and will compare with the initial goal from those manufactures of products. This matter shows to what extent the process adequate to fulfilling either purpose or target which was at the first has appointed with those final results. An outcome method of evaluation is a technique that conducted when the program has done. So as can be said that the outcome of the evaluation was an evaluation of the performance. Evaluation outcome of methods more includes at some of the results which must achieve in short period that is learning that involving: awareness, knowledge, attitudes, and the skills. For the medium term of the period, there is an action include: behavior, practice, and the decision making. While on a long period, an expected condition covers with: the condition of economic, condition of social, the condition of civilian, and condition of the environment.

In collecting of data, the author has uses the instrument of research which consists of five components: context, input, process, product, and outcomes. Precisely are as follows: (a) the basic implementation of PRAKERIN; (b) the components of PRAKERIN; (c) implementation process of PRAKERIN; (d) Competencies of the graduates, and; (e) the absorption of graduates on industries. Furthermore, the point of research can be seen in the table 2.

Moreover, the technique of collecting data tend to collect and record the data scientifically. It refers on Marshall Opinion (in Sugiyono 2016) which says “the fundamental methods relied on by qualitative researchers for gathering information are participation in the setting, direct observation, in-depth interviewing, and document review”. The author has using participant observation methods when author take part in collecting data, in-depth interview, and documentation (Sugiyono 2016). While collecting data, the author proceeds to the technique of analysis data through two steps. At first, analysis of data during the process of collecting data; this aimed to discover what thing that still needed to find, what inquiry that unanswered, what method that should be applied to gained recent information and what fault that should be fixed.

The way is to do checking up the comprehensiveness of data, validation of resourcing data, the sufficiency of technique, completeness of tools, the coding to every single of the data source in order to facilitate researcher in forth of collecting data. Second, analysis data which after finishing collecting data; that is an analysis which to do by the researcher since field collecting data has done. This one has a purpose to pulling up the conclusion from the data which has been obtained through comparing another of resources till disparity and resemblance have discovered to derive the clear conception in processing analysis of data.
### TABLE II. GUIDELINES OF THE INSTRUMENT RESEARCH

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Indicator</th>
<th>Type of Instrument</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Basic Implementation of PRAKERIN</td>
<td>Constitution, Ministerial Regulations, Decree, MoU</td>
<td>Document</td>
<td></td>
</tr>
</tbody>
</table>
| 2  | Components of PRAKERIN | - Students Advisor  
- Instructor of industries  
- Head vice of HKI  
- Head vice of curriculum  
- Alumni  
- Curriculum  
- Infrastructure | - Questionnaire  
Interview  
- Document | Completed with student list as a participant of PRAKERIN |
| 3  | Process of PRAKERIN | - Mapping of Industries Correspondence  
- Placement of the student  
- Briefing  
- Delivery  
- Monitoring  
- Pull out/Pick up  
- Reporting & presentation  
- Assessment & certification | a) Document  
b) Observation  
c) Interview | |
| 4  | Competencies of Graduates | Certificate of PRAKERIN  
Certificate of Competence test  
Certificate of National Examination Results  
Letter of Qualification | Document | |
| 5  | The Absorption of Industry toward Graduates of Vocational High School | Amount of the graduates which accepted work in industries | Document of absorption for graduates in industries | |

### III. DISCUSSION

#### A. Component of Context

Under the implementation of PRAKERIN, SMKN 6 Samarinda has Memorandum of Understanding (MoU) that directly related to industries. Those agreement formed in corresponding to a few of legal basis which listed below:

1. Constitution number 23 on 2014 regarding the Local Government (National Sheets Republic of Indonesia on 2014 number 244; Subsidiary of National Sheets Republic of Indonesia number 5587) such as which changed with the Government Regulations substitute of Constitution number 2 on 2014 regarding amendment of constitution number 23 on 2014 regarding The Local Government (National Sheets Republic of Indonesia on 2014 number 246; Subsidiary of National Sheets Republic of Indonesia number 5589).


#### B. Component of Input

Any of decisions which been produced also became its own highlights for the students. PRAKERIN has run by the school...
so students may apply the material which has been taught in
the school. Come through PRAKERIN, the students can be
expected to apply theories also practice that gained so that
students have a level of competence which would be used
while getting into the working world later. In other that,
PRAKERIN was expected could giving some skills to the
students in terms of adapting just like any others of employee
but also required to running PRAKERIN. Sometimes,
this complicated things like burden
a lot of students in the field which have not
finished the precondition of subjects however they were set on
PRAKERIN. This matter exactly pressing the students because
they must chase on target of the subjects that the same time
required to running PRAKERIN. This complication seems like
a burden for the students which turn into doubled tasks which
causes students to to become not focus and depressed for that
burden.

Besides of students, the author found out any problems at
the location of PRAKERIN. Sometimes, many students coming
take late to the office, even skipping until time to learn practice has
going diminished. Furthermore, the students have also
frequently neglected their task of writing in a book of the
journal, so that many annotations which missed and not well
recorded. Missing on the fulfillment of the journal is pretty
fatal, remind the primary purpose of PRAKERIN was to create
the students in conceiving with clearly regarding on what happens in the working world. When students do not take note
routinely, it would make the students getting losses considering
so much information which finally missed away and cannot be
repeated.

Another aspect in component of input is the advisor. The
author was finding that quantity among advisors and students
at SMKN 6 Samarinda has unbalanced. Basically, PRAKERIN
is allocating a teacher to lead on 10 students, where the teacher
has matching based on their proficiencies. A small amount of
the teachers has made a number of teachers which on duties
being unspecific related with the proficiency. On number, each
of industries has recommended to having three of advisor and
can increase in accordance with a number of the students who
practice does. Duty and responsibility more on supervising and
directing the students during the practice of the period so the
PRAKERIN process would be run as it should be. The
instructor of industries could come from alumni of SMKN 6
Samarinda.

Not only the three actors, there is a Vice of Industrial
Working of Partnership (HKI) which also is one of the
components of input in this research. Role of Vice of HKI lean
as helping the Headmaster on the field. Technical affairs like
doing coordination across the head of proficiency are also
being responsible for Vice of HKI. Vice of Curriculum has an
active role in the arrangement of the PRAKERIN in SMKN 6
Samarinda. Vice of Curriculum has an “earlier job” than Vice
of HKI, who is array an adjustment of PRAKERIN curriculum
in order to uses by the students.

C. Components of Process

After doing the research through on steps which explained
above, the author receiving data regard on PRAKERIN
planning of SMKN 6 Samarinda for period 2014/2015. Those
planning has summarized in the table below:

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Strategy</th>
<th>Indicator of Success</th>
<th>Performances (in Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establishments of Commission</td>
<td>Management</td>
<td>Decree is available</td>
<td>June</td>
</tr>
<tr>
<td>2</td>
<td>Undertake to collect students data and</td>
<td>Worked by team K3</td>
<td>PRAKERIN participant data is</td>
<td>July</td>
</tr>
<tr>
<td></td>
<td>DUDI as a partner of PRAKERIN</td>
<td></td>
<td>available</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Application of PRAKERIN</td>
<td>Worked by secretary</td>
<td>Letter of Application is available</td>
<td>Jul, Aug, Sep, Dec, Jan, Feb</td>
</tr>
<tr>
<td>4</td>
<td>Procurement for Book of Journal</td>
<td>Ordered</td>
<td>Book of Journal is available</td>
<td>July</td>
</tr>
<tr>
<td>5</td>
<td>Search for PRAKERIN Workplace</td>
<td>Coordination with the head of</td>
<td>Letter of Acceptance and Letter of</td>
<td>Jul, Aug, Sep, Dec, Jan, Feb, March, April</td>
</tr>
<tr>
<td></td>
<td></td>
<td>program/ head of proficiency</td>
<td>Disclaimer is available</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Debriefing</td>
<td>Coordination with the head of</td>
<td>Debriefing is available</td>
<td>Jul, Aug, Sep, Dec, Jan, Feb, March, April</td>
</tr>
<tr>
<td></td>
<td></td>
<td>program/ head of proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Deliver Students of PRAKERIN</td>
<td>Assignment of the advisor head</td>
<td>Letter of Assignment which accepted</td>
<td>Jul, Aug, Sep, Dec, Jan, Feb, March, April</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of program/ head of proficiency</td>
<td>on industry/company</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Monitoring I</td>
<td>Assignment of the advisor head</td>
<td>Monitoring document is available</td>
<td>August, September, December, January</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of program/ head of proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Monitoring II</td>
<td>Assignment of the advisor head</td>
<td>Monitoring document is available</td>
<td>Oct, Nov, Feb, March, April, May</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of program/ head of proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Picking up</td>
<td>Assignment of the advisor head</td>
<td>Pick up document is available</td>
<td>Dec, Jan May, June</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of program/ head of proficiency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Presentation</td>
<td>Worked by team K3</td>
<td>A score of presentation is available</td>
<td>Nov, Dec, Jan April, May, June</td>
</tr>
<tr>
<td>12</td>
<td>Production of Certificate</td>
<td>Coordination with secretary and</td>
<td>Certificate of PRAKERIN is</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Head of Program/ Head of Proficiency</td>
<td>available</td>
<td></td>
</tr>
</tbody>
</table>

TABLE III. WORKING PLAN OF WORK INDUSTRIAL PRACTICES PERIOD 2014/2015

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Paper ID: 77818-08
Post component of input, a component of the process from this research could be seen from steps of a work plan based on the establishment of the commission in every packet of proficiencies up to the appointment of working place of PRAKERIN. That process continues with the procurement of the journal as a guide every student in the implementation of PRAKERIN, also including a book of control. While journal has done to share, the debriefing will be started with the advisors before departed to PRAKERIN workplace. The steps regarding the process of PRAKERIN can be seen detailed in the table above.

D. Components of Product

When components of process reached the end, the next component is namely components of the product. The main purpose of PRAKERIN at SMKN 6 Samarinda is to upgrading skills and knowledge of the students in according to their proficiency. Author has found out that score of PRAKERIN would be really useful while the students have finished from vocational high school and joining the working world. It is related to consideration of PRAKERIN scores when the student applying for jobs. Exclusive for graduates engineering of heavy equipment packet of proficiency (TAB) who has to fill School Proficiency Book (SPB), would perform Final Assessment and if declared passing the test, the student will be given full scholarship by PT.TrakindoUtama to continue in higher education in five of Polytechnic in Indonesia which been partner of PT. Trakindo Utama. Contrast with PT. Trakindo, when SMKN 6 Samarinda as the partnership of school is doing a change of policy on 2 period of years that is from recruitment of workforce changed into the policies with awarding a scholarship for the student which have best competencies to continue in higher education in five polytechnics which also being a partner from PT. Trakindo Utama. Those aims to escalate in skill, knowledge, and competency so that after finishes from college, on forward was already become a workforce, not only being practical force.

E. Components of Outcome

Based on graduates of data of SMKN 6 Samarinda in a period of three years, that is period of 2012/2013, amount of graduates totally 230 of students, a period of 2013/2014 as much as 264 of students, and period of 2014/2015 amount of graduates are 226 of students which been consist of six packets of proficiencies. Comparing with graduates of data that absorbed to working world and still continuing the education on college is not balanced, it means there are any graduates which absorbed in working world/world of industries (DUDI) yet, in the other words be unemployed. This condition necessarily being attention particularly by the advisors of PRAKERIN. Monitoring must be applied carefully and comprehensive. If necessary, remedial system could be given to the student that supposing not been able to fulfill standard for the graduate. Considering that PRAKERIN is “operator” to entering the working world, integration among school and students absolutely required related to affording best results that convenient for the purpose of PRAKERIN.

IV. CONCLUSION

Through the explanation above, the author derives the conclusion that SMKN 6 Samarinda has some matters related to the implementation of PRAKERIN. By evaluation of CIPOPO, the author discovers few things which cause challenges on implementation of PRAKERIN at SMKN 6 Samarinda. When notice in the context of evaluation, actually there are many rules and MoU which formed the government and school whether a school with the industry. The problem lies in input that is lack of resources for the advisor and the students which have been less obeying the rules that applied to the industries so PRAKERIN has become obstructed. The process of evaluation shows that preparation for the final evaluation has well organized. That process was neatly adjusted in order to avoid mistakes among one process to the others. However, problems have returned in product and outcome when the results of PRAKERIN not suitable to what expected earlier. Indeed, this condition will press SMKN 6 Samarinda to react and improve toward PRAKERIN.

Author has a few recommendation related on results of the research, that is: (1) improvement of relationship among industries and school to accommodating some proficiencies; (2) improvement of awareness and control from the industries, including addition of instructor advisor, so results would be optimal and on target; (3) maximize of debriefing in order to make the students fully obedient with law of industries infield; (4) more strengthen in law of administration for the students which take on PRAKERIN; (5) strictly monitoring, from initial once per month become twice per week in order to more effective and supporting which related to motivating the students; (6) time alignment of PRAKERIN in every subjects of proficiency field that going more effective; (7) Agenda of evaluation among school and part of industries; (8) strengthen regulations to always write in journal or control book so there are no activities that not recorded; (9) Enhancement of human resources by part of school, principally for the advisor.

REFERENCES


