

## Collaborative Industrial Class Contribution (*2w Suzuki Class*) in Preparing Highly Competitive Human Resources on Vocational School

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### Abstract:

Improving Human Resources provide contribution to a country's development. An advanced nation is supported by high quality human resources and creative capability in supporting the nation's development. Indicators in determining human resources is exhibited in population's average education level and quality. Superior human resources would increase employment rate in industrial area. Collaborative program conducted between vocational school and employment field as a form of care towards education realm. PT. Suzuki Indomobil Sales has long since conducting collaborative program in order to increase vocational school graduates' quality which includes 14 *Sekolah Binaan Suzuki* (Suzuki Target School). Methods used in this research is case study utilizing research evaluation approach. Sample/ Informants are taken utilizing purposive method. This research was conducted in Suzuki Class (*W2 Suzuki Class*) in East Java. The result of this research exhibits that: (1) Suzuki Class R2 (*2W Suzuki Class*) National Test (UN) average grade is higher (74,60) compared to Regular Class, (2) vocational competency test (UKK) for Suzuki Class R2 (*2W Suzuki Class*) is higher (88,81) compared to Regular Class with 0,02 significance, (3) Suzuki Class R2 (*2W Suzuki Class*) graduates average employment rate is higher (73,42%) compared to Regular Class in vocational schools.

**Keyword:** industrial class, human resources, vocational education, vocational students

## 1. INTRODUCTION

Improving Human Resources provide contribution to a country's development. An advanced nation is supported by high quality human resources and creative capability in supporting the nation's development. Indicators in determining human resources is exhibited in population's average education level and quality. Superior human resources would increase employment in industrial area. Human Resources (SDM) Strategy requires meticulous preparation in order to produce outputs that are capable of competing in world level. (Dharma S, 2013: 10-20).

Indonesian human resources is currently inferior compared to other countries' development in the world, including neighboring countries. According to human resources development index, Indonesia's position is under other ASEAN countries such as Malaysia, Singapore, Thailand, Brunei Darussalam, Philippine, and even Vietnam which recently recovered.

In Declaration of ASEAN Concord II 2003, ASEAN leaders agreed to establish an ASEAN community or society in 2020. It consists of three pillars: ASEAN Political-Security Community, ASEAN Economic Community, and ASEAN Socio-Cultural Community. In 2007, they decided to speed up the creation of the AEC / AEC in 2015. ASEAN leaders agreed that regional economic integration process is accelerated by ASEAN Economic Community Blueprint in 2007 to shape ASEAN Economic Community (AEC) 2015.

Human resources (HR) is a very important aspect in an organization / company to compete. In reality, Indonesian human resources is not yet fully prepared for ASEAN Economic Community (AEC) by 2015. MEA implementation is agreed by 10 ASEAN countries which have total population of 600 million people and about 43% of the population are Indonesian. MEA is an important moment as it will provide an opportunity for businesses in Indonesia to expand as well as market for national industry products. On the other hand, MEA implementation will be a challenge, given the huge Indonesian population. Indonesia will be a destination market for other ASEAN countries' product. Therefore Indonesia will compete with human resources from other ASEAN countries. It is important to improve economic quality and productivity in general, especially productivity for better technical competence.

By possessing one or more skills in a certain field, especially *Sekolah Menengah Kejuruan (SMK)* or Vocational School graduates will be able to challenge ASEAN *Economic Community*. Aside from hard skills, these youths must possess high soft skill competence. Hard skill and soft skill are inseparable components. Nevertheless, based on a number of researches, difference portion or allocation in each skill would influence a person's success which is around 80% soft skill and 20% hard skill. A person's success is not merely influenced by technical knowledge and skills (hard skill), but also capability to manage themselves as well as others (soft skill). Hard skill is mastery of science, technology and technical skills related to studied field. Soft skills is a person's capability in dealing with others (interpersonal skills) and organizing themselves (intra-personal skills) to be able to work and develop optimally.

Furthermore, one of cooperation form between vocational educations and employment fields is collaborative program. Education in Indonesia requires a lot of attention, both from government and private sources. With better education quality, Indonesia hopes to have a brighter future. As a form of concern for education, PT. Suzuki Indomobil Sales have long collaborated with 14 vocational programs to improve their graduates' quality. R2 Suzuki collaborative class program in East Java had never been examined in thorough evaluation. Taking into account curriculum suitability conducted as well as graduates employment rate in industry field, a thorough evaluation of the program is required in order to illustrate the effectiveness and usefulness of the cooperation program on industrial field.

## 2. RESEARCH METHOD

This research is categorized as research evaluation using case studies method. Case study method aims to make an accurate interpretation of the object under study characteristics. Creswell (2010) claims that a case study focuses its attention on programs, events, or activities involving individuals. Creswell explained that qualitative case studies types possess limited case size. On the other hand, Tellis (2009) claims case study method could be applied to evaluation research as it is capable of revealing quantitative and qualitative data which are information source in program under research.

The research is conducted in Suzuki R2 Class (*W2 Suzuki Class*) in SMK PGRI 3 Malang and SMK PGRI 2 Ponorogo. These schools were selected as they have conducted *Competency Based Training (CBT)* programs in Suzuki R2 Class (*2W Suzuki Class*). Both schools are vocational schools in East Java which have conducted

mentioned program. Samples/Informants taken are selected through purposive or deliberate method, based on research objectives. Informants selection criteria are as follows: 1). School Headmaster, Vice-Headmaster, and Program Chairman; 2). Productive teachers; 3). Industrial Instructors guiding students' training; 4). Third year students who have participated in industrial practice (*prakerin*). Evaluation model utilized in this research is *CIPP*. *CIPP* is an evaluation model consists of the following four components: *Context, Input, Process, and Product* (*CIPP*).

In order to reveal the effectiveness of HR Competency Enhancement R2 Suzuki Class (Suzuki 2W Class) at vocational school, the researchers conducted document analysis and distribute questionnaire to the students. Document analysis is conducted by analyzing national exam and competence test result, as well as graduates employment rate.

**Table 1. Result Indicators including Output and Outcome**

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Result (Product)	<ol style="list-style-type: none"><li>1. High category output includes:<ol style="list-style-type: none"><li>a. Average National Test / <i>Ujian Nasional</i> (UN) for Suzuki Class (<i>2W Suzuki Class</i>) higher than Regular class; 50% <i>2W Suzuki Class</i> graduates in Vocational school obtained grade &gt; 7,00.</li><li>b. Average vocational competency test / <i>ujian kompetensi kejuruan</i> (UKK) Suzuki Class (<i>2W Suzuki Class</i>) higher than Regular class; 90% <i>2W Suzuki Class</i> graduates in vocational school obtained grade &gt; 7,00.</li><li>c. Obtained DUDI Competency Certificate for Suzuki Class (<i>2W Suzuki Class</i>) is higher than Regular Class in Vocational School.</li></ol></li><li>2. High Category Outcome includes:<ol style="list-style-type: none"><li>a. Suzuki class (<i>2W Suzuki Class</i>) employment rate in DUDI is at least 80% of graduates who passed vocational motorbike technical competency test. In three months, the graduates obtain income as much as minimum regional salary or <i>upah minimal regional</i> (UMR)</li><li>b. Suzuki class (<i>2W Suzuki Class</i>) employment rate in DUDI is higher than regular class in vocational school.</li></ol></li></ol>
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Qualitative data analyses were conducted in four stages: data collection, data reduction, data display and conclusion (Miles and Huberman, 1992). While quantitative data were analyzed using descriptive analysis.

### 3. FINDINGS

Data collection of National Examination (UN) for Regular and Suzuki classes' exhibits difference in average value. Data were analyzed from UN grades in 2010 - 2016. Every year differs, in form of increase and decline in grades. The following table exhibits analysis result of UN grades from 2010-2016.

Figure 1. Suzuki and Regular Average National Exam (UN) Grade

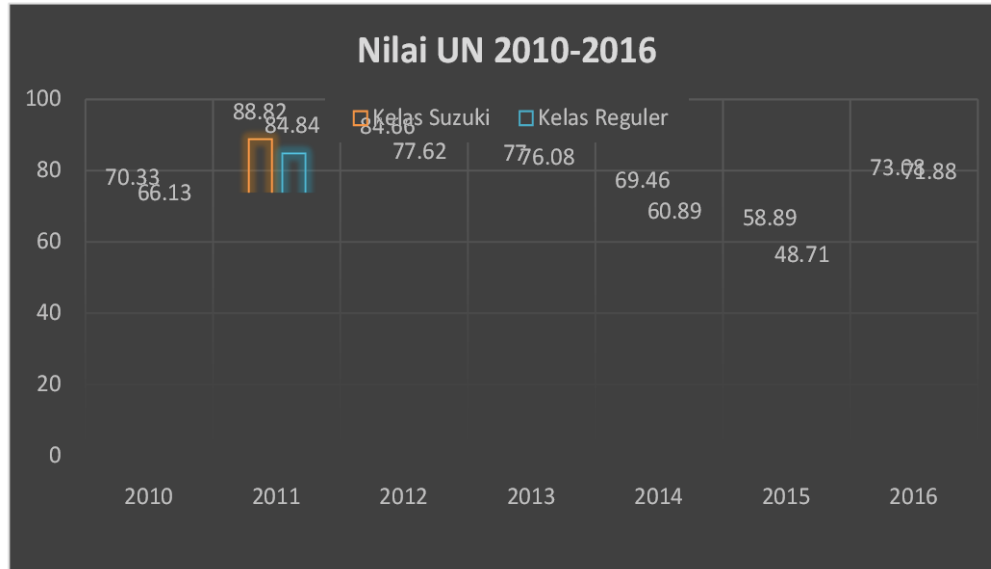
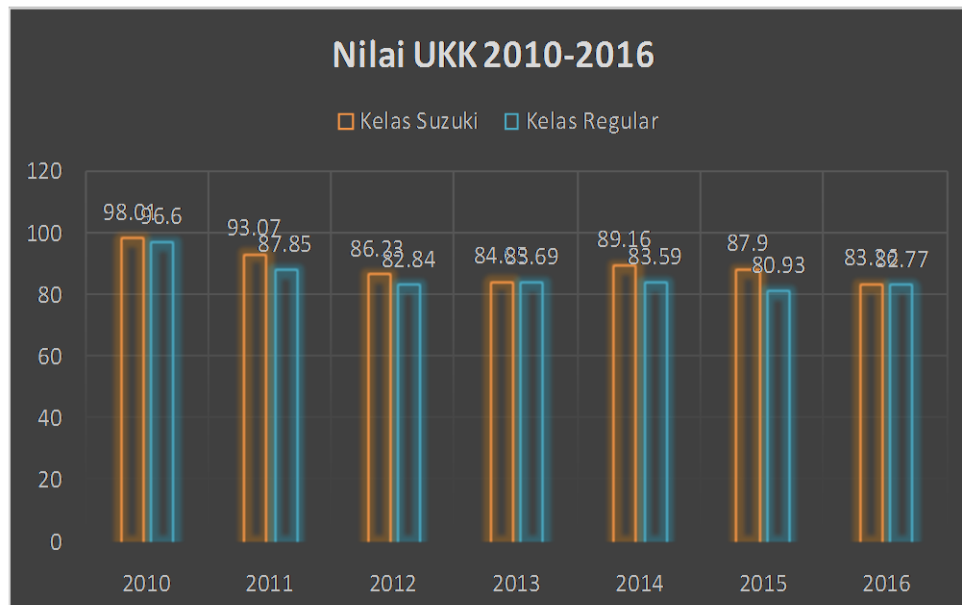


Figure 1 exhibits that both classes (Suzuki and Regular classes) experience decline each year. The decline is insignificant as only few grades were affected. Seen from both class average, Suzuki class possess higher average grade compared to regular class.

Figure 2 exhibits data analysis from Vocational Competency Test (UKK) for Suzuki and Regular classes. Both class possess differing grade. The difference is exhibited in average grade in 2010 - 2016.

Figure 2. Suzuki and Regular Class Average Vocational Competency Test (UKK) Grade

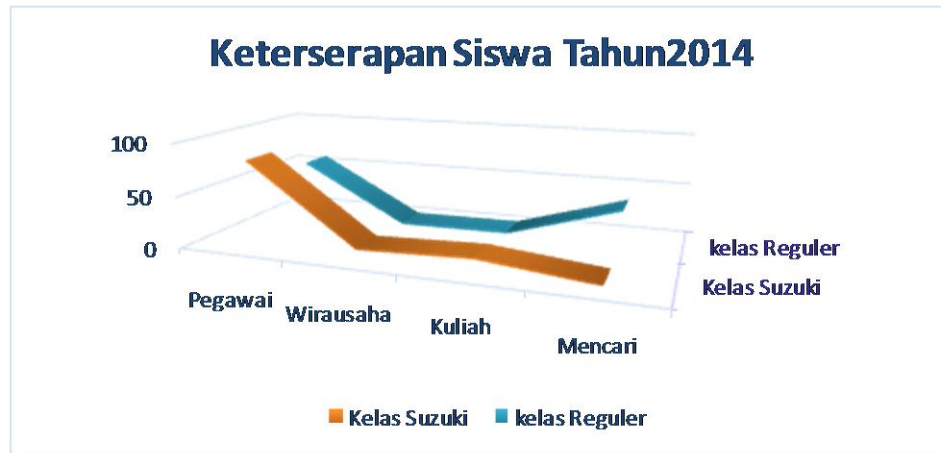


Based on Figure 2, there are differing average value between Suzuki and Regular classes. Suzuki classes possess higher UKK grade in 2010-2016 compared to regular class. It is exhibited by average grade comparison between Suzuki and Regular classes which experience constant changes each year.

### 3.1 Suzuki and Regular Classes Employment Rate

Based on both classes (Suzuki and Regular classes) employment rate in 2014-2016, there are significant difference. There are different employment rate for both classes each year. Biggest employment rate for each class (Suzuki and Regular classes) are in 'employee' field. Employees includes activities or occupation excluding entrepreneurship, college, and job hunting process.

Figure 3. Student Employment Rate 2014



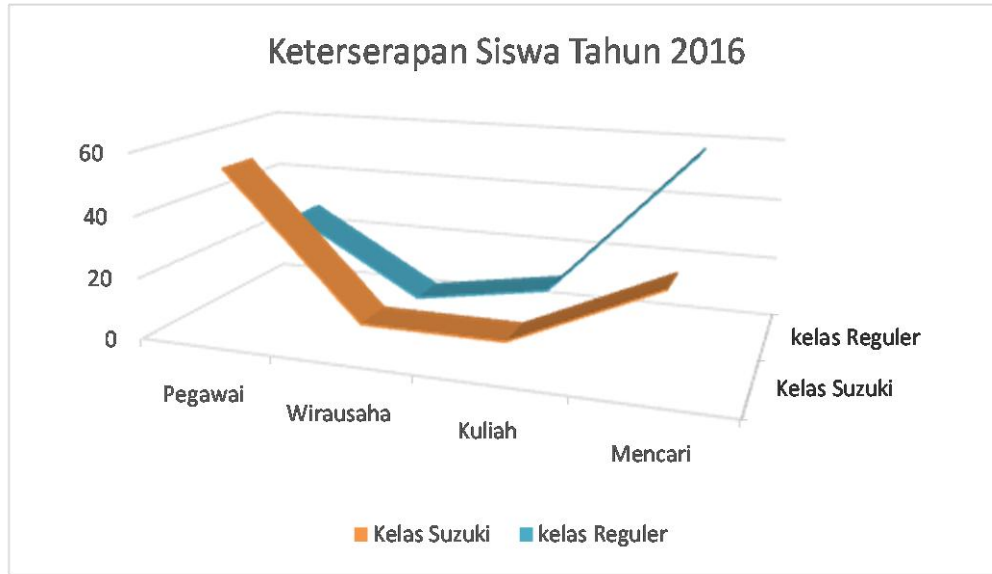
In 2014, Suzuki and Regular classes from vocational school employment rate possess significant difference. Suzuki classes possess the following employment rate: employee (82.1%), entrepreneurship (7.2%), college (10.7%), and job hunting ( 0% ). On the other hand, regular classes possess the following employment rate: employee(58.9%), entrepreneurship (2.1%) , college (3.2%), and job hunting (35.8%).

Figure 4. Student Employment Rate 2015



In 2015, Suzuki and Regular classes from vocational school employment rate possess significant difference. Suzuki classes possess the following employment rate: employee (62.9%), entrepreneurship (3.7%), college (11.1%), and job hunting ( 22.2% ). On the other hand, regular classes possess the following employment rate: employee (41.2%), entrepreneurship (1.5%) , college (8.8%), and job hunting (48.5%).

Figure 5. Student Employment Rate 2016



In 2016, Suzuki and Regular classes from vocational school employment rate possess significant difference. Suzuki classes possess the following employment rate: employee (54.2%), entrepreneurship (8.3%), college (8.3%), and job hunting (29.2%). On the other hand, regular classes possess the following employment rate: employee (28.4%), entrepreneurship (3.0%), college (10.5%), and job hunting (58.2%).

### 3.2 Vocational Competency Test (UKK)

ANOVA Statistic Test was conducted on Suzuki and Regular Classes UKK grade. ANOVA test were conducted in order to reveal sample significance level (Suzuki and Regular Classes)

Table 2. Group Statistics

	Y	N	Mean	Std. Deviation	Std. Error Mean
UKK Suzuki Class	1.00	46	89.3500	7.21420	1.06368
UKK Reguler Class	2.00	230	85.1582	8.34021	.54994

Table 3. Independent Samples Test 1

		Levene's Test for Equality of Variances		t-test for Equality of Mean			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differences
UKK Suzuki Class Vs UKK Regular Class	Equal variances assumed	.745	.389	3.178	274	.002	4.19183
	Equal variances not assumed			3.501	71.272	.001	4.19183

Table 4. Independent Samples Test 2

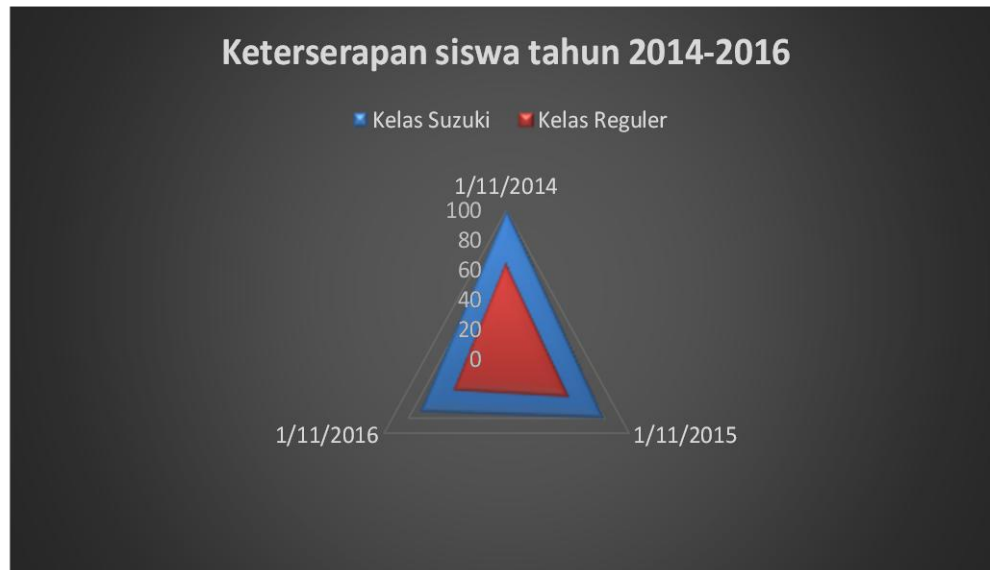
		t-test for Equality of Mean		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
UKK Suzuki Class Vs UKK Regular Class	Equal variances assumed	1.31892	1.59532	6.78833
	Equal variances not assumed	1.19743	1.80438	6.57927

Based on Group Statistics above, regular class average is 85.1582 while Suzuki class possess 89.3500 average. Based on the result, it could be concluded Suzuki class average is higher compared to Regular class. On significance test result, significance <0.05 were obtained. Based on tables above, there's 0.02 significance. Significance value was above 0.02 < 0.05, therefore it could be concluded that there is significant difference between Suzuki and Regular class.

#### 4. DISCUSSION

Based on research result, there is significant difference between Suzuki and Regular classes' grades. The differences were observed through Suzuki and Regular class National Test (UN) results. Suzuki class UN grade is higher compared to Regular class'. It is supported by data discussed in previous chapter. Suzuki class consistently possess average grades above Regular class'. Suzuki class' average UN grade is 74.6% compared to Regular class' 69.5%. It could be concluded that Suzuki class grades are higher than Regular class. Other data exhibits Suzuki class possessing higher Vocational Competency test (UKK) result compared to Regular class. Suzuki class' average UKK test result is 88.81% while Regular class gained 85.6%. The data are provided annually, from 2010-2016. On the other hand, Suzuki class student employment rate is higher than regular class, which is exhibited in Figure 6.

Figure 6. Student Employment Rate Recapitulation 2016



Suzuki Class Collaborative Program is a model that combines provision of education as a whole, integrated learning student activities in schools, and vocational skills mastery by direct practice in employment field. The method was implemented in order to improve vocational schools in achieving education and labor needs relevance. Relevance meant competencies acquired by students in schools are those needed in industries. Industries must also play an active role in delivering the technology advancements to school in order to enable synchronization between education and industry. Dual Education System Policy could be conducted in the form of Suzuki Class Collaborative Program implementations.

Research result is supported by previous research. Nurudin (2013) stated implemented curriculum is aimed to meet business and industry need. This research implied that schools should partner with DUDI and complement TKR practice facilities DUDI parties should be involved in planning, organizing, implementing and evaluating educational activities. Soeryanto (2009) conducted research regarding evaluation studies on PBK implementation on automotive mechanic Vocational School in Surabaya. The study uses CIPP model. The implication of this research is PBK development in vocational program should be continued, in line with achieving the program objective to improve job competencies required by DUDI.



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