



## The Cooperation Form of SMK Karya Teknologi Jatilawang of Technology and Industry Group with Astro Parts in the Framework of Forming an Entrepreneurial Spirit

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### Abstract

The cooperation form of SMK KaryaTeknologi Jatilawang of technology and industry group with Astro Partss in the framework of forming an entrepreneurial spirit. This research aims to describe and analysis (1) the cooperation form of SMK KaryaTeknologiJatilawang with Astro Partss, in terms of forming the entrepreneurial spirit in students; (2) which form of cooperation is the most dominant in the formation of entrepreneurial spirit in students. The cooperation of SMK KaryaTeknologiJatilawang with Astro Partss aims to develop students' soft skills and competency ability in order to be ready and able to face the world of work. The research be used is a design qualitative research. The research approach is meant to learn deeply by examines, analyses, and describes based on data in SMK KaryaTeknologiJatilawang. The data collection technique which used are observation, interview and documentation which are continued with data source triangulation method to check data validity. The result of this research is SMK KaryaTeknologiJatilawang gets the cooperation form with Astro Partss, the forms are; (1) foster father – foster child; and (2) dual system; and (3) industrial culture ; (4) training; and (5) agency. The last result of this research can be known the cooperation form of agency is the most dominant cooperation form in terms of forming the entrepreneurial spirit in students.

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## INTRODUCTION

The intermediate vocational education is an education in the middle grade which gives priority to developing of the students' ability to do such kind of job. The intermediate vocational education gives priority to prepare the students to enter the field of work and develop the professionalism attitude. In accordance to the form, the intermediate vocational education runs the educational programs which are adjusted with kinds of job. (Peraturan Pemerintah Nomor 29 Tahun 1990). The expectation of the intermediate vocational school is it can reduce the number of unemployment in Indonesia.

According to Tripney & Hombrados (2013:2) in their article the title is "Technical and vocational education and training [TVET] for young people in low – and middle income countries" vocational education is an education which just not includes general aspect however it also knowledge and technology which are interrelated to the acquisition of knowledge aspect, attitude and skill practically are connected to the job in many economic sectors. Laura Galloway and William Keogh (2006: 129) explain "education runs important role in economic growth".

Statistic Data Center Agency (2017) about Open Unemployment based on the grade of Highest Education which is graduated on 2017 from source of survey National Work Force (Sakernas) mentions that the number of unemployment intermediate vocational education unemployment on February 2017 the amount of 847.365 and August 2017 is 1.332.521. On August the number of unemployment is raised because of graduation intermediate vocational education's students' effect.

The establishment character which are discipline, independent, responsible and has an entrepreneurial spirit is so strategic in the way to make a graduation intermediate vocational education to be able to choose a career and improve themselves so the graduation intermediate vocational education is hoped can fill the demand of enterprise or industrial world now or later, and they will be a productive, adaptive and creative citizen so they are not dependent and edible just for working on a factory after their graduation later. To make it real, the school and industrial sides must be work together in preparing the students to enter the enterprise and industrial world.

The cooperation form of intermediate vocational education and industry needs to be increased and developed, it supposed to prepare the students are not only to be ready for working in a factory but also being independent to enterprise because a business opportunity is open so widely to them but an entrepreneurial knowledge and experience which are not gotten by the students made a little of them are brave to open their own chance.

The cooperation is mainly shows there is a deal between two men or more are getting a profit, as the definition of corporation according to Hafsal (2000:45). In the other side according to Kusnadi (2003) he defines cooperation as more of two people to do an activity together which is done integratedly.

According to Purwanto (2013:1) the cooperation of intermediate vocational school (SMK) with Du/Di is very important lest behind with Du/Di's world that are more rapid with its technology development, the cooperation of intermediate vocational school (SMK) with Du/Di is even used to know the graduate competence that are required by Du/Di.

That way is done by SMK Karya Teknologi Jatilawang to increase the quality of input, process and output SMK, SMK Karya Teknologi Jatilawang joins with Astro Partss to make a collabarion and teamwork to develop students' character which are discipline, independent, responsible and has an entrepreneurial spirit.

To increase the entrepreneurial interest is influenced by some factors, they are entrepreneurial knowledge and self – confidence (Ermawati&Widodo (2015): Zimmerer (2008:7): Onstenk (2003:25). Therefore to grow an entrepreneurial spirit to students, the school needs to give some knowledges and experiences about an entrepreneurial activity in SMK through the Production Unit.

In means of forming the entrepreneurial spirit to the students of SMK is done by a manner integration of entrepreneurial values into the subject and through the activity in the production unit (Supriyatiningih (2012:78); Widarto (2011:56); Caecilia (2012:120))

Ekawati in her research be entitled "The connection of school work with Du/Di" states: (1) the role of Du/Di in the support of school education success is in the form of an aid in the development of school curriculum which is oriented to market of work ; (2) Du/Di helps school to make a good work ethic to the students by an internship; the role of Du/Di in the placement of SMK's graduation, Du/Di joins in training the students to communicate / interaction as a professional in the truly world of work.

SMK Karya Teknologi Jatilawang as the object of this research had started its cooperation with Astro Partss since 2017 until now, it is considered be able to develop entrepreneurial spirit to its students through a cooperation form that is applied by Astro Partss.

The objective of this research which want to be attained are: (1) to analyze the form of cooperation between SMK Karya Teknologi Jatilawang with Astro Partss, in the event of formation the entrepreneurial spirit to the students; (2) to analyze to the form of cooperation which is more dominant SMK Karya Teknologi Jatilawang with Astro Partss, in the event of forming the entrepreneurial spirit.

## **METHODS**

This research uses a qualitative research method according to Darmawan (2103:49). The design is mentioned to learned deeply by study, analyze, and describe based on the data in SMK Karya Teknologi Jatilawang with a stage as follow: (1) pre research, it is a stage of determination and formulation the problem then arrange the design of research and make research instrument. Furthermore analyze the materials or literature are relevant with the problem that are examined to get input and domain; (2) the implementation research connects main respondent to get an input, collect the data is needed even its primary data or secondary data; and (3) the post research, the researcher manage the data which are got from the field, arranges the data of result research to be analyzed, then it is described as a study and formed as research report.

The main data source in qualitative research is the words (spoken) and action. Source of a spoken data that used is an interview result with an informant who get involved directly in this realization of the cooperation. The data that are collected through this research is data that are according with research focus, it is about form of cooperation between SMK Karya Teknologi Jatilawang with Astro Partss. The technique data collection uses three main technique, they are: observation, interview and documentation, then done a triangulation data source technique as a technique to check data validity. Where in its definition of triangulation is a validity checking technique that utilizes another something in comparing an interview result to the object of research. (Moeloeng, 2004:330). Then to know how far the truth of the research result can express the reliability that actually it is used standard of credibility.

While this research used contextual data analyze for the technique analyze data, they are: (1) data collection; (2) data reduction; (3) data presentation; (4) verification and conclusion.

## **RESULT AND DISCUSSION**

Research Form of Cooperation between SMK Karya Teknologi Jatilawang with Astro Partss aims to analyze any forms of cooperation are tied and the form of cooperation which is more dominant. To get a result that is hoped in this research, it began with observation activity. Observation is do to get an early description that SMK Karya Teknologi Jatilawang actually has tie a cooperative with many companies however in this research is focus on a discussion on form of

cooperation between SMK KaryaTeknologiJatilawang with Astro Partss. Based on the Memorandum of Understanding (MoU) and interview is done in in SMK Karya Teknologi Jatilawang so it can be known kinds of design and form of cooperativeSMK Karya Teknologi Jatilawang and Astro Partss, they are: (1) foster father – foster child; and (2) dual system; and (3) culture industry; (4) training; and (5) agency.

First is form of “foster father – foster child” which is the relation between the industry which is ready to be its partner to help the development of education world based on vision, mission and goals each institution. The goals, vision and mission of SMK KaryaTeknologiJatilawang among of them are education management in accordance with work market necessity, increase the achievement in extracurricular sector in line with the potential, and build up the environment study and work with an adequate facility to support the student’s development overall.

Second, the form of “Dual System Program”. Based to Mr. WahyuWidodo as the Vice – Headmaster on the field of DU/DI this cooperation is implemented in the form of industrial visit implementation for the students grade X and industrial work practice (prakerin) for the students grade XI. This program is implemented in Astro Partss for 6 months. Third, it is a cooperation in coaching of Industrial Culture in SMK. Related to the attitude application and culture industry Mr. WahyuWidodo also says by the industrial work practice program is implemented in fact makes the students become know and understand directly about any cultures and attitudes which are needed and implemented in industry.

Fourth, the form of “Training” the program aims to equip the teachers and teachers ‘staff make them actually better know and more understand about the necessity of industrial world. Fifth, the form of “Agency” is a cooperation where is the SMK as the side which has role in distributes and sells the product from Astro Partss. Mr. WahyuWidodo says that Astra Otoparts is an official distributor company the supplier of AHM spare parts so that they have a power to implement this cooperation.

Mr. AgusWasito as the Vice – Headmaster on the field of curriculum says that “Implementation of Agency Cooperation packed in a program development workshop of SMK which is Astra Otoparts obligates the students in the management motorcycle workshop so they can feel entrepreneurship.

The result of observation and interview in this research shows that in this cooperation implementation each side has big role and responsibility, the role and responsibility which are mentioned as follow.

First, it is the graduation recruitment. As the SMK partner, SMK KaryaTeknologi Jatilawang has an obligation to prepare all the necessities to implementation recruitment, including to prepare its alumni to follow that process.

Second, the place of industrial work practice is a place to work practice for the students grade XI that is implemented for 6 months.

Third, making guest teacher or Transfer Knowledge (competency of guest teacher). Such as by Mr. AgusWasito says as the Vice – Headmaster on the field of curriculum in SMK KaryaTeknologi that this program is held in SMK KaryaTeknologi approaching the beginning of learning year in the activity of In House Training (IHT) as one of activity obligate in preparing learning set.

Fourth, a place of implementation OJT (On The Job Training) for the teacher, the aim is to improve the productive teachers competency in order to the implementation teaching learning process in the school is matching with the industry, and also the Du/Di can give a contribution to improve the teacher’s quality will be used to prepare the students so that they are ready to work the industry’s demands.

Fifth, tools standardization an automotive workshop is standardize workshop tools or the existing place of practice is appropriate with standardize which is applied in SMK KaryaTeknologi's workshop of production unit.

Sixth, the implementation place of industrial visit. Mr. WahyuWidodo says that "the students grade X of SMK KaryaTeknologi can do industrial visit to Astro Partss", this activity aims to (1) introducing industrial of work process; (2) introducing the rules in the industry; and (3) introducing the environment of industrial work. By this cooperation, SMK KaryaTeknologi can do the industrial visit activity in Astro Partss. As arranged in the agreement of cooperation (MoU) the participants who could be able to follow this program is the teachers and the students.

Seventh, the distribution of tools or spare part to SMK. According to the agreement of cooperation (MoU) that SPS which delegates AOP is responsible in process of goods delivery to SMK. According to Mr. AkhmadMuthohar, S.T. "SMK just submit a demand of needed goods, make a data all of it according to the data from them, then we just wait the goods come. Usually 14 days after that the new goods come. For the payment every 2 weeks in accordance with the amount of the goods we asked. So we are as SMK is very truly got advantages because we do not need a capital" The matter is suitable with the explanation in cooperation agreement (MoU).

### **The Cooperation Implementation Impact**

Pattern implementation cooperation form foster father – foster child in SMK KaryaTeknologiJatilawang gives extremely positive impact, they are the alumni of SMK KaryaTeknologi can be merge in a company well and the Practical Learning Room even the Workshop of Production Unit has a standard from Astro Partss.

In implementation cooperation form Program Dual System (PSG) which realized in industrial visit program and industrial work practice get a positive impact for the student, the students know the rules in the industry, the environment of industrial work, and get a work experience in the industry.

Positive impact from training cooperation form is SMK KaryaTeknologi can invite Astra Otoparts as Teacher Guest and can send the teacher of SMK KaryaTeknologi for Internship Teacher program (OJT) in Astra Otoparts.

Positive impact from cooperation form of Agency with Astro Partss is the students understand about management supervision of production unit and they also understand the technique and marketing method spare parts of Astro Partss.

### **The most dominant cooperation form in terms of forming the entrepreneurial spirit**

Based on the result of interview, observation and documentation about the implementation cooperation form SMK KaryaTeknologiJatilawang with Astro Partss can be known that this cooperation has many extremely impacts and advantages for the students and school's development. However in this research must be known the most dominant cooperation form in terms of forming the entrepreneurial spirit, therefore it needs to know that the indicator achieved entrepreneurial value which is oriented on the shape and implementation of each cooperation form that tied between SMK KaryaTeknologi with Astro Partss. The following result of analysis orientation of indicator achieve of entrepreneurial value on fifth that cooperation form.

From the data above can be known which of cooperation form that has all indicators achieve of entrepreneurial values, so that it can be known that implementation agency cooperation form through workshop production unit of SMK which work to distribute and marketing the product of AOP in SMK more dominant in forming the entrepreneurial spirit to the students because they also directly participate in management and implementation of workshop program in this SMK.

The conclusion above is according to what the headmaster of SMK KaryaTeknologiJatilawang Mr. AkhmadMuthohar,S.T. said that "cooperation form of this agency,

the students are not only learn to sell the goods only or just give service of services however they participate in management of production unit is like calculate the stock of goods, order the lack of spare part, make a payment, etc.

Mr. WahyuWidodo as the Vice – Headmaster on the field of DU/DI also says the same things that “cooperation form of this agency is the best in the forming the entrepreneurial spirit because the students are really trained and participate in the business of management, implementation and development of workshop production unit of SMK.

Mr. AgusWasito as the Vice – Headmaster on the field of curriculum also says the same things that “cooperation model to distribute and marketing the spare part of AOP which are packed in a development program workshop of SMK is a cooperation form which is the most appropriate to the forming the entrepreneurial spirit because in this cooperation PT. AOP obliges the role of the students in the management of motorcycle workshop so that they can feel the entrepreneurship.”

**Tabel 1.** Indicator Analysis of Achievement of Entrepreneurial Values

No	Cooperation Form	Implementation Form	Indicator of Achievement of Entrepreneurial Values
1	foster father – foster child	Distribution the Graduate and Alumni Development of means Practice and Production Unit	Independent Action oriented Hard work
2	Dual System Program (PSG)	Industrial Visit Industrial Work Practice	Independent Dare to take a risk Leadership Action oriented Hard work
3	Industrial Culture	Application of attitude a rules of industry. Application of Green Line Application of 5S/ 5R Movement	Independent Dare to take a risk Action oriented Hard work
4	Training	Guest Teacher Internship Teacher (OJT)	Independent Dare to take a risk Action oriented Hard work Skills
5	Agency	Distribution and Marketing Spare Parts AOP in workshop Production Unit of SMK	Independent Creative Dare to take a risk Action oriented Leadership Hard work Concept Skills

To respond the things above a chief of Production Unit Mr, SudarnoCahyadi,S.Pd. who handle directly the form of this activity also says there were 2 alumni of SMK KaryaTeknologi who have opened an entrepreneurship by making use of this cooperation form. That matter is known better by Mr. SudarnoCahyadi,S.Pd. because they also become a customer in a buying of spare part from AOP in this Production Unit to supply their business necessity.

Based on the things above it can be conclude that form cooperation SMK Karya Teknologi Jatilawang and Astro Partss which is the most dominant in terms of forming the entrepreneurial spirit to the students is cooperation form of agency.

## CONCLUSION

Based on the result of the research can be conclude that form of cooperation SMK KaryaTeknologiJatilawang and Astro Partss which tied are (1) foster father – foster child; and (2) dual system; and (3) industrial culture ; (4) training; and (5) agency. And then cooperation form of this agency is the most dominant in the forming the entrepreneurial spirit.

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## REFERENCES

- Darmawan. Deni. 2013. *Metode Penelitian Kualitatif*. Surabaya : Rosda
- Ekawati, A., D. 2012. *Hubungankerjasekolahdengan Du/Di .StudiSitus SMK Negeri. DonorojoKabupatenPacitan*.
- Ermawati, E., &Widodo, J. (2015) *PengaruhpengetahuanWirasahadanKepercayaanDiriterhadapMinatBerwirausahaSiswaKelas XI JurusanPemasaran SMK Negeri 2 Semarang TahunAjaran 2014-2015*. Economic Education Analysis Journal, 4(3)(2015), Semarang: UNNES, from <http://lib.unnes.ac.id/21179/1/7101411133-s.pdf>
- Galloway, L., & Keogh, W. (2006). International Journal of Continuing Engineering Education and Life-Long Learning: Editorial. *International Journal of Continuing Engineering Education and Life-Long Learning*, 16(5), 317-320.
- Hafsah, M., J. 2000. *Kemitraan Usaha KonsepsidanStrategi*. PT. PustakaSinarHarapan : Jakarta
- Kaswadi E. M. K. 1993. *Pendidikan Nilai Memasuki Tahun 2000*. Jakarta : PT. Grasindo
- Moleong, L.J. 2004. *MetodepenelitianKualitatif*. Bandung: PT RemajaRosdakarya.
- Onstenk, J. (2003). *Entrepreneurship and vocational education. European educational research journal*, 2(1), 74-89.
- Purwanto, Djanji. 2013. *ManajemenKerjasamaantaraSekolahMenengahKejuruan denganIndustri (Studikasus di SMKN 1 Malang)*. Malang: VEDC Malang.
- PeraturanPemerintahRepublik IndonesiaNomor 29.1990.*PendidikanMenengah*.Pasal 1. Jakarta. LN 1990/37; TLN NO. 3413
- Sari, Lia Eka, 2014. Sistem Kerja Kontrak Dan Dampaknya Terhadap Kesejahteraan Buuruh. UKSW. Salatiga
- Supriyatiningih. 2012. PenanamanNilai-nilaiKewirausahaanPada SiswaMelaluiPraktekKerjaIndustri. *Tesis*. Semarang : PPS UNNES
- Tripney&Hombrados, 2013. *Technical and vocational education and training (TVET) for young people in low- and middleincome countries: a systematic review and meta-analysis*. London: *Empirical Research in Vocational Education and Training* 2013, 5:3 doi:10.1186/1877-6345-5-3 from <https://ervet-journal.springeropen.com/track/pdf/10.1186/1877-6345-5-3>
- Widarto. 2011. *Soft Skills Education For Preparing Vocational Secondary High School In Producing Skilled Graduates*. MakalahInternasional Vocational Education and Training. Yogyakarta: Departement of Machine engineering Education Faculty of Engineeering. Yogyakarta State University ISBN : 978-602-97249-0-5
- Zimmerer, Thomas. 2008. *KewirausahaandanManajemen Usaha Kecil*. Jakarta :SalembaEmpat