Edupreneurship Through Teaching Factory In Vocational School Of Hospitality Expertise

Tri Kuat, Budi Santosa

Abstract: The purpose of this study is to know, describe and analyze the Implementation Edupreneurship through Teaching Factory at the Hospitality Expertise Program Vocational School and to know, describe and analyze the factors that influence the success and obstacles. The research method used in this study is a qualitative method. This method is intended to find out in depth in the implementation of edupreneurship through the teaching factory in SMK. This research was started by observing edupreneurship activities through factory teaching in selected Vocational High Schools SMK N 6 Yogyakarta and SMK N 1 Kalasan. Whether the problems that occur this need to be parsed by conducting in-depth interviews with informants who are directly involved in edupreneurship activities. The results of this study were that edupreneurship through the teaching factory was conducted well through activities at Edotel. Factors that influence success are: 1) professional and competent teachers, 2) adequate infrastructure, 3). support from good schools, while the inhibiting factor is the collaboration between Vocational Schools and the business world and industry is still weak and marketing capabilities are still low.

Index Terms: edupreneurship, SMK, teaching factory

1. INTRODUCTION

EDUPRENEURSHIP is an activity that is emphasized on creative and innovative efforts carried out by schools to obtain school achievements and can increase school income. The implementation of edupreneurship can be done through the activities of the teaching factory and business center. Through the teaching factory by the way students conduct learning activities that are similar or almost the same as those of business and industry. Educational entrepreneurship is seen as a consequence of market opportunities that appear in educational sectors [1]. The objective of learning factories mainly lies in identifying the participants with the opportunities and challenges of global production as well as increasing their professional competence in this realistic demonstration environment at the same time [2]. The initial focus on learning is to teach lean principles students in typical manufacturing environments [3]. Learning factories are a place of education and training for industry, factory-related topics [4]. Teaching factory is a combination of competency-based learning approaches and production-based learning where the teaching and learning process is carried out as in the real world of work by holding production or service activities in the school environment. [5].

The Teaching Factory model approach is a combination of the Competency Based Training (CBT) approach, where training is based on the work done by students in the workplace and puts pressure on what someone can do as a result of training (output) rather than the quantity of training [6]. The application of the TF-6M Learning Model is expected to support efforts to improve innovative and creative human resources in the current era of globalization. Innovative and creative human resources can also be realized through entrepreneurship education [7]. The teaching factory paradigm aims to align manufacturing teaching and training to the needs of modern industrial practice. Future engineers and knowledge workers need to be educated with new curricula in order to cope with

the increasing industrial requirements of the factories of the Teaching factory proposed as a knowledge future [8]. delivery mechanism introducing a paradigm shift to manufacturing education. The paradigm concept and its implementation are presented. A proposed as a knowledge delivery mechanism introduces a paradigm shift to the manufacturing education. [9]. The teaching factory program can run if the facilities and infrastructure owned by the school meet the standards for conducting production activities in the form of goods or services in accordance with the educational program they have [10]. Action-oriented learning approaches in learning factories show promising results, though ga systematic approach for the design of learning factory courses and systems is missing{11] The teaching factory learning aims to develop the character and work ethic (discipline, responsibility, honesty, cooperation, leadership, etc.) that are needed by the business and industry as well as improving the quality of learning outcomes from competency based training. towards learning that provides the ability to produce goods (production based training). The mini-factory is used in practice during the lecture of Production Systems simulating in abusiness game the planning, design, implementation, gradual expansion and optimization of multi-variant and flexible assembly systems[12] The Teaching Factory - 6 M Model is is also useful to improve students' motivation, sense of responsibility aswell as work ethics.{13}Teaching Factory Concept in training its students and industry personnel on relevant additive manufacturing technologies with real industry applications[14] The success of teaching factory where the school is able to provide a place of practice like the real industry, and is in the school environment so that students practice according to the standards, procedures and work culture of the business and industry. Vocational tourism expertise program as a place of practice is Edotel. The edotel is an educational hotel (teaching hotel), which in daily activities serves quests and as a place to stay. The management is carried out by competent professionals managing a hotel. In accordance with the problems and facts in the field to realize SMK that has entrepreneurial attitude and spirit through edupreneurship, this study intends to examine and analyze in depth how the description of the implementation of edupreneurship through the teaching factory. The research was conducted at 6 SMKN Yogyakarta, SMK N 1 Kalasan. This location was chosen because the Vocational School has

Trikuat is a lecturer in Vocational Education Teacher Master Degree Program in Universitas Ahmad Dahlan, Indonesia, E-mail: sonytrikuat@gmail.com

Budi Santosa is lecturer in Vocational Education Teacher Master Degree Program in Universitas Ahmad Dahlan, Indonesia. E-mail: budi santosa@mpv.uad.ac

implemented edupreneurship through hospitality business which has been developed as a student practice. Based on these reasons, problems can be formulated as follows; a. How is the Implementation of Edupreneurship Through Teaching Factory in Vocational Hospitality Skills Program at SMK N 6 Yogyakarta, SMK N 1 Kalasan? b. What factors influence the success and failure of ImplementationEdupreneurship Through Teaching Factory at the Hospitality Vocational Program in Tourism Sector at SMK N 6 Yogvakarta, SMK N 1 Kalasan? The purpose of this study is: knowing, describing and analyzing the Implementation of Edupreneurship through Teaching Factory at the Hospitality Expertise Vocational School Program. and knowing, describing and analyzing the factors that influence the success and failure of Edupreneurship Implementation Through Teaching Factory at Hospitality Vocational Skills Program.

RESEARCH METHODS

The chosen research method is a qualitative research method on a qualitative approach, the data collected is generally in the form of words, images and not numbers, even if there are numbers that are only supporting. The data included interview transcripts, field notes, photographs, personal documents, notes, and other notes. For this reason, the qualitativedescriptive approach was chosen. The qualitative approach also refers to the explanation of [15] explaining that qualitative research that explains the beliefs of researchers is based on research experience and the nature of the problem. The same thing was expressed by [16] research is a procedure of collecting data that produces descriptive data in the form of written or oral words from people and observable behaviorResearch on the implementation of edupreneurship through teaching factory was conducted in Yogyakarta 6 N Vocational School, Kalasan N 1 Vocational School. The reason for choosing this location is because SMK N 6 Yogyakarta is a vocational school, which already has edotel as a teaching factory vehicle in creating student competencies, as well as SMK N 1 Kalasan is a vocational school that has edotel as a means of practicing students. The target of this study included the Principal, the deputy headmaster of the curriculum, productive Teachers, students, SMK N 6 Yogyakarta and SMK This target is considered the most N 1 Kalasan. understanding and knowing related to the implementation of edupreneurship through the teaching factory in the school. Qualitative research requires a focus of research, determining the focus of research is needed so that a researcher will know exactly which data needs to be collected and which data may be interesting but irrelevant, does not need to be included in the data being collected). The focus of this study includes the following: a. Educational policies implemented by schools both from the central level and from schools. b. Map of problems and obstacles in implementing edupeneurship through teaching factory activities in schools. c. Efforts made to improve the success of the results of the implementation of edupreneurship through teaching factory activities in schools. d. Criteria for student success after doing teaching factory activities at Edotel. To collect data and information in accordance with what is needed to support this research is used with a variety of techniques, namely: Interviewing techniques, observation, and document study. The technique of checking the validity of the data uses a triangulation technique that is a technique of checking the validity of data that uses something else outside the data for checking

purposes or as a comparison to that data. The triangulation technique in this study is used based on the source.

RESULT AND DISCUSSION

3.1 Implementation Edupreneursip Through Learning **Teaching Factory**

The implementation of edupreneurship through teaching factory in both SMK N 6 Yogyakarta and SMK N 1 Kalasan using edotel owned by the school. Learning activities by learning while working. This means that students learn by doing activities that are actually like them as employees or hotel employees. The work carried out primarily is the activity of serving guests staying at the hotel. Before students practice internships at edotel first accept the theoretical activities carried out in class. The teacher divides students into groups of 3 to 5 students per group. Each group will carry out activities in edotel. Through hotel teaching activities, students who are apprenticed or carry out work practices get practical learning activities such as actual hotel activities.

| | | Student Teaching Factory Activities at Edotel | |
|----|----------------------|--|---|
| No | Field | Canana Antivitian | Table |
| | of Work | Scope Activities | Task |
| 1 | Front Office | Reception Telephone operator Porter Valet dan Butler | a. Receiving and handling room bookings by prospective customers; b. Make a re-order confirmation; c. Welcome and give greetings; d. Managing bills for guest payments while staying at the hotel; e. Providing information services; |
| 2 | House- keeping | Public Area Attendan Order Taker Linen and Uniform Attendant Laundry Attendant | f. Handle complaints of guests staying at the hotel a. Maintain and clean guest rooms in hotels; b. Maintain the clean liness of public areas of hotels or public areas; c. Report the status of the room to the front office section; d. Maintain cleanliness of hotel linen; e. Take care of housekeeping work equipment; f. Arrange the room to make it look beautiful and clean |
| 3 | Food and Beverage | Food and Beverage Products (F & B Product): Food and Beverage Service (F & B Service) | a. Processing raw material into ready-to-eat food; b. Making dishes that have flavors; c. Responsible for food & drink made whether it meets health requirement a. Duty to handle requests for ordering food and drinks: b. Presenting food and drinks to guests; c. Responsible for serving food and drinks to guests. |

From tabel 1 can be explained: Activities carried out by students include carrying out work in the Front Office environment as Reception, Reservation, Telephone Operators, Porters, and Valet Butlers. Tasks at the front office include: a) Receiving and handling room bookings by prospective customers; b) Make a re-order confirmation; c) Welcome and give greetings; d) Managing bills for guest payments while staying at the hotel; e) Providing information services; f) Handle complaints of guests staying at the hotel. Carry out Housekeeping work as a Public Area Attendant. Order Taker. Linen and Uniform Attendant, Laundry Attendant while the main task is a). Maintain and clean guest rooms in hotels; b). Maintain the cleanliness of public areas of hotels or public areas; c). Report the status of the room to the front office section; d). Maintain cleanliness of hotel linen; e). Take care of housekeeping work equipment; f). Arrange the room to make it look beautiful and clean. Carry out work in the scope of Food and Beverage Service as a Waiter or Waitress. The Food and Beverage Department (F & B Department) is one of the departments in the hotel that is responsible for the sale of food and beverages and is responsible for processing raw food ingredients into ready-to-eat food, and is tasked with serving food and drinks to guests. The F & B Department itself consists of two parts, namely: a). Food and Beverage Product (F & B Product) is responsible for processing food ingredients and making food, b). Food and Beverage Service (F & B Service) is in charge of serving food or serving food to guestsThe duties and responsibilities of the Food & Beverage Department include: Duties and Responsibilities of Food and Beverage Products (F & B Product): a). Processing raw material into ready-to-eat food; b). Making dishes that have flavors; c). Responsible for food & drink made whether it meets health requirements. Duties and Responsibilities of Food and Beverage Service (F & B Service): a). Duty to handle requests for ordering food and drinks: b). Presenting food and drinks to guests; c). Responsible for serving food and drinks to guests. After carrying out an internship at Front office to find out the success of an internship, students undergo a theory and practice exam using a test tool in the form of written questions for theory, while for practice each student practices as Reception, Reservation, Telephone Operator, Porter, and Valet Butler. Likewise, after carrying out an internship in the field of Housekeeping, students are tested with a written test by working on theoretical questions about the work in housekeeping. Internships also carry out practical exams by carrying out work as a Public Area Attendant, Order Taker, Linen and Uniform Attendant, and Laundry Attendant. Students who have carried out work in the Food and Beverage Service scope also undergo a written test to find out the ability to know the theoretical basis of work, after which the apprentice students are tested practically by doing work as a Waiter or Waitress. Apprentice students are declared to have passed the written test if they have reached the minimum completeness criteria (KKM). Whereas the internship students are declared to have passed the practice if they have met the standards of each work that has been set. Most test results (90%) can be passed, while the rest (10%) do not meet the criteria for graduation, and must undergo a remedial exam. The success of participating in written and practical examinations is strongly supported by infrastructure and facilities in the form of edotel that meet the criteria of a threestar hotel. Competent and professional teachers and full support from school principals and stakeholders

3.2 Factors That Influence the Success and Failure of the Implementation of Edupreneurship Through Teaching Factory

Based on the results of interviews and observations during research in SMKN 6 Yogyakarta and SMK N 1 Kalasan it was found that success in carrying out teaching factory activities through activities at Edotel as follow: 1) Teachers who are professional and competent. Teachers who have minimum S1 qualifications according to their field of expertise, are creative and innovative in their learning. 2) Adequate facilities and infrastructure in the form of edotel are equivalent to three-star hotels. Edotel is actively accepting guests to stay overnight. So students really do work like a real hotel. 3). Support from a good school. All school members support, principals, teachers, students and school committees. Factors that cause failure or hinder the implementation of edupreneurship through teaching factory are: 1) The lack of cooperation between schools and the business world. This is due to the lack of good communication between the school and the business world and industry so that schools are less able to keep up with the latest developments, both tools and work procedures.2) Weak marketing capabilities. This can be seen from the lack of promotion carried out by schools to introduce edotel to outsiders, so that the impact on housing is still SMA. The results of the research at Yogyakarta 6th Vocational High School and SMK 1 Kalasan in general can be said that the results of research related to the implementation of edupreunership through the factory teaching can be implemented well, because of the commitment from the school, so that it can foster student competence. This is in accordance with the results of the study by [17] that the teaching factory model is one solution to prepare students to have competencies that are in accordance with the competency needs of the industrial world. Learning teaching factory developed can be integrated into the production unit organized by the schoolLikewise Siswanto research explains that factory teaching can contribute to improving the competence of vocational students by: (1) trying one student in one media during practice, (2) conditioning the practices of students to produce quality products, (3) applying standards in accordance with those in the industry in every practice undertaken by students, (4) provide more opportunities for students to practice their skills in teaching factory activities [18] The successful implementation of the teaching factory is supported by professional and competent teachers, this is in accordance with the results of the study that if the educator's activities in teaching factory based learning are to be carried out effectively, 1) then the teacher must be aware to develop, 2) Having a strong character, 3) Having and using an active learning model [19] The Teaching Factory has emerged as a promising concept of integrating the factory environment with that of the classroom.[20]

4 CONCLUSION

From this study we can conclude that the implementation of edupreneurship through the teaching factory in terms of learning can run well, there is a school commitment to implement it seriously. Factors that affect success are: 1) professional and competent teachers, 2) adequate facilities, 3). support from good schools, while the inhibiting factor is the collaboration between vocational and business and industrial sectors that are still weak and marketing capabilities are still

low.

ACKNOWLEDGMENT

The author would like to thank the prinsipals of the SMK N 6 Yogyakarta and SMK N 1 Kalasan for helping in the research.

REFERENCES

- [1] M. L. Lăcătuş and C. Stăiculescu, "Entrepreneurship in Education," Int. Conf. KNOWLEDGE-BASED Organ., vol. 22, no. 2, pp. 438–443, 2016.
- [2] C. Liebrecht et al., "Concept Development for the Verification of the Didactic Competence Promotion for the Learning Factory on Global Production," Procedia Manuf., vol. 9, pp. 315–322, 2017.
- [3] L. Louw and M. Walker, "Design and implementation of a low cost RFID track and trace system in a learning factory," Procedia Manuf., vol. 23, no. 2017, pp. 255–260, 2018.
- [4] M. Juraschek, L. Büth, G. Posselt, and C. Herrmann, "Mixed Reality in Learning Factories," Procedia Manuf., vol. 23, no. 2017, pp. 153–158, 2018.
- [5] N. Fajaryati, "Evaluation of Smk Teaching Factory," pp. 325–337.
- [6] M. B. Wijaya, "Vocational High Shool Teaching Factory Management Model," J. Penelit. PendidikanA A, vol. 30, no. 2, pp. 125–132, 2013.
- [7] R. Kurniawan, "The Effect of Application of the 6 Step Teaching Factory Learning Model (Tf-6M) and Entrepreneurship Leaning Achivement on Entreprenual Interset," Innov. Vocat. Technol. Educ., vol. 10, no. 1, pp. 57–66, 2017.
- [8] G. Chryssolouris, D. Mavrikios, and L. Rentzos, "The Teaching Factory: A Manufacturing Education Paradigm," Procedia CIRP, vol. 57, pp. 44–48, 2016.
- [9] D. Mavrikios, K. Georgoulias, and G. Chryssolouris, "The Teaching Factory Paradigm: Developments and Outlook," Procedia Manuf., vol. 23, no. 2017, pp. 1–6, 2018.
- [10] G. S. Sukoco, "Teaching Factory Depveopment in Worshop," J. Pendidik. Teknol. dan Kejuru., vol. 22, pp. 467–483, 2015.
- [11] M.Tisch, C. Hertle, E. Abele, J. Metternich, and R. Tenberg, "Learning Factory design: a competency-oriented approach integrating three designed levels,"Int.J. Comput. Integr. Manuf., vol. 29, no. 12, pp. 1355-1375, Dec. 2016
- [12] D.T. Matt, E. Rauch, and P. Dallasega, "Mini-factory- A Learning factory concept for students and small and medium sized enterprises," Procedia CIRP, vo.17, pp. 178-183, 2014.
- [13] D. Hidayat Martawijaya, "Developing a Teaching Factory Learning Model to Improve Production Competencies Among Mechanical Engineering Students in Vocational Senior High School," J. Tech. Educ. Train., vol.4, no. 2, p. 45, 2012.
- [14] D.S.K. Wong, H. M. Zaw, and Z. J. Tao, "Additive manufacturing teaching factory: driving applied learning to industry solutions: This papaer reviews the past and current status of AM technology at Nanyang Polytechnic in Singapore," Virtual Phys. Prototyp., vol. 9, no. 4, pp. 205-212, 2014.
- [15] Straus, A.L., & Corbin, J.M. 1990. Basic of Qualitative Research Grounded Theory and Techniques. Newbury Park Calif: Sage Publications

- [16] Moleong, Lexy J. 2007. Qualitative Research Methodology Revision edition. Bandung: PT Remaja Rosdakarya.
- [17] Nurtanto, M., Ramdani, S. D., & Nurhaji, S. (2017). Development of Teaching Factory Models in vovationals shools Proceedings of the National Education Seminar, 467–483.
- [18] Siswanto, I. (2011). Teaching Factory Implementation to increase Competency of Vocational High School Student in the 2011 National Seminar "Wonderful Indonesia" (pp. 396–404)
- [19] Haris, A. (2013). The role of Educator in Teaching Factory Based Learning in Vovational High Schools Business Tips, 5(2), 159–174.
- [20] G. Chryssolouris, D. Mavrikios, and D. Mourtzis, "Manufacturing system:Skills& competencies for the future,"Procedia CIRP,vol.7, pp. 17-24, 2013