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Educational Partnership Design of Diploma II Study Program of Culinary with the Corporate World

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ABSTRACT

This study aims to design partnership model between Diploma III Study Program of Culinary and the corporate world, to find the components and the management aspects in partnership, and culinary field components of Diploma III Study Program of Culinary students which can be taught/trained in culinary corporation world. This is a Borg & Gall based research and development study. The research results show that (1) competence improvement and competitiveness-based job model tends to be a win-win solution; (2) components and management aspects of partnership from planning, execution, output until evaluation. The expected output are students' competence improvement and business competitiveness improvement. The steps are to arrange planning/curriculum, human resources, and facility together. The procedure of arranging partnership is begun by the Diploma III program administrator arranging learning materials draft. Next, the corporate party will make correction and give suggestions for the draft. The partnership includes learning, R&D, technology transfer, and consultation. R&D activity is an absolute condition to generate innovation which ends in product commercialization and competitiveness improvement. (3) The culinary competence which can be taught/trained in the corporate world is a hard skill competence in completing job.

Keywords
Diploma III of Culinary; corporate world; partnership

Introduction

The world of education in general faces challenges to produce graduates who have academic skills, technical skills, and employability skills that are aligned and balanced (Febriana, 2017: 149). Demands for job skills change from time to time so that culinary vocational education is required to continue to develop itself. Presidential Regulation No. 2 of 2007 concerning the ASEAN Tourism Agreement or ASEAN Tourism Agreement. The problem that often arises in Diploma III Culinary education is the competency gap of graduates with qualifications required by the world of work. The Education Sector Analytical and Capacity Development Partnership (ACDP) states that vocational colleges at the diploma level have not fully met expectations of job security (ACDP, 2013: 20). As a result, many vocational education graduates are not absorbed into the world of work. Many unemployed people have a background in vocational higher education. Open unemployment with a diploma degree in 2017 reached 6.35%, increasing to 7.92% in 2018 and to 6.89% in 2019 (Official Statistics News / BPS, 2019).

According to Sudira (2012: 36), the problems of Diploma III education generally lie in the lack of increased access to industry and the lack of improvement in the quality of education. The

diploma education collaboration with the industrial world has been ongoing, but the gap between the theory taught in lectures and work practices in industry / work is still far away. This happens because the cooperation carried out is still very limited where the industrial / business world is only used as a place for work practice or industrial practice (PI) so that industry / business actors are not involved in preparing the lecture curriculum.

PI activities begin with planning activities referring to the PI Guidelines by students. In this case, students are looking for Industrial practice places, student's complete administration such as permits, classical Industrial Practice training. Furthermore, students come to Industry to submit permits, introductions, start practicing Industrial work. Then the student completes the report, the student examines on campus. At the end of industrial practice (PI), lecturers and business actors will monitor them, then evaluate whether the industry provides skills according to student needs. The model of cooperation that is practiced as long as it has weaknesses, namely the absence of standard standards, there is no clear description, legality that does not exist except for incidental MoUs, unclear objectives,

Diploma III education needs to have an intensive partnership with the industrial world (Suharto, 2016). Partnerships must be based on joint planning. Planning becomes a formulation that shows a framework for the parties including the effectiveness and participation of stakeholders as well as guidelines so that the curriculum is more relevant to environmental changes and the needs of the community (Zajda&Gamage, 2009: 105-106). The existence of planning will provide an overview to the parties who will work together regarding: (1) a number of activities previously determined, (2) the existence of a process, (3) the results to be achieved, and (4) concerning the future within a certain time, 2014: 77).

Planning must provide an overview of the results to be achieved, as well as being a reference for how to achieve them. Planning is prepared on the basis of a number of common interests between the diploma III program and the world of work so that there is a joint guide on how to carry out the partnership. Survey onthree vocational colleges at the Diploma III level of education in Yogyakarta indicate that the pattern of cooperation implemented has not shown the expected cooperation system. Often encountered a number of problems including unsuitable job placements, unacceptable allowances, job description that is not in accordance with the agreement, cooperation is only in a partial and incidental scope when students practice industry. The consequences of this partial and incidental cooperation are (1) low recognition of the competence of Diploma III graduates; (2) the mismatch between educational outcomes and the needs of the world of work; (3) supply and demand imbalance, and (4) the quality of human resources (HR) produced is still low.
Departing from these conditions, it is necessary to create a cooperation model that can work well between Diploma III education and the industrial world. This research aims to produce a cooperation model that can be applied in the Diploma III of Culinary Study Program with the world of work, management aspects in collaboration, and the resulting competencies.

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Literature Review

Vocational education is part of the education system that prepares a person to be better able to work in a group of jobs or one job field than in other occupations (Evans, 1971: 1). Vocational education is actually vocational, but legally in Indonesia in accordance with the law, it is higher education that organizes Diploma education (Kuswana, 2013: 204).

Slamet (2011: 189) explains that the purpose of vocational education emphasizes four aspects, namely personality and soft skills, work skills, national character, and sustainability. According to Djohar (2007: 1295-1297), vocational education has characteristics, including education aimed at preparing prospective workers, tailored to the real needs of workers in the business and industrial world, requiring cooperation with the business and industrial world.

The characteristics of vocational education are also unique according to the expertise program. One of them is the culinary expertise program. The educational characteristics of the Culinary diploma are interactive, holistic, integrative, scientific, contextual, thematic, effective, collaborative, and student-centered (Regulation of the Minister of Research, Technology and Higher Education of the Republic of Indonesia Number 44 of 2015 concerning National Higher Education Standards). With the existence of AFTA, the world of work for culinary graduates is basically wide open, especially since the tourism sector is being directed to continue to be developed (Kristiana, et al., 2018: 17). Along with the development of tourism, the world of culinary continues to develop. In order to develop student competencies, the need for cooperation between universities and industry is increasingly felt as a vehicle to increase innovation through knowledge exchange (Ankrah&Tabbaa, 2015: 387). Collaboration carried out can include academic and non-academic cooperation.

Partnership

Cooperation is often interpreted as being the same as partnership because they have something in common. Partnership seen from an etymological perspective is adapted from the word partnership, and comes from the root word partner. Partner can be translated "partner, soul mate, ally, or camping". The meaning of partnership which is translated into partnership or partnership (Sulistiyani, 2017: 129).

In order for a partnership to be realized and developed, several defining conditions are: (1) there is a common need (Institutional needs). The needs referred to here are to mutually meet the needs of each party involved in the partnership without wasting resources; (2) institutional policies that support partnership activities; (3) availability of resources; (4) there is an intention and willingness to partner from both parties; (5) there is mutual trust in each party involved in the partnership; (6) the existence of eligibility to partner (Mote, 2001).

Partnerships can develop, and provide sustainable benefits, it is necessary to apply the following principles: (1) the principle of mutual need; (2) the principle of mutual benefit; (3) the principle of sustainability; (4) the principle of mutual trust; (5) the principle of being accountable; (6) the principle of responsibility (Wirakartakusumah et al., 1996). Science-based collaboration between

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universities and industry offers benefits for both parties where universities and industry can overcome global challenges for mutual benefit and the welfare of society (Sharma & Sharma, 2015: 27).

Partnerships follow three important principles (Wibisono, 2007: 102), namely:

1) Equality or balance (equity). The approach is neither top down nor bottom up, nor is it based on power alone, but on a relationship of mutual respect, mutual respect and mutual trust. To avoid antagonism, it is necessary to build mutual trust. Equality includes the existence of rewards, obligations, and ties.
2) Transparency. Transparency is needed to avoid mutual suspicion between partners. Includes transparency of information management and transparency of financial management.
3) Mutualism. A partnership must bring benefits to all parties involved.

Relating to partnerships carried out by educational institutions according to Dharma et al. (2013: 193), that there are three principles of partnership, namely: (1) mutual benefit; (2) mutually reinforcing; and (3) need each other. The same thing was conveyed by Hafsah (2000: 43) that partnerships must have the principle of mutual need and mutual growth.

Partnership models

The partnership model can refer to a number of expert opinions. Levinger and Mulroy (2004: 248) propose four types or types of partnerships, namely: a) Potential Partnership, in this type of partnership the partners care about each other but have not worked together more closely; b) Nascent Partnership, this partnership is a partner but the efficiency of the partnership is not optimal; c) Complementary Partnership, in this partnership, partners / partners get benefits and increase in influence through great attention to a fixed and relatively limited scope of activities such as delivery programs and resource mobilization; and d) Synergistic Partnership.

There are three partnership models that are able to describe the relationship between organizations, namely: 1) Pseudo Partnership. Pseudo partnership is an alliance that occurs between two or more parties, but does not actually cooperate in a balanced manner with one another; 2) Mutualism Partnership; 3) a mutualistic partnership is an alliance of two or more parties who are equally aware of the important aspects of a partnership, namely to provide mutual benefits and get more benefits, so that they can achieve optimal goals; and 3) partnerships through Conjugation Partnership. Conjugation partnerships are partnerships to get energy and then separate from each other, and can further divide themselves (Sulistiyani, 2017: 130).

There have been many collaborations between tertiary institutions and the industrial world that have resulted in a number of cooperation models. Cooperation between the National University of Malaysia and a number of industries includes cooperation in the fields of innovation and development, technology transfer, consulting, and product commercialization (Salleh& Omar, 2013: 660). The model of cooperation between universities and the food industry in India departs from the needs of the industry for technology development, knowing customer and market needs, and knowing the development carried out by competing products. The end result is a commercial food product (Bombaywala, 2014: 36).

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University and industry cooperation goes through certain stages depending on the motivation of the cooperation. Cooperation begins with the formation stage, the organizing stage and the operational stage. During the formation stage, partners are identified and assessed until the signing of the cooperation contract. At the organizing stage, communication is carried out either formally or until agreement is made on the goals and targets of cooperation. At the operational stage, meetings, training, personnel deployment, labor, and other activities are carried out (Ankrah& Al-Tabbaa: 2015: 401).

Collaboration between universities and industry does not always come from the same motivation and goals. The industrial world is more motivated to collaborate that leads to product innovation which leads to product commercialization, while universities are more motivated to absorb graduates, promote innovation, new discoveries, curriculum development, research and experience (Ankrah& Al-Tabbaa, 2015: 392). Judging from the choice of a mutualistic partnership model, the most appropriate model for realizing a win-win solution model is the model described by Salleh and Omar (2013) which is practiced by the University of Malaysia.

Opportunities for wider cooperation between tertiary institutions and industry are wide open in Indonesia, and it has even been regulated in Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 14 of 2014 concerning higher education cooperation, states that universities can collaborate in the academic and / or non-academic fields with other universities, the business world, or other parties, both domestic and foreign (Permendikbud, 2014).

Academic and non-academic collaboration between tertiary institutions and industry enables a number of elements in this collaboration, including curriculum, human resources, infrastructure, graduate competencies, evaluation and monitoring. The broad scope of cooperation requires good collaborative management. Hasibuan (2016: 9) states that management is the science and art of regulating the process of utilizing human resources and other resources effectively and efficiently to achieve certain goals. According to Terry (2016: 16) explains that "Management is a typical process consisting of planning, organizing, mobilizing and controlling actions to determine and achieve goals through the use of human resources and other resources".

Industrial competitiveness

Win-win solution cooperation means that the industrial world also receives benefits comparable to those felt by tertiary institutions. In this context, universities expect an increase in competence, at the same time the industrial world expects an increase in industrial competitiveness. Competitiveness is the ability of a commodity to enter foreign markets and the ability to survive in that market, meaning that if a product is competitive, the product is in great demand by consumers (Uliyati, 2015: 6).

The dimensions of the competitiveness of a company put forward by Muhardi (2007: 40) consist of cost, quality, delivery time, and flexibility. Cost is a dimension of operational competitiveness which includes four indicators, namely production costs, labor productivity, utilization of production capacity and supplies. In this case, the existence of capital is absolutely essential to

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finance these costs. Quality as intended by Muhardi (2007: 40) is a dimension of competitiveness which is also very important, which includes various indicators including product appearance, product acceptance period, product durability, speed of resolution of consumer complaints, and product suitability to design specifications. Delivery time is a dimension of competitiveness which includes various indicators including timeliness of production, reduced production waiting time, and timeliness of product delivery. The flexibility dimension is a dimension of operating competitiveness which includes various indicators including the types of products produced, the speed according to environmental interests.

Methodology

The research method used is a type of research and development (Research and development) and based on the information and data to be analyzed, using a qualitative approach. The main activity in this research is to develop a cooperation model for Diploma III of Culinary Studies with the world of work. This study uses the research and development or R&D stage of Borg and Gall (1983). However, the research on the development of the Diploma III education cooperation model of the Culinary Study Program and the world of work is grouped into three stages, namely: (1) Preliminary study. (2) Model development. (3) Model testing. The subjects in the preliminary research were education managers consisting of: (1) elements of Diploma III education management and the Head of the Culinary Study Program; from Diploma III of Culinary Engineering, YSU, from STiPRAM Yogyakarta, from AKS-AKK Yogyakarta; (2) lecturers and staff involved in the field of cooperation; (3) elements of the world of work involved in cooperation management. The subject of the expert trial is experts in vocational education and cooperation and practitioners from the world of work consisting of: 1 expert in the field of culinary, namely: Dr. SitiHamidah, M.Pd., 1 expert on cooperation, namely DewiEkaMurniati, SE, MM; 2 people from the world of work, namely: 1 person from the APJI association as well as the manager of Rama Shinta Garden Resto, namely Wartadi, SH; 1 General Manager of Tara Hotel Yogyakarta, namely JimanBudiharjo. The subject of the expert trial is an expert in vocational education and cooperation and practitioners from the world of work consisting of: 1 expert in the field of culinary, namely: Dr. SitiHamidah, M.Pd., 1 expert on cooperation, namely DewiEkaMurniati, SE, MM; 2 people from the world of work, namely: 1 person from the APJI association as well as the manager of Rama Shinta Garden Resto, namely Wartadi, SH; 1 General Manager of Tara Hotel Yogyakarta, namely JimanBudiharjo. The subject of the expert trial is an expert in vocational education and cooperation and practitioners from the world of work consisting of: 1 expert in the field of culinary, namely: Dr. SitiHamidah, M.Pd., 1 expert on cooperation, namely DewiEkaMurniati, SE, MM; 2 people from the world of work, namely: 1 person from the APJI association as well as the manager of Rama Shinta Garden Resto, namely Wartadi, SH; 1 General Manager of Tara Hotel Yogyakarta, namely JimanBudiharjo.

Data was collected through interviews, focus group discussions, questionnaires, and documentation. Interviews were addressed to managers and actors in the Culinary service industry. The FGD was attended by Culinary education managers and culinary entrepreneurs representing the industrial world. The questionnaire was addressed to practical students. The stages of data analysis follow the interactive analysis model from Miles, et al (2014) which consists of the stages of data reduction, data presentation, and conclusion drawing. The data

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collected is grouped into themes and sub-themes according to the stages in development research. The validity of the data in this study used triangulation.

Results and Analysis

The preliminary study shows that the cooperation model that has been practiced so far, according to the manager, still has weaknesses, namely the absence of standard standards, no clear description, no legality except for incidental MoUs and unclear goals, planning, processes, and monitoring. During the industrial practice, students of the Culinary study program who carry out industrial practices abroad are generally constrained by the communication aspect, not on the expertise in the culinary field such as cooking or service / serving systems. Other constraints, such as not being involved in the field or going into the industry, show the mismatch between the competencies expected by students and the competencies taught in the industry. Constraints are in the form of industrial practice time that collides with college time.

Judging from the competency standards set by the government, the competence of diploma III culinary students shows a number of abilities including: 1) Completing a broad scope of work, the ability to choose methods to complete work, using analysis appropriately to show performance with measurable quality and quantity in analysing work, using the correct method / procedure, the ability to manage work groups and the ability to be responsible for their own work and to be responsible for the achievement of group performance. Facts on the ground show that not all of them have shown quality performance.

Needs analysis

The competitiveness of the Culinary business actors studied are KaruniaCulinary, Tara Hotel Yogyakarta, and Rama Shinta Resto Yogyakarta. The competitiveness of the world of work can be seen by comparing two businesses with the same standards and segments. Judging from the standards used, the competitive conditions faced by KaruniaCulinary are still at reasonable limits. According to the culinary industry players, their business competitiveness is relatively stable, so it needs improvement.

The facts about the various weaknesses in this cooperation indicate the need for an improvement in the model of cooperation between tertiary institutions, especially the Culinary Study Program with the industrial / business world. In the FGD, there were a number of hopes for a better cooperation model. Culinary industry players generally expect cooperation to increase efficiency and productivity, product quality, human resource quality, hospitality, service, product development, innovation and creativity to eliminate boredom and increase competitiveness, according to the Culinary Study Program manager, improvements to the collaboration model are carried out to produce graduates with competency skills, work ethic, and soft skills, creative and innovative while meeting industrial needs. The industrial / business world needs R&D and technology transfer, product development, quality management, efficiency innovation, and increased competitiveness. The need for a better cooperation model is felt by both parties, both the business world / industry and the manager of the Culinary Study Program.
Model Development

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Broadly speaking, the cooperation model developed seeks to improve the competence of lecturers and students while at the same time increasing the competitiveness of industry / business world.

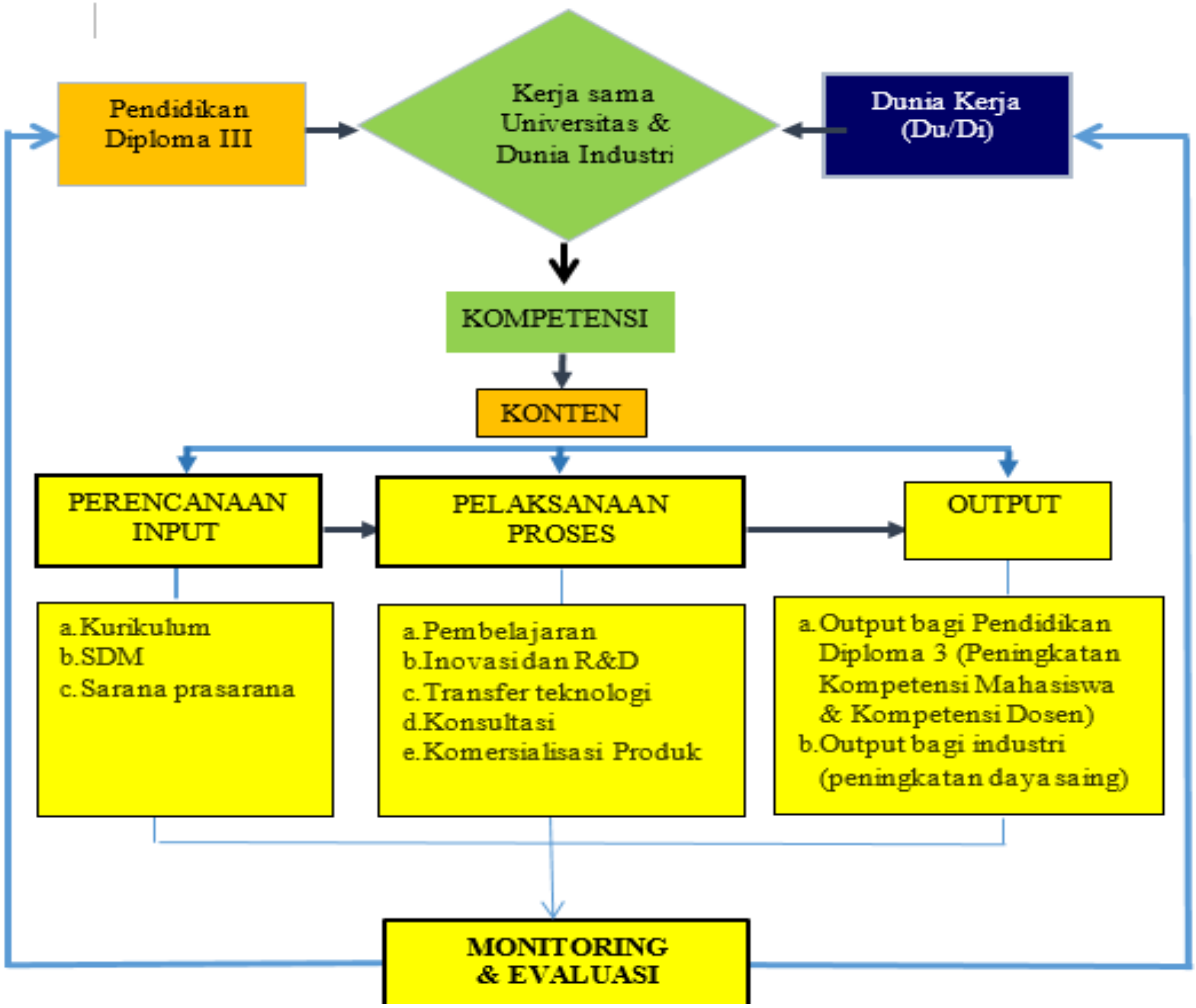

Figure 1. Competency and Competitiveness-Based Development Cooperation Model

The cooperation aims to: 1) Increase the competence of the Diploma III Culinary lecturers, 2) Improve the competence of Diploma III Culinary graduates so that there is no wide gap between the competence of graduates and the competencies needed by the industrial world, 3) Increase industrial competitiveness so that the industry is increasingly developing and progressing.

The scope of cooperation as stated in the MoU is oriented towards increasing the competence of lecturers and students and increasing industrial competitiveness. the scope of cooperation includes: planning, implementation, cooperation outputs, and monitoring and evaluation. Planning includes compiling curriculum, teaching human resources, and providing learning and research infrastructure. Implementation includes theoretical and practical learning, innovation and R&D, technology transfer, and consulting. Output cooperation includes increase the competence of graduates, improvement of lecturer competence, and increasing competitiveness.

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The cooperation procedure starts from compiling a cooperation proposal & draft MoU, discussing to approve the MoU, lecturers compiling research proposals, compiling joint plans with business actors, implementing cooperation, and monitoring and evaluation. In this case the management / lecturers proactively compile a cooperation proposal & draft MoU.

Models development

Experts and practitioners do the testing of the model. The results of the expert's assessment concluded that: Output what is stipulated in the cooperation model is correct, that is, it benefits both parties, but the expected output is still too high or far. R&D needs to be done because the development of the business / industry world is diverse and rapidly changing. However, it will be constrained by the HR competency. Technology transfer needs to be done by both parties in various ways. Consultation needs to be carried out as a form of exchanging ideas as fellow partners. There must be product commercialization as a form of market-oriented product development and competitiveness. It needs planning from the start including curriculum, facilities, human resources. Monitoring and evaluation needs to be done at every stage in each component as well as an evaluation at the end of the on job training. Experts suggest that the following additions or improvements are made: The output is adjusted to the intended industrial scale, consultations by both parties as partners, there is an understanding of all the things needed for implementation, and a more detailed and clear job description is needed. This cooperation model can be implemented equipped with the necessary instruments, namely manuals, proposals, MoUs, and monitoring and evaluation instruments.

The cooperation guidebook contains: rationale, understanding of competency and competitiveness-based cooperation, cooperation objectives, benefits and characteristics of cooperation, scope of cooperation, academic provisions and provisions for implementing cooperation, mechanisms for implementing cooperation and provisions for monitoring and evaluation. Proposals are compiled systematically consisting of: 1) Rationale, 2) Cooperation Objectives, 3) Benefits of Cooperation, 4) Scope of Cooperation, 5) Forms of Cooperation, 6) Cooperation Time, 7) Monitoring and Evaluation. The proposal attaches a schedule of practical learning activities. In the MoU it was emphasized that this cooperation agreement was an agreement in order to increase the competence of lecturers, students, and increase business competitiveness. The instrument is a monitoring and evaluation checklist by students.

Field trials

The competency and competitiveness-based cooperation model was tried partially from the planning, implementation, and monitoring and evaluation stages. Each stage was tested in the form of applicable activities. The planning stage is marked by the preparation of a cooperation proposal and the preparation of a draft MoU by the researcher as a Food Management lecturer. The contents of the proposal state the goals and benefits of cooperation. The objectives of the cooperation are: 1) Increase the competence of the Diploma III Culinary lecturers, 2) Increase the competence of Diploma III Culinary graduates so that there is no wide gap between the competence of graduates and the competencies needed by the industrial world, 3) Increase

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industrial competitiveness so that the industry growing and progressing. The purpose of cooperation indicates a win-win solution, indicated by a real goal for the industrial world.

The scope of cooperation includes cooperation in terms of curriculum, human resources, infrastructure, learning, R&D, technology transfer, consulting, and product commercialization. Human resources needed in education are theoretical lecturers, practical supervisors, and business leaders. The cooperation process is carried out by transferring technology. Business actors train students how to use the latest work tools used in industrial activities.

In planning, the proposal becomes a reference for cooperation in addition to the MoU. The draft MoU was prepared by researchers and then submitted to business actors to be corrected and discussed together. The discussion of the draft MoU resulted in an agreement that was not much different from the proposed draft. The agreed scope of implementation of cooperation is in accordance with the cooperation model developed. The agreed forms of cooperation include: Compiling Learning Materials Related to Industrial Practices, Providing Infrastructure, Providing Practical Instructors and Advisors, Carrying Out Production Activities, Conducting Research and Development, Conducting Technology Transfer, both from the First Party to the Second Party, as well as from the Second Party to the First Party,

The output of cooperation includes: increasing student competence, increasing lecturer competence, increasing competitiveness. The increase in student competence can be seen from the many fields of work practiced by students, starting from preparation, production processes, room service, and post-production. Increasing the competence of lecturers can be seen in the activities of lecturers in mapping the competencies of students who will practice, preparing cooperation proposals, understanding cooperation manuals, negotiating with the industrial world, coordinating with business actors, compiling a list of competencies to be developed during practice, and so on.

Increased competitiveness in the form of increased product quality seen from the variety, product packaging or appearance, speed of service time, and so on has not yet been seen. However, the potential for increasing competitiveness is quite large, especially in terms of innovation and network expansion. Since the beginning of the planning of cooperation, business actors have been optimistic that this cooperation model can be implemented and achieve the expected output.

Monitoring and evaluation activities are carried out by both the Diploma III program manager and business actors. Evaluation and monitoring are carried out using a checklist. The results of monitoring and evaluation by business actors on the cooperation components show the following. The curriculum components, human resources and infrastructure are considered good. The aspects of the curriculum that are considered good are the material to be studied, the material that is suitable for the interest, and the location of the practice that is in accordance with the interest. Human resources that are considered good are business actors who provide guidance, lecturers, and students who undergo practice. The infrastructure aspect is considered to be fully available, the number of facilities is sufficient according to the needs of students, and students can use the existing facilities. Plans that were not implemented were students practicing to review and

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develop products, market research, practice marketing products, and business management practices. In addition, technology transfer is considered to be lacking.

Revision of the final product

Based on input from experts, and field trials, there have been a number of improvements made to the competency and competitiveness-based cooperation model. The inputs obtained are:

a. Business actors do not teach all the competencies proposed by the Diploma III of Culinary
b. Technology transfer is unidirectional, namely from the business actor.
c. The scope of cooperation does not need to go down to product commercialization.
d. Evaluation is sufficient / limited to results (output)
e. The output of cooperation includes increasing student competence, lecturer competence, and increasing competitiveness.

Based on the facts above, the final model of cooperation development is as shown in Figure

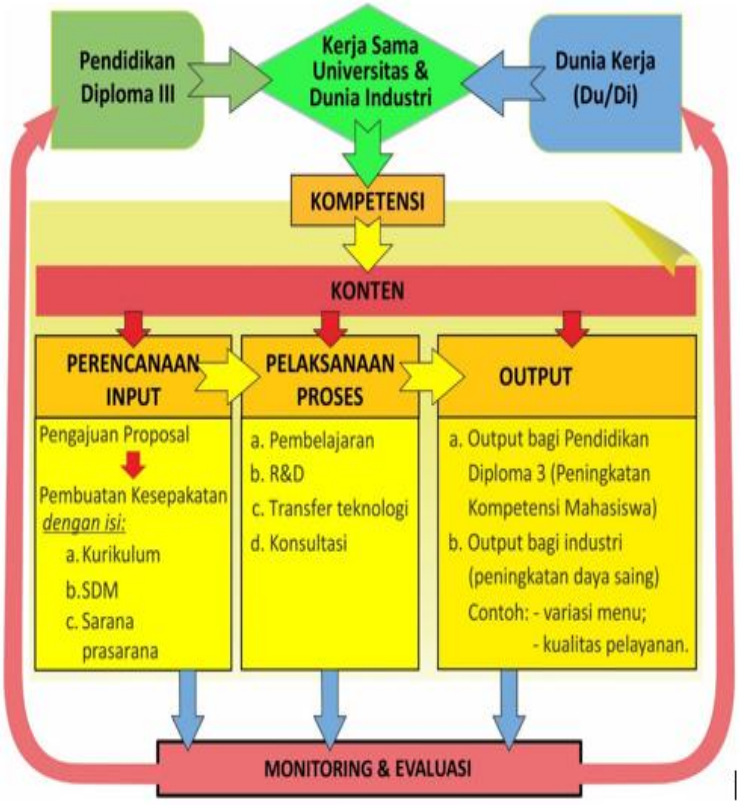

Figure 2. The Final Product of Competency-Based Development Cooperation Model and Competitiveness

At the planning stage, the education manager for Diploma III in Culinary submits a cooperation proposal until an agreement is reached which contains the curriculum, human resources, and infrastructure. This agreement is a reference for both parties to formulate an MoU that regulates

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four points that must be implemented, namely: learning, R&D, technology transfer, and consultation.

Implementation or learning processes, R&D, technology transfer, and consultation are carried out in an effort to achieve the output agreed upon in the MoU. The intended output is increased student competence and increased competitiveness for the world of work. For example, by producing menu variations and quality of service.
Both parties monitor and evaluate at each stage of the cooperation. Monitoring is carried out at the time of planning and during the implementation process. Evaluation is carried out on the output to determine the extent to which cooperation has achieved the results in accordance with the agreement. The results of monitoring and evaluation produce information for managers of Diploma III and World of Work programs to improve or enhance the quality of cooperation to match the expected output.

Discussion

The revised cooperation model for the final product has relatively the same scope of cooperation. The difference is that the final model does not contain commercialization aspects on the grounds that the problem of commercialization of industrial products is to become a working field for the world of work. The revised cooperation model in the final product has a number of advantages over the model in the initial concept. First, the collaboration flow in the final model is easier to understand, starting from the submission of a proposal by the manager of Diploma III Culinary. This means that the manager of the Diploma III Culinary program takes more initiatives. Second, the final model describes the existence of monitoring and evaluation in stages, namely the planning stage, the implementation stage, and the stage after the output of cooperation. The results of monitoring and evaluation are used as material for the manager and the world of work to improve cooperation. Third, related to the elimination of the element of commercialization, the final model is implemented by the Manager of Diploma III of Culinary because the element of commercialization is quite sensitive to the world of work.

Overall, both the model in the concept and the final model have advantages in terms of cooperation output, namely an increase in industrial competitiveness. The world of work will feel the benefits of cooperation more than before. On the Diploma III Culinary program, students will have more opportunities to develop various competences themselves, lecturers can also develop more frequently into industry or internships in industry, will gain more experience.

Collaboration between universities and the industrial world in Europe has long been carried out, continued in industrialized countries in Asia such as Japan, Taiwan and South Korea. Innovations continue to produce new, original domestic products so as to encourage significant economic growth for the advancement of the nation. Many R&D activities in advanced industrial countries are carried out through collaboration between universities and the industrial world (Yusuf &Nabeshima, 2007: 12). The result of cooperation between universities and the industrial world is the speed in mastering technology as shown by industrial countries (such as China and India which have developed innovation systems) which have also succeeded in increasing the ability of economic innovation (Yusuf &Nabeshima, 2007: 12). Cooperation between universities and

industry in China is more financially driven so that there is a commercialization of research results for industry. The results of research are of high economic value because they are a solution for the industry to continue to innovate (Zhou et al., 2016: 15).

Collaboration between universities and the industrial world in Europe has long been carried out, continued in industrialized countries in Asia such as Japan, Taiwan and South Korea. Innovations continue to produce new, original domestic products so as to encourage significant economic growth for the advancement of the nation. Many R&D activities in advanced industrial countries are carried out through collaboration between universities and the industrial world (Yusuf &Nabeshima, 2007: 12). The result of cooperation between universities and the industrial world is the speed in mastering technology as shown by industrialized countries (such as China and India which built innovation systems) which also succeeded in increasing the capacity for economic innovation (Yusuf &Nabeshima, 2007: 12). Cooperation between universities and industry in China is more financially driven so that there is a commercialization of research results for industry. The results of research are of high economic value because they are a solution for the industry to continue to innovate (Zhou et al., 2016: 15).

This competency and competitiveness-based cooperation model shows compatibility with the university and industry cooperation model in developed countries, at least in terms of the scope of cooperation that includes R&D and product commercialization. Product commercialization in industrialized countries such as China, Japan and South Korea is not only the commercialization of industrial products, but also products from the results of the research itself, as stated by Yusuf andNabeshima (2007: 17).

This cooperation model is the answer to the obstacles that have been happening in Indonesia. Education Sector Analytical and Capacity Development Partnership / ACDP (2013: xi) states that in Indonesia too many universities develop their strategies without asking for help from industry stakeholders, and many academics look down on the industry, considering them 'greedy' and 'lacking idealism'. On the other hand, industrialists regard universities as ivory towers, bureaucratic, and too focused on consensus building to meet industry needs. The solution to the conditions in Indonesia is to apply a competency and competitiveness-based cooperation model.

Partnership components

This cooperation model is still based on competence with the expected output, namely increased student competence and industrial competitiveness. Business actors strongly agree with the more comprehensive content of the collaboration. Business actors do not want to be positioned only as providers of industrial practice places, but also contribute in many ways, from planning (input), implementation (process), output and evaluation. This cooperation model is still based on competence with the expected output, namely increased student competence and industrial competitiveness. The university and industry cooperation model developed, namely a competency-based and competitiveness-based cooperation model, can be said to be feasible at the micro level. The micro level according to Kaklauskas et al. (2018: 1) only has micro coverage such as R&D, innovation, competency transfer, and technology transfer. The micro level alone is

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difficult to do without an umbrella for cooperation at the macro level which involves the government as a policy maker.

In planning cooperation, since the beginning of planning, the manager of the Diploma III program has been more active in establishing communication even though it is only related to industry practice material, not discussing the curriculum in a certain period such as one semester or one academic calendar year. Open and frequent communication enables groups to share information and develop the involvement of members in collaborative activities (Haire& Dodson-Pennington, 2002). Frequent and open communication between the two parties will even lead to success in collaborating. During the collaboration, both parties participate and understand each other's strategic choices in cooperation (Rast et al., 2015: 190).

The cooperation is said to be successful. A number of organizational factors that affect the success of implementing cooperation include communication, commitment, mutual trust and leadership (Rast et al., 2015: 190). Trust guarantees ongoing cooperation, even guarantees the sustainability of cooperation in the future. The informal collaboration that has been built by the university can be a stepping stone and a trust-building mechanism to develop collaboration to a formal and long-term level (Pittayasophon&Intarakumner, 2016: 37).

Cooperation must be built on the awareness that the organizational cultures of the two parties are different. The university has an organizational culture: 1) providing services to the public in the form of scientific development and education for prospective workers; 2) scientific publications, 3) research, and 4) theory development. Industry has an organizational culture: 1) creating added value for society, 2) value for shareholders, 3) income, 4) practical research related to the interests of increasing income / profits, 5) driven by results / profit motivation, 6) doing business mastering knowledge, 6) to meet market needs (Ivascu, et al., 2015: 675-676).

The component of cooperation assessed is still lacking, namely technology transfer. Technology transfer is still very simple due to limited practice time and the willingness of business / industry actors to share knowledge. The willingness of business actors to share knowledge and technology will be low as explained by Ivascu, et al. (2015: 676) that the industry has a culture to try to master knowledge, not share knowledge, let alone publicity its knowledge and technology.

This cooperation model positions the transfer of technology from both parties, either from universities to industry or vice versa from industry to universities. Transfers like this have been carried out in Brazil, as explained that universities have the advantage of being science-based (Ferreira & Ramos, 2015: 173), while the industry, according to the author, is based on empirical problems. The problem is that industry is only interested in research to find solutions to problems faced by industry, while universities are more interested in project research in the context of scientific development (Ivascu, et al., 2015: 676). University and industrial cooperation in Thailand pays the most attention to engineering (problem solving) and cooperative education activities (Pittayasophon&Intarakumner, 2016: 37).

Technological cooperation between universities and industry in the UK occurs a lot because there are university actors who are also leaders in an industry (Minshall et al., 2015: 28). The transfer

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of technology in the pilot test model is very simple, so it is less weighty than the transfer of technology in university and industrial cooperation in industrialized countries, even simpler than in Brazil. Cooperation between universities and industry in Brazil has been able to increase competitiveness and technological innovation (Ferreira & Ramos, 2015: 180).

Output to be achieved through this collaboration includes output for students, namely in the form of increased competence, increase the competence of lecturers, and output for industry, namely in the form of increased competitiveness. Industrial competitiveness will increase when there is innovation produced through collaborative R&D carried out by universities and industry. R&D will help companies improve their innovative capabilities (Shen et al., 2018: 1597). The trial results show almost no industrial competitiveness seems to emerge from the cooperation that has been done. This fact strengthens the opinion of some informants that the expected output is still too high.

This means that the development of student competencies is limited as well as a result of the internship program which does not provide opportunities for students to develop themselves in organization and management. The results of the assessment for industrial practice students found that students needed to strengthen their problem solving and communication skills (Agero&Bonotan, 2016: 97).

Another output from this cooperation model is increased industrial competitiveness. Field trials in a limited scope in terms of time and scope of cooperation have made the competitiveness aspect unattainable. However, all partners agree on the importance of increasing competitiveness. This dimension of competitiveness is in line with the explanation of Muhardi (2007: 40) by quoting Ward et al. (1998: 1036-1037) that competitiveness includes cost, quality, delivery time, and flexibility. The business / industry world studied as seen in the four companies shows that business actors do not carry out research and development. Without R&D, it is difficult to innovate and increase competitiveness. R&D cooperation will produce a number of types of output such as intellectual property, prototypes, product innovation and process innovation (Pittayasophon&Intarakumner, 2016: 37). Experience in developed countries such as in the UK, research results from collaboration between universities and industry are able to generate solutions for industrial progress so that research results have a broad economic impact (Mgonja, 2017: 220).

Developed competences

Cooperation is intended to produce competent graduates so that student competence becomes the main focus in this collaboration. At the same time, cooperation also increases the competence of lecturers, especially lecturers who are directly involved in implementing the cooperation. Competency of culinary graduates. These competencies are generally hard skills in completing work around culinary, namely prepare, production process, room service and post production. Competence that places more emphasis on hard skills is usually achieved through field practice and field internships are seen to be effective ways to gain practical experience. Internships as a component of the learning experience that can increase opportunities for developing job opportunities (Gault, et al., 2010: 1). Diploma III in Culinary is also required to have other

competencies such as problem-solving skills, leadership, communication, independent work, creativity, negotiation, teamwork, time management and initiative (Agero&Bonotan, 2016: 97). Longer and more intense industrial practice will be able to provide more experience for students to get used to carrying out assignments with measurable targets, both in quantity and quality.

Conclusion

The comprehensive cooperation model is a cooperation model based on increasing competence and competitiveness. Cooperation is oriented towards improving student competence and industrial competitiveness. This cooperation is a win-win solution so that it is mutually beneficial with benchmarks in the form of increased competence for students and increased competitiveness for the industry. Students get learning and industrial practice experience in order to improve their competence, while business / industry actors can increase their business competitiveness through R&D activities carried out with universities.

The cooperation components in this model include planning, implementation, output and evaluation. The output to be achieved is an increase in student competence and an increase in business competitiveness. Orientation to this output, the industry and the manager of the Diploma III Culinary program jointly compile educational planning including curriculum, human resources and facilities, carried out together in accordance with the MoU in order to achieve the agreed output, then carry out a joint evaluation.

The procedure used in compiling a cooperation plan is initiated by the manager of the Diploma III program compiling a draft of learning material then the industry provides corrections and input to the draft until there is an agreement that becomes an integral part of the MoU. The implementation of the collaboration includes learning, R&D, technology transfer and consulting. R&D activities are an absolute prerequisite for generating innovations that lead to product commercialization and increased competitiveness.

The output agreed by both parties in this cooperation model is in the form of increasing student competence, lecturer competence and increasing competitiveness. Competencies that have been successfully improved are hard skills competencies, but in it also develop affective and cognitive aspects. All parties agree that other competencies that are soft skills can be realized when the cooperation model is implemented with a long term and scope. Lecturer competence increases along with the involvement of lecturers in every stage of cooperation. The output of this cooperation is a win-win solution orientation that has been expected by business actors from the start. All cooperation partners agree on the importance of increasing industrial competitiveness.

The evaluation aspect in this cooperation model is carried out at the end of the cooperation for all components of the cooperation. The evaluation is carried out by students, lecturers, and business actors using evaluation instruments prepared by the Diploma III program manager and the industry.

Competence in the field of food that is improved is a competency hard skill in completing work. Students can improve their competence in the pre-production, production to post-production

stages. In terms of increasing competence, both program managers and business actors admit that a longer and more intense industrial practice will be able to provide more experience for students to get used to carrying out tasks with measurable targets, both in quantity and quality.

Limitations and Future Studies

As mentioned before, to improve educational result of Diploma III Culinary Study Program quality and relevancy towards corporate world, a partnership model of Diploma III Culinary Study Program is needed. As the problem might be wide, this study was focus on problems below.

1. Partnership between Diploma III Culinary Study Program and the corporate world.
2. Culinary competencies of Diploma III Culinary Study Program students which can be taught/trained in corporate world (Hotel, Catering, Restaurant, Bakery).
3. Managerial Components/aspects (planning, application, evaluation) in the partnership between Diploma III Culinary Study Program and corporate world.
4. Developing a more comprehensive partnership model between Diploma III Culinary Study Program and corporate world.

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