**STUDENT’S COMPETENCY TAUGHT IN THE CULINARY INDUSTRY ASSESSED FROM 21ST CENTURY SKILLS**

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**ABSTRACT**

Industrial competition in the 21st century is getting tougher with new jobs based on production, analysis, distribution and information emerging with changes in human lifestyles as a result of the advent of technology, workplace becomes more computer based and transformed. Compared to 25 or 30 years ago, current university graduates including the Culinary program students, need more skills to successfully face the tough competition of the 21st century.

This writing aims to identify the student’s skills that are taught in the workplace whether it can be seen in measurable activities or not based on the 21st century skills in order to improve the competitiveness of the Indonesia. The identification includes skills taught in the food industry, the powers contained in student activities during the industrial sector and competency appropriateness taught by the industrial world with the needs of the students facing the industry of the 21st century.

Competency development, both program manager and businessman admit that longer and more intense practical industrial will provide more experience for students to get used to perform the tasks with measurable goals, both in quantity and quality. The managers of the Diploma III of Culinary Program should not only be focused on improving the base skills, but also other functional skills in the completion of work such as problem solving, leadership, communication, independent works, creativity, negotiation, teamwork, managerial skill development, research skill improvement, time management and initiative.

**Keywords: competency, culinary, 21st century**

**INTRODUCTION**

Industrial competition in the 21st century is getting tougher with new jobs based on production, analysis, distribution and information emerging with changes in human lifestyles as a result of the advent of technology, workplace becomes more computer based and transformed. Compared to 25 or 30 years ago, current university graduates including the Culinary program students, need more skills to successfully face the tough competition of the 21st century.

The Association of Indonesian Catering Companies (APJI) encourages all of its members to be ready for the 4.0 industrial era. The goal is to be able to compete and have more value. In the 4.0 industrial era, culinary businessman can come from anywhere for that business competition is tighter. Indonesian Food Industry is facing the challenge of power meet the needs the community with a quality greater than, the time in terms of quality of products and quality of service (Novalius, 2019). As a result, the food industry needs reliable human resources to communicate, collaborate, think critically and creative. Good quality of human resources here is ideal, however it needs more efforts to keep Indonesian culinary industry increasing.

Universities that provide a training in restoration cannot work alone to prepare these human resources, for even as the food industry can only be one without work. The universities cannot always follow the development of the food industry, so that food industry has limits in the conduct of research and development as a condition for innovation (Palupi, 2020). To improve the student’s skills, the universities need partnerships with the industry. The progress of the industry 4.0 oblige also the universities do not provide for content of knowledge of a hand, but to ignore the content of attitudes and skills (Gozali , *et al,* 2019). In this case, the student must be able to compete with machines and be able to use the technology goods wisely.

Moreover, Palupi (2020) has revealed that the world industry was involved in the development of student’s skills. It's just that the competence developed is still very limited in light of a certain number of considerations by the owners of the industry, there including the minimization of the risk potential of loss due to errors of students in practice. In this case, the college can negotiate the skills that will be taught in the industrial world order that more of skills are acquired by the students. Palupi (2020) has revealed that the types of skills studied in the food industry are very diverse, from so that the skills of students the some of the others are also very diverse. This skill variety is due to the fact that the characteristics of the sector restoration are quite different between the hotels, the *catering*, restaurants and *bakeries*. In addition, the businessmen have their own policies regarding the skills that can be practiced and not exercised.

In general, the skills taught are alwaystechnical skills or the skills to do a job. Basically, the work activities carried out contain a number of hidden skills such as creativity, communication and cooperation. This communication and cooperation also contain the elements of sympathy, empathy and understanding mutual. However, without an effort planned and measured to develop these skills, the development of skills will not be optimal. As a result, it is necessary to identify the skills that are taught by the world industrial, both for visible and hidden, and the need to examine these skills from the point of view of the needs of the skills of the twenty-first century.

**RESULTS AND DISCUSSION**

The competence is a characteristic that underlies a person related to the effectiveness of the performance individual in his work or the characteristics base of individuals who have a relationship causal or as cause and effect with criteria that are used for references, are efficient or have excellent or superior performance at work or in certain situations (Moeheriono, 2012: 3). The competence is generally understood as the ability to work in the workplace with the skills required (competence functional), with the knowledge base appropriate (competence cognitive) and sometimes with the attitude and behavior appropriate. The division of competences follows generally the taxonomy of Bloom who distributes the skills according to three areas or fields of activities educational, namely cognitive, affective and psychomotor. The domain cognitive is linked to skills mental (knowledge), the field affective for the growth of feelings or fields emotional (attitudes), while the field psychomotor is linked to skills manual or physical (skills) (Winterton *et al,* 2006: 60).

Some of the aspects contained in the concept of competence are as follows (Gordon in Sutrisno, 2016: 204):

1. Knowledge (*knowledge*), namely awareness in the cognitive domain. For example, an employee knows identify learning and how to make a good learning in function of the needs of the company.
2. Comprehension (*comprehension*), namely the depth of cognitive and affective abilities possessed by individuals. For example, an employee in the achievement of learning must have a good understanding of the characteristics and working conditions in an effective and efficient manner.
3. The value (*value*) is a standard of behaviour that has been raw and integrated psychologically in a person. For example, the standard of behaviour of employees in the performance of their duties (honesty, openness, democracy, etc.).
4. The ability (*skill*) is a thing that belongs to individuals to perform the task or the job assigned to employees.
5. Attitude (*attitude*), this emotion (happy -not happy, like -do not love) or a reaction to a stimulus coming from outside. For example, reactions to the economic crisis, feelings about salary increases.
6. Interest (*interest*) is a person's tendency to do an action. For example, doing a work activity.

**Graduate Skills of the Diploma III of Culinary**

The scope of competence which includes aspects of knowledge, understanding, values, abilities, attitudes and interests has become a serious consideration for the teaching of Diploma III of Culinary Administrator. The skills of graduates of the degree III of the program of studies in restoration cover three aspects to the times in the aspect affective (attitude), the appearance cognitive (knowledge) and the appearance psychomotor (skills). The skills affective (attitudes) include (Faculty of Engineering, YSU, 2014: 103):

1. Be devoted to Almighty God and able to show a religious attitude;
2. To defend the values of human in the exercise of functions based on religion, morals and ethics;
3. internalize the values, the norms and ethics scholars;
4. To act as citizens proud and loving the country, with the nationalism and sense of responsibility towards the state and the nation;
5. Respect the diversity of cultures, points of view, religions and beliefs, as well as the opinions or original discoveries of others;
6. Contribute to the improvement of the quality of life in society, nation, state and to the advancement of civilization based on Pancasila;
7. cooperate and have a sensitivity social and concern of the community and the environment;
8. Obey the law and discipline in public and state life;
9. Internalization of the spirit of independence, struggle and entrepreneurship;
10. To show an attitude of responsibility for work in the field of education culinary so independent.

The cognitive skills (knowledge) include (Faculty of Engineering, 2014: 104):

* 1. To control concepts and methods theoretical criticisms, systematic and innovative in from a variety of options that have been or not standardized in the context of the restoration in the field of pastry, services culinary supported by the mastery of knowledge food, nutrition and culinary arts
  2. To control concepts theory in the field of food, nutrition and knowledge culinary and be able to formulate solutions to issues of procedure
  3. To master the principles of teamwork management and write reports written complete
  4. Master the principle of responsibility for accomplishing one's own work and the results of group work
  5. To master the principles of organization of food in the institutions of the hospitals, the school, other agencies government
  6. Master the theory and entrepreneurial principles in the field of cooking.

The psychomotor skills (skills) include skills -specific and skills General. The skills specific include (Faculty of Engineering, 2014: 104-105):

1. Able to perform work in the planning, processing and servicing of routine foods, selection and use of methods, both standard and non-standard, based on data and of information, and able to demonstrate performance with a quality and a quantity measurable
2. To master the principles and / or bases of knowledge theory in general, the knowledge nutritional and culinary and be able to apply them to the resolution of issues of procedure.
3. Able to manage working groups, work together in groups and compile systematic and comprehensive written reports.
4. the responsibility of the completion and realization of the objectives of work, alone or in group.
5. Able to work together and adapt to individuals, to groups, to community, to the environment of work and the new situation in which it faces.
6. Able to communicate the ideas verbally and in writing
7. Ability to design delivery food in the institutions of the hospitals, the school, other agencies government
8. Able to manage entrepreneurs in the field of kitchen oriented towards the field of pastry and catering services.

Aspects of skills General which will be acquired by the graduates of the program of studies of the degree III of restoration include (Faculty of Engineering, 2014: 105):

* 1. Apply a thought logical, critical, innovative and creative in order to improve self-efficacy, good execution of the work, as well as the quality and productivity of labour.
  2. Compilation of scientific studies in the framework of the scientific development of culinary education worthy of publication.
  3. Take the right decisions in the context of the resolution of problems in the area culinary in function of the results of the study.
  4. Manage the learning so independent, develop and maintain the network with mentors, colleagues and peers inside and outside of the establishment.

These three areas of competence are achieved by the students of Diploma III Restoration through theoretical and practical education programs. At level practice, D III culinary administrators collaborate with the trade actors / industry in order to produce the graduates with the skills contained in the normative formulation. The results of practical industry are often not that what expect the institutions of education. Palupi (2020) in his research has revealed that the skills developed in practice industrial put more emphasis on the technical skills. The students of the degree III are not in able to solve the problems of large scale because the students of the degree III, in particular in universities private, not follow that course management companies catering and catering. The degree III culinary must also have other skills, such as the resolution of problems, leadership, communication, working with independent, the creativity, the negotiation, work team, time management and the initiative (Agero & Bonotan , 2016: 97).

The skills related to communication, collaboration and skills Creative will receive not enough attention even if, conceptually, education D III, like any other training professional, puts the emphasis on education in preparation to work on developing the skills and *abilities to* think, work and putting in work of innovation professional. The preparation of the workforce to work through the teaching professional in ACS in addition to the *skills* technical should also aim to: (1) To develop the *abilities* and skills in the analysis and resolution of problems. (2) Development of *skills* and competencies for the processing of information. (3) *Skills in communication* that contribute to relations productive and harmonious between workers and customers. (4) *Skills Working Team* that contribute to a productive working relationship and impact. (5) *Skills initiative and enterprise* that contribute to impacts innovative (6) *Skills in planning and organization* that contribute to planning strategic short and long term. (7) *Self-management skills* that contribute to satisfaction and performance growth. (8) *Skills learning* that contribute to the development of career durable and expansion of staff. (9) *Skills technology* that contributes to a running effective work (BCA / ACCI, 2002: 5).

**The Need for D III Culinary Graduates to Have the Skills for the 21st Century**

The graduates of D III Culinary Program are faced with requirements of competition in the twenty-first century. As a result, the leaders culinary DIII of are also required to equip graduates with skills that match the challenges of competition in the twenty-first century. As in judging by the skills formulated by UNY, it is of many skills. What is relevant to the skills of the twenty-first century. The graduates of D III Culinary Program as well as graduates of degree teaching professional III century today must master science, possess the skills metacognitive, be able to think critically and so creative and be able to communicate and to collaborate effectively (Greenstein, 2012). Partnership US for the skills of the 21st Century (P21), identifies the skills needed in the 21st century, namely "4C" - (*Thinking critically, communication, cooperation, creativity*) (Sugiyarti , et al, 2018).

Glaser (in Fisher, 2009: 3), provides an understanding of the skills of *critical thinking* in both an attitude of willingness to reflect deeply the problems and things that are in the scope of his experience, the knowledge of methods logical examination and reasoning, etc. a skill to apply the methods.

The skills in communication include the skills to convey thoughts or the way of suggestions clearly and convincingly orally and in writing, the ability to convey opinions in sentences clear to transmit the orders clear and be able to motivate the others in speaking.

The skills of collaboration are very important to the times in life community and the workplace. The results of the survey by the Conference Board (2006, cited by Scott, 2015b) have revealed that the professionalism, a good ethical work, communication oral and written, collaboration, work team, critical thinking and resolution of problems are the skills most important. These skills allow for a person to obtain more value to the eyes of his colleagues while in moving in environmental work collaborative (Redecker *et al.,* 2011). Among the skills important in the twenty-first century, there is the ability to promote the cooperation interdisciplinary and exchange global ideas to fight against discrimination potential due to membership ethnic, to sex or to the age (Leis, 2010).

The skills of creativity involve a process in several levels starting by making variations, combinations, transformations to the creativity pure emerging. It has been demonstrated that creativity is part integral of a large variety of skills, including thinking science, entrepreneurship, design thinking, the math (Center for Curriculum Redesign, 2015: 4).

With 4C skills, the graduates of D III Culinary Program are supposed to be able to interact with other people and the environment and create the sense and to appreciate and adapt in the right way, to be able to 'criticisms and be creative as well as to communicate the ideas as well as to understand the ideas of others so they are also qualified to collaborate with others .

There are a number of skills in the 21st century that education seeks to acquire. Wagner (2010) and the Change LeadershipGroup at the University of Harvard have identified the skills and abilities of survival which the students were required to deal with the life, work and citizenship in the 21st century by putting the focus on the seven skills following : (1) critical thinking and capacity of resolution of problems, (2) collaboration and leadership, (3) agility and adaptability, (4) initiative and spirit of *enterprise*, (5) able to communicate effectively in both oral and written, (6) able to access and analyze the information, and (7) have curiosity and imagination.

The 21st century skills that are essential for graduates to excel and compete in the 21st century have been identified by The Partnership for 21st Century Skills (2008). These skills can enhance the marketing, the employability and preparation for citizenship. A skill will have selling power when there is the right situation and the right condition. In the twenty-first century, people skilled in the kitchen have also the ability to communicate (communication) orally, in writing or by means of the front media will have more power sales that people only competent in cooking. Although all two are skilled in cooking, people skilled in working have a sales power and are regarded as more capable of working the other. Even a person who is an expert culinary has a sales value and a better ability to work when it is in able to demonstrate his ability to think critically and so analytical a job cooking in relation to the context socio- economic of the community. In from of the skills of critical thinking, a chef trained will be in able to create a new product with a new meaning.

The skills in communication, cooperation, critical thinking and creativity are a set of skills that can be obtained through practice direct. The efforts aimed at providing the skills in the lecture halls will not reach the level of knowledge of the skills themselves. The skills of communication and collaboration must depart the skills to give sympathy, to show empathy, show respect, the respect, build an understanding mutual, build a trust mutual to this the need for collaboration will make sense. These various skills relating to others should become a habit or a habit. Efforts to get used to these skills are the best adapted to the practice of the industry over a long period of time, not just a few months. More practice industry is long, better will be the training of skills in the 21st century for D III Culinary Program graduates.

The graduates of D III Culinary Program will certainly left to account so the practice industry is exercised only during a few months only because graduates will gain from the experience in the field of skills techniques. Basically, it is the skills hidden (hidden), which have also been developed for practical industrial or internship to ensure that graduates have unintentionally the problem of skills of the 21st century, when it becomes just a skill acquired, the student culinary will appear as competitive culinary skills are appropriate. Even if that is not enough. When from the beginning, in full consciousness, the director and D III Culinary Program students are aware of the importance of the skills of the 21st century, students try to develop to be competitive in the 21st century.

**CONCLUSION**

Conceptually ideal, the competence of graduates culinary of degree III is in part relevant to the skills of the 21st century, but in practice, the improvement of skills food is usually a *skill difficult* to accomplish a task such as: 1) the ability of graduates to complete a working large scale. 2) the ability to choose a method to complete the work, 3) by using an analysis appropriate, 4) k the ability to run with the quality, 5) k the ability to run with the amount measured, and 6) k the ability to correctly use the method / procedure. These various skills are part of the skills base. Entering the 21st century marked by the progress of technology information and communication, the graduates culinary of Diploma III were also necessary for other skills functional to solve the job such that the resolution of problems, leadership, communication, work independent, the creativity, the negotiation, the work team and the development of skills in management and in management. time and initiative.

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