Implementation of Collaborative Learning Model Teaching and Learning Life Skills based for Improving the Competence of Students in Facing the Industrial Revolution 4.0 and the Society 5.0 Era

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Abstract

The implementation of learning should stimulate students to be more active in improving social skills, emotional skills, spiritual skills, scientific skills, mental skills, kinesthetic skills, and entrepreneurial skills, which in turn can improve students' competence and entrepreneurial character, in accordance with the vision and mission Education units. These skills are also skills needed in the world of work and industry, because industry professionals always work in groups and synergize to complete a particular project or job. Thus, the hard skills and soft skills of vocational and high school students as prospective workers and entrepreneurs should be able to develop creativity and innovation that will shape competence, entrepreneurial character, through positive, integrated, combined, mutual cooperation and collaboration interactions, implementing human literacy among people. Fellow human beings, cooperate, work in groups, synergize, and collaborate to complete a job. Life skills in the Industrial Revolution 4.0 and the era of society 5.0, as well as the new normal life, are the ability and courage to face life's problems, then proactively and reactively, seek and find solutions to overcome them. Life skills are skills or abilities to be able to adapt and behave positively, which allows a person to be able to deal with various demands and challenges in real life more effectively. The implementation of life skills-based collaborative learning can be used as a forum to improve students' competence and entrepreneurial character.

Keywords

collaborative teaching; learning; life skills; competence improvement; high school; vocational high school students.



I. Introduction

In the development of the world of education, especially after the rolling reforms, new phenomena have arisen in educational institutions, which are schools that use the term Integrated Islamic Schools (Titik, 2010: 42). The school is essentially aimed at helping parents teach good habits and add good character, also given education for life in society that is difficult given at home. Thus, education in schools is actually part of education in the family, which is also a continuation of education in the family (Daulay in Ayuningsih, W. et al. 2020).

Education is the foundation of a successful career, financial freedom, the ability to think and reason critically and to make informed decisions. Without education we will be limited to perform tasks and we will be ignorant to the things that are happening in and Budapest International Research and Critics Institute-Journal (BIRCI-Journal)

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around our surrounding, and according to Martin Luther King, a people without knowledge is like a tree without roots. For education to be of great value, curriculums should be implemented. (Philips, S. 2020)

Increasing the quantity and quality of learning in Vocational High Schools or Senior High Schools is not yet relevant to the facts on the ground, the world and the industry have not absorbed graduates optimally. The increasing number of graduates who are not ready to work, because the skills of graduates are still not in accordance with work competencies. The values of life skills include the values of honesty, responsibility, courtesy, self-confidence, ethics, cooperation, creativity, communication, and leadership (soft skills), which are work competencies needed by the world of work, industry, and the business world. High academic ability (hard skills) but not balanced with good soft skills will result in less than optimal resources.

The increasing number of vocational / high school graduates who go directly to the world of work and the business world, soft skills aspects are very much needed in their learning. The integration of learning in SMK requires more supportive learning strategies or methods so that students can develop their soft skills aspects. The challenge is the spread of false information (hoax) quickly which of course will lead to confusion of information and even cause social conflict. The progress of science and technology as a trigger for the industrial revolution is also followed by other implications such as unemployment, competition between humans and machines, and higher demands for competence. Unemployment occurs because of the shifting of human tasks at work which are replaced by machines. Advances in science and technology, automatically competition for human competence is also getting tougher. Competence is the mastery of Knowledge, Skill, Attitude in certain fields based on certain standards (Law No. 13 of 2003). Humans are required to have the competence to be able to compete with one another. Moreover, in 2015 a free market known as MEA (Society Asean Economics) in which there is an agreement between 11 countries

The integration of soft skills, hard skills and entrepreneurial skills is an important aspect in producing graduates who are able to compete and succeed in their work. It is necessary to study the patterns of integration of soft skills and hard skills in learning with various strategies. The development of information and communication, the rapid development of science and technology and changes in the labor structure in the global era require reliable quality Human Resources (HR). The quality in question is HR who has open competitiveness with other countries, adaptive and anticipatory to various changes and new conditions, open to change, able to learn how to learn (learning how to learn), multiskilling, easy to retrain, and has the basics broad, strong, basic ability and fundamental to develop in the future. Developments that will occur in the 21st century and identify the necessary competencies and become the task of education to prepare citizens with these competencies. There are five new conditions or contexts in the life of the nation, each of which requires certain competencies. Global competition conditions (need global awareness and independence), global cooperation conditions (need global awareness, ability to work together, mastery of ICT), information growth (adaptation to technology, critical thinking & problem solving), work and career development (need critical thinking & problem solving, innovation & improvement, and, flexible & adaptable), service-based economic development, knowledge economy (need to be information literate,

Vocational High Schools need to develop their learning to prepare their graduates to meet the full competency needs expected by the world of work/industry covering aspects: honesty, work ethic, responsibility, discipline, applying the principles of work safety, initiative and creativity, cooperation, adjustment, self-confidence, and tolerance. Aspects of

soft skills or work character have a significant role in determining the success of a business/industry as well as the success of the employees themselves. global awareness ability, independent character, ability to cooperate globally, ability to master computing, ability to be technology literate, intellectual ability which emphasizes on critical thinking and problem solving ability, ability to innovate & perfect, and, have knowledge and skills that are flexible &

The results of empirical observations conducted by the Ministry of National Education, quoted by Mariah & Sugandi (2010:1) show that the majority of SMK graduates in Indonesia are not only less able to adapt to the development of science and technology, but also less able to develop themselves and their careers in the workplace. Qualifications of candidates for the world of work needed by the world of work, in addition to scientific and skill requirements, also a series of non-technical abilities that are intangible but indispensable, which are referred to as soft skills.

Soft skills, hard skills, entrepreneurial skills are competencies that cannot be separated from one another in a person if that person wants to achieve success in his favorite field. Hard skills refer to the technical skills and knowledge needed to do the job, while soft skills allow you to use technical skills more effectively. Hard Skills can be defined as a person's skills in terms of mastery of science, technology and technical skills related to the field of science. It relates to the ability to think (cognitive) and physical skills (psychomotor). In other words, hard skills are a representation of intellectual intelligence and also kinesthetic intelligence. In the UNESCO concept, hard skills are the expectations of the educational pillars of learning to know and learning to do. Soft skills are a person's skills in self-regulation (intrapersonal skills) that can improve performance optimally and one's skills in dealing with others which are the result of expectations from learning to be and learning to live together. Entrepreneurial skills are the result of someone's thinking and competence that starts from communication skills (inter and interpersonal skills, social skills) critical tinking, and collaboration skills (cooperation, mutual cooperation, human literacy or humanitarianism,) which will produce creativity and must be realized in an innovation in real, which will form competence in meeting the needs of consumers or society, and industry.

The new literacy is (1) Data Literation is the ability to read, analyze and use information from Big Data in the digital world, (2) Technology Literation is the ability to understand system mechanics and technology in the world of work, such as Coding, Artificial Intelligence (AI) and principles of engineering (engineering principles), and (3) Human Literacy is in the fields of humanities, collaboration, humanity, communication, and design (draft) that need to be mastered by all graduates of SD in Indonesia. Especially for human literacy (HR), the strategy that must be applied to the next generation is to be able to interact well, not rigid, be able to take a human approach by carrying out good and weighty communication, in addition to having to master creative and innovative designs.

The results of the initial observations on the implementation of entrepreneurship learning in SMK are as follows: 1) students feel less confident in entrepreneurship because they do not have special skills as capital for business expertise; 2) SMK students stated that the entrepreneurship learning process still uses classroom learning methods and is more theoretical; 3) SMK students learn entrepreneurship only to fulfill the obligation to take entrepreneurship subjects, 4). SMK students stated that they lacked enthusiasm to apply entrepreneurial character, lacked enthusiasm to increase creativity and be innovative in entrepreneurial activities; 4) Vocational High School students, stated that the teacher applied the learning method with lectures, discussions and assignments; 5) SMK students stated that the supporting facilities for entrepreneurship learning were still lacking.

Vocational High School students have not been able to express ideas in every given task, have the courage to take risks, when doing practical assignments students are not brave enough to make assignments with different views. Results-oriented attitude, students have not been able to act to produce real work needed by society. The leadership attitude of students has not been able to divide tasks into groups, is less able to manage time well, lacks cooperation between groups; The attitude of students to work less hard in utilizing their time more productively and creatively; The skill attitude of Vocational High School students is still less independent in maximizing new ideas.

The results of initial observations on the implementation of entrepreneurship learning in SMK/SMA are as follows: 1) students feel less confident in entrepreneurship because they do not have special skills as capital for business expertise; 2) SMK students stated that the entrepreneurship learning process still uses classroom learning methods and is more theoretical; 3) students learning entrepreneurship only aim to fulfill the obligation to take entrepreneurship subjects, 4). students stated that they lacked enthusiasm to apply entrepreneurial character, lacked enthusiasm to increase creativity and be innovative in entrepreneurial activities; 4) students stated that the teacher applied the learning method with lectures, discussions and assignments; 5) students stated that the supporting facilities for entrepreneurship learning were still lacking.

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The Teaching Factory learning model is a learning model that describes the actual industrial cycle according to the concentration of expertise by integrating all subjects in an Expertise Program, in one semester as a form of life-based Collaborative teaching and learning or life skills, which is based on learning and education for life. The teaching factory must be carried out in blocks of time in one semester by giving students direct experience of the industrial atmosphere in what is done in schools in an effort to achieve learning competence, in the form of integration of soft skills, hard skills, entrepreneurial skills, in the subjects of the National Compulsory Group, Regional Wajin and Compulsory Specialization Groups, in a vocational skill program that produces goods and services. What the community needs. For Vocational Schools where the implementation of the teaching factory is conducive, it can also be carried out as the implementation of PKL (Field Work Practice) followed by a Competency Assessment ending with developing entrepreneurial skills that are relevant to regional potential.

In line with the problems above, on this occasion the researchers will look at improving the quality of integration of soft skills, hard skills, and the development of entrepreneurial skills, which are relevant to the culinary industry's work competence, through the implementation of the Teaching Factory learning model which will be applied by integrating and collaborating all subjects National Compulsory Group, Regional Compulsory Group and C1, C2 and C3 compulsory specialization groups, Social And Science (SC) Expertise and Specialization Programs in SMA.

II. Review of Literature

2.1. Soft Skills and Hard Skills

Definition of Soft Skills and Hard Skills In the world of work, superior human resources are those who not only have hard skills but are also good at soft skills. According to Abdurrahman in Widhi (2010), soft skills are attitudes and behavior, honesty, self-confidence, high motivation, ability to adapt to change, interpersonal competence, value orientation that shows effective performance and entrepreneurial spirit. Soft skills are a person's skills in dealing with other people and skills in self-regulation that are able to develop work to the fullest. (Sutikno, 2009). Soft skills can be divided into two categories, namely:

- 1. *Interpersonal skills*, a person's skills in dealing with others, which include: a) motivation skills, namely the ability to provide motivation or encouragement to others; b) leadership skills, namely the ability to achieve results by empowering others; c) negotiation skills, namely the ability to facilitate an agreement between two or more parties; d) presentation skills, namely the ability to communicate messages in front of many people; e) communication skills, namely the ability to communicate with other people; f) relationship building, namely the ability to build relationships; g) public speaking skills, namely the ability to speak in public; and h) self-marketing skills, namely the ability to market products properly and appropriately.
- 2. *Intrapersonal skills*, skills in self-regulation, such as: a) time management, namely being able to manage time well in work efficiency; b) Stress management, namely the ability to control oneself when situations, people and events that exist give excessive demands; c). change management, namely the ability to accommodate changes and then adapt to these changes; d). transforming character, namely the ability to form patterns of thought, attitude and behavior in order to build effective relationships with other people; e) creative thinking, namely the ability to think in creating; f) goal orientation, namely the ability to focus efforts to achieve goals, missions or targets; and g) accelerated learning technique, namely the technique of learning quickly.

Research then leads to the question of what personality characteristics support success at work. Of the many personality theories, the five-factor theory of personality is widely used to review success at work. The five personality factors are a description of the unique and relatively stable individual characteristics of the individual. The five factors include: 1) personal resilience (conscientiousness), this personal resilience is shown by persistent, systematic, unyielding character, high motivation and resistance to workload; 2) extraversion, this personality type is characterized by skills in building effective relationships and communication, good at getting along, working together, being active, prioritizing cooperation, being attractive and assertive (open); 3) friendliness (agreableness), humble, do not want to show their strengths, easy to sympathize, warm, trustworthy and polite; 4) stable emotion (emotion stability), this type is characterized by a calm attitude, not easily anxious and depressed, easy to accept, not easily angry and confident; and 5) openness to experience (openness), individuals with this type have imaginative thinking power, like challenges, antiestablishment, creative, critical and have great curiosity (Widhi, 2010).

Based on this definition, hard skills can be categorized as follows: 1) knowlegde (science), is something that is known directly from experience, based on the five senses, and processed by reason spontaneously; 2) skill (skill/technology), is the ability to carry out a certain job, namely in using equipment and methods from a particular field, for example using computer programs, accounting and others. 3) standard operation procedure (SOP), is a set of guidelines in an organization that explains routine activity procedures, SOPs are needed

by an organization to achieve organizational goals effectively and efficiently, the benefits of SOPs include:a) As a means to communicate the implementation of a job, b) as a reference tool in evaluating the service process, c) as a training facility for new staff so as to reduce the time wasted giving direction, d) as a means of controlling and anticipating if there is a change system, e) as a means of auditing information systems (Sutikno, 2009).

The results of initial observations on the implementation of entrepreneurship learning in SMK include the following: 1) students feel less confident in entrepreneurship because they do not have special skills as capital for business expertise; 2) SMK students stated that the entrepreneurship learning process still uses classroom learning methods and is more theoretical; 3) SMK students learn entrepreneurship only to fulfill the obligation to take entrepreneurship subjects, 4). SMK students stated that they lacked enthusiasm to apply entrepreneurial character, lacked enthusiasm to increase creativity and be innovative in entrepreneurial activities; 4) Vocational High School students, stated that the teacher applied the learning method with lectures, discussions and assignments; 5) SMK students stated that the supporting facilities for entrepreneurship learning were still lacking.

The Directorate General of Vocational High School Education (Directorate of PSMK) takes part by trying to improve the competence and entrepreneurial spirit of SMK graduates. In the 2010-2014 SMK Roadmap, the PSMK Directorate has a vision to create a SMK that can produce entrepreneurial graduates who are ready to work, smart, competitive, and have national identity, as well as being able to develop local advantages and be able to compete in the global market. In an effort to realize this vision, one of the strategies made is to carry out a teaching and learning factory or teaching industry program in SMK.

2.2. Life Skills Based Collaborative Teaching And Learning (CTLBLS) Learning Model with Teaching Factory Implementation in SMK and Project Social and Science (SC) in SMA.

Collaborative learning is defined as a philosophy of personal responsibility and respect for others. Students are responsible for their own learning and seek to find information to answer the questions that are presented to them. Educators act as facilitators, consultants, assessors who provide support but do not steer the group towards the previously prepared outcomes.

Jerome Bruner in Melvin also discusses the social side of the learning process in his classic book entitled Toward a Theory of Instruction. He explained about "the deep human need to respond to others and together with them involved in achieving goals, which is called reciprocity (reciprocity)". Bruner argues that reciprocity is a source of motivation that can be used by teachers to stimulate learning activities. With motivation, students will be enthusiastic to learn so that their learning outcomes will increase. Collaborative methods in learning emphasize more on the construction of meaning by students from social processes that are based on the learning context.

Collaborative learning emphasizes more on the construction of meaning by students from social processes that are based on the learning context. The basis of the collaborative method is interactional theory which views learning as a process of building meaning through social interaction. This collaborative learning can provide opportunities to lead to successful learning practices, and this collaborative learning involves the active participation of students and minimizes individual differences.

Collaborative learning is a group learning process in which each member contributes information, experiences, ideas, attitudes, opinions, abilities, and skills, to jointly increase the understanding of all members. Kemp, explained that Collaborative Learning includes social skills and learning abilities. It combines 3 concepts, namely individual accountability, group

benefit, and equal achievement of success. "The purpose of collaborative learning is to increase student interaction, in understanding a task and students are able to explore whatever is on their mind". (Elizabert, et al, 2014) In detail the collaborative learning model is described as follows, when collaborative is implemented all students will be active. Learners will communicate with each other naturally in a group of 4 to 6 students. For example, to make students able to work together and communicate with each other in a group of 4 to 5 people, the teacher should prepare a game (in this case a game of finding pictures) with the hope that all students are active. With active communication between students, a good relationship and mutual respect will be established, because group work is not an individual task but a joint task. This will stimulate cooperation, and in these conditions the teacher only observes how students work and how to communicate by being a comparison when students need help. Learners will communicate with each other naturally in a group of 4 to 6 students.

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III. Research Method

This research uses a descriptive survey method in the preliminary study and the experimental method is devoted to a quasi-experimental design with a non-equivalent control group design. This non-equivalent control group design placed the research subjects into two class groups consisting of the experimental group and the control group, which were not chosen at random. The experimental group, namely class XII Culinary Services 1 will receive the Teaching Factory Learning Model, while class XII Culinary Services 2, as the control class, will receive a conventional model. In addition to researchers coming directly to the place or object of research in this case in the Observation and Preliminary Study at SMK Nurrusalam Salopa Tasikmalaya which is a Leading School for the implementation and implementation of the Teaching Factory learning model.

IV. Result and Discussion

The results of the research at SMK Nurusalam Salopa Tasikmalaya, in the Expertise Program regarding the implementation of the Teaching Factory learning model to increase the integration of knowledge skills, soft skills, hard skills and entrepreneurship skills, which include a) conditions for implementing learning subjects for the National Compulsory Group, Regional Compulsory Group and compulsory specialization groups C1, C2 and C3 Culinary Expertise Program which is currently being carried out in SMK b). learning plans to increase integration, soft skills, soft skills, hard skills, and entrepreneurial skills Culinary Skills Program through the implementation of the Teaching Factory Learning Model in SMK b)

implementation of development and improvement of the integration of knowledge skills, soft skills, hard skills, and entrepreneurial skills Culinary Skills Program through the implementation of the Teaching Factory Learning Model in Vocational High Schools and c) assessment of learning development and improvement of the integration of knowledge skills, soft skills, hard skills, and entrepreneurial skills Culinary Expertise Program through the implementation of the Teaching Factory Learning Model in Vocational High Schools. In the learning planning process of the Culinary Services Expertise Program with regard to increasing the integration of knowledge skills, soft skills, hard skills and entrepreneurship skills, including learning on the subjects of National Compulsory Groups, Regional Compulsory Groups and C1, C2 and C3 compulsory specialization groups.

Preliminary study is the initial stage of research that aims to explore information about the learning process of the subjects of the National Compulsory Group, Compulsory (WN), Regional Compulsory, C1, C2, and C3 Compulsory Specialization Groups in Vocational Schools at this time. The objects of this research include: a. learning planning contained in the lesson plan. b.the learning process in the classroom, c. students' perceptions of the learning that has taken place. An overview of the results of each stage of the preliminary study can be presented as follows, the lesson plans prepared before teaching include the syllabus, lesson plans, teaching materials, evaluation instruments. Planning is adjusted to the Subjects in class XII semester IV Culinary Program subjects for National Compulsory Group, Compulsory (WN), Regional Compulsory,

In the implementation of Teaching Factory, the subjects of the National Compulsory Group, Compulsory (WN), Regional Compulsory, C1, C2, and C3 Compulsory Groups, are carried out using a learning process curriculum and integrated assessment. Mandatory (WN), Territorial Mandatory, Compulsory Specialization Groups C1, C2, and C3. the learning process is separate and the learning infrastructure is only to support the learning process, it has not been empowered to have economic value. The motivation, benefits and objectives of learning suitability in the culinary industry were not conveyed. The learning material has been mastered in terms of concepts and facts, but the presentation is less systematic. The implementation of learning is in the order of explaining concepts, demonstrations and practices, the learning methods that are most often used sequentially are: lectures, question and answer, and discussions and the scientific approach. Class activities are still teachercentered. Utilization of learning resources and media has been carried out well, knowledge and skills assessment has been carried out. Attitude assessment was not carried out. The assignment of making practical objects has not been completed in a timely manner and is not up to standard. Competency Evaluation of learning outcomes mostly applies written tests and assignments. Implementation of the assessment is daily assessment. Mid-Semester Examination (UTS) and Final Semester Examination (UAS) and Practice.

In the learning planning process, namely the preparation of students and the determination of the target class, both the experimental class and the control class in the Culinary Expertise Program, teachers, infrastructure, learning equipment, preparation of the Teaching Factory Model learning administration in the form of a Product Making Plan (RPP), teaching materials, assessment plans knowledge skills by testing knowledge, soft skills, hard skills and entrepreneurship skills by observing using an observation checklist. The next activity is planning a literature study and a visit to the Culinary Services industry with very small, small, medium, medium and large business specifications, by comparing and synchronization of culinary industry learning between schools and industry, by observing, recording industrial cycle processes, and making reports of industry visits.

The next day's activity was a discussion of the results of an industrial visit, and an agreement on the implementation of the Teaching Factory learning model followed by a change in class management to real culinary industry management. The next activity is the selection of methods in the learning planning document, planning is classical, namely lectures, questions and answers and discussions with a scientific approach for the delivery of the realm of knowledge or the integration of knowledge skills. In the Scientific approach, it includes observing, asking questions, gathering information, associating and communicating, and developing metacognition or the relationship between National Compulsory Group Subjects, Compulsory Subjects (WN), Regional Compulsory, Compulsory Specialization Groups C1, C2, and C3, so as to produce creativity for the manufacture of goods and services related to the latest Culinary Services.

The research findings show the following, the integration of knowledge skills, soft skills, hard skills and entrepreneurship skills resulting from learning using the Teaching Factory model or using the conventional model is reflected in the value of the integration of knowledge skills and vocational competence. The data shows that the average gain of knowledge skills integration of students for the experimental group is relatively higher than the average cognitive gain of students in the control group. Increasing the ability to integrate knowledge skills of students whose learning uses the Teaching Factory model is higher than those whose learning uses the conventional model.

The confidence interval of the average competency of the experimental group students from ordering Culinary service products is the same as the average gain. The integration of the soft skills, hard skills and entrepreneurship skills of students differed significantly between the experimental group and the control group, seen from the creativity and innovation of making orders for Culinary service products. The value of the integration of knowledge skills, soft skills and entrepreneurship skills product orders of students whose learning uses the Teaching Factory model is significantly higher than students whose learning uses the conventional model, and shows that the use of the Teaching Factory Model has a very high level of effectiveness in improving knowledge skills, soft skills,

The results of learning and assessment of students obtained in this validation test are the ability of knowledge skills, soft skills, hard skills and entrepreneurship skills students' perceptions of the learning model, which are described in detail as follows. The average gain of the experimental group students' soft skills as a whole after learning with the Teaching Factory model showed an increase knowledge skills of students show a very high category. Soft skills show in the very high category after the implementation of the Teaching Factory model. The average gain of the experimental group students' hard skills as a whole after learning using the Teaching Factory model showed a significant and positive increase, with a very high category

The perception of the experimental group students about the conventional learning model decreased and was lower after participating in learning with the Teaching Factory model. Students' perceptions of the Teaching Factory model are very positive, and have met the ideal value, are preferred and can increase creativity and innovation that form work competencies, and the learning expected by SMK students from conventional learning models. The nature of the Teaching Factory Model is based on several assumptions and rationales as follows, that the learning and education process in Vocational High Schools must be implemented holistically and in real terms so that all aspects of the potential of students can be developed.

V. Conclusion

The conditions of the implementation of learning can be described as follows, the preparation of the lesson plans still needs to be sharpened on indicators of competence, both cognitive, psychomotor and attitudes that are in accordance with learning objectives. The implementation of learning has been carried out quite well, but still requires development in the achievement of the expected competency indicators. The implementation of learning subjects for the National Compulsory Group, Compulsory (WN), Regional Compulsory, C1, C2, and C3 Compulsory Specialization Groups is carried out only on fulfilling task values, not yet directed at making culinary products that have economic value, time efficiency, and industry standard as expected order. Planning and implementation of the evaluation of learning outcomes has been going quite well, however, sharpness is needed in formulating aspects and indicators of competency achievement for the National Compulsory Group, Compulsory (WN), Regional Compulsory, C1, C2, and C3 Compulsory Specialization Groups. The implementation of tasks is carried out separately from each subject. It is necessary to use the time of the learning process in an integrated manner in achieving the expected competencies. Attitude assessment is more directed at work attitudes, not attitudes in the form of soft skills.

Evaluation of learning outcomes is still influenced by the formality of the assessment which is limited by the KKM, so that the assessment has not been interpreted by students because it is only limited to fulfilling report cards.

The results of the knowledge skills assessment showed a significant increase, and most of the averages included very high criteria for the Experimental Class and the Control Group was in the medium criteria. Sofi Skills ability has a significant increase, and has an average increase that is mostly in the very high criteria for the Experimental Class and the Control Group is in the very low criteria. Hard Skills ability, there is a significant increase, most of them are in the very high criteria for the Experimental Class and the Control Group are in the medium criteria. Entrepreneurship Skills, there was a significant and positive increase, with most of them being in the very high criteria for the Experimental Class and the Control Group being in the low criteria. Students' perceptions of conventional learning there is no significant difference between students' perceptions of conventional learning models, in the early and late semesters of learning in the control class. While in the experimental class there was a significant change and a decrease, and a negative assessment of the Conventional Model. Perceptions of the Implementation of the Teaching Factory Model in improving the ability to integrate knowledge skills, soft skills, hard skills and entrepreneurship skills of experimental class students are included in very high criteria. There are significant differences in the perceptions of students of the Culinary Services Expertise Program towards increasing the integration of entrepreneurship skills, the average being in the very high criteria, and the control class average being in the medium criteria. Observing the ability to integrate entrepreneurship skills in the field of Culinary Services, there are significant differences which have an average with very high criteria. This result is evidenced by the achievement of aspects and indicators of the entrepreneurial character of students, which include achievement motivation, future orientation, business leadership, business networks, and responsiveness and creativity to change combined with the implementation of the Teaching Factory Learning model.

References

- A.N, et al, (2016), Karakteristik Sikap Mental Wirausaha Mahasiswa Dalam Bidang Otomotif, Journal of Mechanical Engineering Education, Vol.3 No 1. Juni 2016
- Adi.W.Gunawan. Genius Learning Strategy (Jakarta: PT Gramedia Pustaka Utama, 2007), hlm. 173
- Amar, A. F, et al. (2015). Penerapan Model Pembelajaran Teaching Factory 6 Langkah (Model TF-6M) untuk Meningkatkan Motivasi Berprestasi Siswa di SMK, Journal of Mechanical Engineering Education, Vol 2 No 2, Desember 2015.
- Athiatul Haqqi. (2017). COLLABORATIVE LEARNING: Model Pembelajaran Dalam Upaya Meningkatkan Literasi Informasi Mahasiswa Jurusan Ilmu Perpustakaan dan Informasi Melalui Belajar secara Kolaboratif Jurnal Ilmu Perpustakaan dan Informasi VOL. 1 TAHUN 2017/1439 Ilmu Perpustakaan dan Informasi FAH UIN Sulthan Thaha Saifuddin Jambi.
- Ayuningsih, W. et al. (2020). Implementation of Islamic Education Curriculum Development in Al-Ulum Islamic School Medan. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal. P. 1033-1044.
- Chyssolouris, G, et.al. (2016). the Teaching Factory; A Manufacturing Education Paradigm, LMS, Dept. Of Mechanical Engineering & Aeronautics University of Patras Greece.
- Daniel Muijs & David Reynolds. (2008). Effective Teaching Teori dan Aplikasi (Yogyakarta: Pustaka Pelajar).
- Dimyati dan Mudjiono. (2002). Belajar dan Pembelajaran (Jakarta: PT Rineka Cipta).
- http://fhateh.wordpress.com/2012/03/12/softskill-dan-hardskill/ Nebraska Department of Education. (2000). Nebraska WBL Instruction Guide. Nebraska Department of Education: Nebraska USA.
- Khalid, N, et al. (2014). Importance of Soft Skills for Industrial Training Program: Employers' Perspective, lAsian Journal of Social Sciences & Humanies, Vol 3(4), November 2014.
- Mariah, Siti. (2012). Pengembangan Karakter Kerja Berbasis Industri Pada Siswa SMK Melalui Pendekatan Demand Driven, Artikel Ilmiah, Universitas Indonesia
- Martawijaya, D.H. (2016). Mendayagunakan Sekolah Kejuruan Melalui Implementasi Model TF-6M, kompetensi Keahlian Tata Boga dan Tata Busana, SMK N 2 Baleendah Bandung., Workshop Tgl 29 Agustus 2016.
- Martinis Yamin. (2011) Paradigma Baru Pembelajaran (Jambi: Gaung Persada Press), Ilda,
- Mulyani, Endang. (2009). Strategi Menumbuhkan Sikap dan Perilaku Wirausaha Melalui Pembelajaran Kooperatif yang berwawasan Kewirausahaan, Jurnal Ekonomi dan Pendidikan, Volume 6 Nomor 2, November 2009.
- Murti, K.E. (2013). Pendidikan Abad 21 dan Implementasinya pada Pembelajaran di SMK, untuk Paket Keahlian Desain Interior, Artikel Kurikulum 2013 SMK.
- Peningkatan Metode pembelajaran Definisi Ekonomi Kreatif dan Industri Kreatif: http://www.indonesiakreatif.net/index.php/id/page/read/definisi-ekonomi- kreatif, 23 juni 2012 jam 18.14 sumber:
- Philips, S. (2020). Education and Curriculum Reform: The Impact They Have On Learning. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal. P. 1074-1082.