

JVCE 7 (1) (2022): 65-77

Journal of Vocational Career Education



https://journal.unnes.ac.id/nju/index.php/jvce

Soft Skill Improvement Strategy for Vocational High School Students Base on Career and 21st Century Learning Oriented

Bunyamin Bunyamin[™], Samsudi Samsudi, Shohihatur Rohman

Pascasarjana, Universitas Negeri Semarang, Indonesia

Article History : Received December 2021 Accepted March 2022 Published July 2022

Article Info

Keywords: soft skills, career, vocational graduates, 21st century learning

Abstract

The fundamental problem for vocational graduates today is the ability of soft skills which are the main basis for developing self-character to support the hard skills they have. Soft skills have a very important role in determining the character maturity of SMK graduates towards the world of work. The aims of this study were: 1) to describe the factual conditions for the soft skill development of SMK students that are integrated with the learning process and 2) to develop career-based soft skill enhancement strategies for SMK graduates oriented towards 21st century learning. The research approach used was descriptive research, followed by SWOT analysis. while the research respondents were determined through purposive random sampling method. The research results show that, SMK still has weaknesses in learning soft skills, including: 1) learning is still limited to increasing knowledge and skills (hard skills); 2) teachers, not all of them personally can become role models for students; 3) learning strategies have not yet integrated learning models based on improving students' soft skills; 4) the uneven application of Du/Di culture in the learning process; 5) lack of Du/Di support in the soft skills development of SMK students; and 6) the lack of the role of guidance and counseling in the development of soft skills. Furthermore, based on the resulting SWOT analysisthe highest score for the strength-opportunity strategy (SO: 3.53), whereimproving the soft skills of vocational students based on career-oriented learning in the 21st century, can optimize the SO strategy in all aspects, namely: 1) learning objectives; 2) basic behavior of students; 3) learning materials; 4) career-based learning strategies oriented to 21st century skills; 5) media and learning resources; and 6) learning evaluation.21st Century Learning emphasizes a balance between the development of hard skills and soft skills for SMK graduates, in order to be able to compete in the world of work and entrepreneurship, however, it is necessary to accelerate the role of various parties, especially schools in developing the character and careers of its graduates.

[™] Correspondence : Pascasarjana, Universitas Negeri Semarang, Jalan Kelud Utara III, Semarang, Jawa Tengah, Indonesia 50237

E-mail: bunyamin@mail.unnes.ac.id

p-ISSN 2339-0344 e-ISSN 2503-2305

INTRODUCTION

The development of Indonesian vocational education through Vocational High Schools (SMK), is expected to become part of the foundation for national economic growth, therefore SMK graduates must have hard skills or skills in their respective fields of expertise, according to industry demands. Not only that, soft skills in the form of good character must also be possessed by SMK graduates as skilled workers in the industrial world or to become entrepreneurs. Vocational schools are currently required to focus on three strategic matters in an effort to increase the nation's competitiveness, namely; investment, development of human resources (SDA), and industrial technology.

Director General Vocational, Ministry of Education and Culture, Wikan Sakarinto conveyed that students or students at Vocational Schools must be instilled in soft skills, such as communication skills, attitudes, and good character by educators. Good mastery of soft skills, Wikan believes that SMK graduates will be able to communicate well when they become entrepreneurs or work in the industrial world (https://www.kompas.com/edu).

The results of empirical observations conducted by the Ministry of National Education (2004: 1) show that the majority of vocational school graduates in Indonesia are not only unable to adapt to developments in science and technology, but are also unable to develop themselves and their careers in the workplace. Qualifications for prospective workers needed by the world of work in addition to scientific and skill requirements are also a series of intangible but very necessary non-technical abilities known as soft skills. Soft skills are defined as personal and interpersonal behaviors that develop and maximize humanist performance, including the ability to communicate, socialize, work in teams, mental resilience, discipline, responsibility, and other attributes of soft skills.

Soft skills competence is an ability that can be developed and taught in every learning process, both inside and outside the classroom (experience). Vocational High School students can acquire soft skills through learning experiences at school, life and past experiences, or experiences in the world of work that are currently being carried out. This experience is a very valuable lesson so that SMK students can play a role as a professional who is not only reliable in technical matters, but is very competent as a superior Human Resources (SDA).

Vocational High School students specifically prepared to enter the workforce immediately, continue their education at a higher level or act as job creators. Vocational High School graduates, in their various roles, will face various non-technical challenges which will be the key to success in their work. If a SMK graduate is able to face these challenges, it is very likely that he will succeed, but if he fails, it might become a serious problem. The facts above show that the mastery of soft skills is important as the basic capital for pursuing a career for SMK graduates. This needs to be strengthened and included in a 21st Century oriented learning process, and adjusted to the type of career path in each program of expertise. Based on the background description above, factual conditions for the development of soft skills of SMK students that are integrated with the learning process; 2) What is the career-based soft skill improvement strategy for SMK graduates oriented towards 21st century learning.

METHOD

This study uses a descriptive approach (descriptive research) which aims to describe real phenomena, which are taking place at this time or in the past (Sukmadinata, 2008). Descriptive research is also intended to provide as detailed data as possible about humans, conditions or other symptoms. Based on this description, it can be interpreted that descriptive research is research that seeks to describe a symptom, event or incident that occurred at the time the research was carried out (real time).

Implementation of this research, divided into two stages. The first stage, initial identification of existing conditions in the field and description and mapping of real problems in SMK. The results of the first phase were followed up with a SWOT analysis for mapping strategies for improving the soft skills of vocational students based on career-oriented learning in the 21st century. The research involved several SMKs, especially SMKs in Technology and Engineering (SMKN 3 Semarang), Arts and Creative Industries (SMK Ibu Kartini Kota Semarang). The selection of several SMKs was based on the priority policies for the development of the vocational sector which were currently carried out by the government, as stated in Presidential Instruction number 9 of 2016 concerning Vocational Revitalization, which covers the fields of technology and engineering, maritime affairs, and arts and creative industries.

RESULTS AND DISCUSSION

A. Factual Conditions development of soft skills of SMK students that are integrated with the learning process

1. Soft skills development for SMK students

Based on the results of research conducted on 125 research respondents who came from Vocational School Teachers and Students, a factual description of the soft skills development of Vocational High School students was obtained that was integrated with teaching and learning activities, and an overall description of the invoice conditions for the soft skills development of Vocational High School students can be seen in the table 1 below.

Table 1. Factual Conditions for Developing Soft Skills for Vocational High School Students

Attitude	Indicator	Cond	lition		
Attitude	indicator	TB	KB	В	SB
Self-confident	Full of confidence in self-ability;	0	59,1	40,9	0
Sen-connuent	Do not depend on others;	0	59,1	36,4	4,5
	Priority on achievement;	0	72,7	22,8	4,5
Task Oriented	Have faith in the process, diligent and thorough;	0	68,2	31.8	0
	Have initiative and improvisation;	0	59,1	36,4	4,5
Dare to take risks Al	Able to take risks in work;	0	36,4	63,6	0
Date to take fisks	Likes challenges;	0	54.5	45.5	0
Landarchin	Open to suggestions and criticism;	0	50	50	0
Leadership	Easy to adapt and cooperate;	0	86.4	13,6	0
	Creative, Innovative and Visionary;	0	59,1	40,9	0
Success Oriented	Focus on doing work;	0	45.5	50	4,5
Success Offented	Have networks and resources;	0	50	50	0
	Absorb new knowledge and experience	0	50	40,9	9,1
Vicionary	Think "out of the box";	0	36,4	63,6	0
Visionary	Open to new things	0	59,1	40,9	0
Description of the cor	ndition score: 4: very good; 3: good; 2: not good; and	1: not g	ood.		

Based on the table inabove, it is obtained that the factual conditions for the soft skill development of

the factual conditions for the soft skill development of SMK students are integrated with the teaching and learning process, where almost all indicators of soft skills for SMK students fall into the "less good" category. In terms of self-confidence, in the indicator of full confidence in one's abilities, 59.1% of respondents stated that they did not develop well; and on the indicator of not relying on other people at 59.1%; respondents said it was not good. According to Lauster (2002:4), Self-confidence is an attitude or belief in one's own abilities so that in his actions he is not too anxious, feels free to do things according to his wishes and is responsible for his actions, is polite in interacting with others, has an achievement drive and can recognize strengths. and lack yourself. Lauster described that people who have selfconfidence have the characteristics of selflessness (tolerance), do not need encouragement from others,

are optimistic and happy. Some of the things that cause the lack of self-confidence in vocational students are: (a) the factor often fails; (b) factors of environmental differences; (c) the factor of difficulty adjusting; (d) easily anxious and fearful factors; (e) the factor of being easily nervous; and (f) the factor of giving up easily.

Furthermore, in the task-oriented attitude, in the priority attitude indicator on achievement, 72.7% of respondents stated that it was not good. Furthermore, on the indicators of having confidence in the process, being diligent and thorough, 68.2% of research respondents stated that they were not good. Similar conditions also occur in indicators of having initiative and improvisation, in which 59.1% of respondents stated that they were not good at developing learning activities at SMK. Meanwhile, on the attitude of being willing to take risks, there were 36.4% of research respondents who stated that

they were not good at indicators of being able to take risks at work. Furthermore, on the indicator of liking challenges, 54.5% of respondents stated that they were not good at developing learning activities;

Furthermore, in terms of leadership, both the indicator of being open to suggestions and criticism (50%) and adaptability and collaboration (86.4%), both are not well developed in learning activities in Vocational High Schools. In a success-oriented attitude, all indicators fall into the category of unfavorable development in learning activities at SMK, where the indicatorscreative, innovative and

visionary, less developed by 59.1%; focus on doing work, amounting to 45.5%; have networks and resources, by 50%; and absorb new knowledge and experience by 50%. Meanwhile,on the visionary attitude, the indicator of thinking "out of the box" was stated by 36.4% to be unfavorable by respondents: and by 59.1% the indicator was open to new things.

Development of 21st Century Skills - 4 C (Communication, Collaboration, Critical Thinking, Creative and Innovation)

Table 2. Results of the 21st – 4C Century skills development analysis (Communication, Collaboration, Critical Thinking, Creative and Innovation)

Amagt	Indicator	Condi	ition (%)		
Aspect	indicator	ТВ	KB	В	SB
	Students are able to understand, manage, and create forms and contents by:	e effecti	ve comm	ınication	in various
Communications	Oral	0	0	27.5	72.5
(communication)	Writing	0	0	32.5	67.5
	Digital	0	0	45	55
	Able to work in groups and leadership;	0	0	32.5	67.5
Collaboration (collaboration)	Respect for different perspectives in the environment;	0	0	42.5	57.5
	Able to adapt in various roles and responsibilities;	0	0	35	65
	Work productively with others;	0	0	32.5	67.5
	Placing empathy (caring/concern) in its place;	0	0	42.5	57.5
	Menjalfoster personal responsibility and flexibility in personal, workplace, and community relations;	0	0	35	65
	Seek to provide sound reasoning in understanding and making complex choices;	0	0	37.5	62.5
Critical thinking and problem solving	Have the ability to compile and express, analyze, and solve problems;	0	0	35	65
(critical thinking and problem solving)	Using the abilities they have to try to solve the problems they face independently;	0	0	42.5	57.5
	Understand the interconnection between systems (interconnection between several fields/sections);	0	0	37.5	62.5
Creativity and innovation	Students have the ability to develop, implement, and convey ideasru to another;	0	0	35	65
(creativity and innovation)	Be open and responsive to new and different perspectives.	0	0	42.5	57.5

Based on the results of an analysis of the development of 21st Century – 4C (Communication, Collaboration, Critical Thinking, Creative and Innovation) skills that are integrated with learning

activities in Vocational High Schools, it can be seen that 21st century learning indicators are developing well. In table 2 above, it can be described that the communication aspect which has oral, written, digital indicators is developing very well, namely 65%. This is in accordance with the statements of communication researchers, who prove that until now language (oral, written and digital media) is recognized as the most effective medium for communicating in an interaction between individuals such as counseling and coaching activities, teaching and learning processes, workplace meetings. and others(Muhtadi, 2012).

Furthermore, an average of 63.3% of respondents stated that the collaboration aspect developed very well in the learning activities carried out. This is in accordance with several studies which prove that students will learn better if they are actively involved in the learning process in small groups. Students who work in small groups tend to learn more about teaching material and remember it longer than if the teaching material is presented in other forms, for example in lecture form, regardless of the teaching material (Warsono dan Hariyanto, 2012: 66-67).

Meanwhile, an average of 61.9% of respondents stated very good progress in aspects of critical thinking and problem solving. Critical thinking is a directed and clear process used in mental activities such as solving problems, making decisions, persuading, analyzing assumptions and conducting scientific research. Critical thinking is the ability to argue in an organized way. Critical thinking is the ability to systematically evaluate the weight of personal opinions and the opinions of others(Elaine B. Johnson, 2009:182). Fahruddin Faiz, (2012: 2) suggests that the purpose of simple critical thinking is to guarantee, as far as possible, that our thoughts are valid and correct. With the ability to think critically students will be able to solve the problems they face. One cannot study well without thinking well. Critical thinking is related to career success, but also to success in higher education.

In the aspects of creativity and innovation, an average of 61.25% of respondents stated that the conditions for the development of these aspects were very good in learning activities at SMK. According to Yeni Rachmawati and Euis Kurniati (2010: 30-31) children's creativity can develop properly when supported by several factors such as the following: 1) provide good mental stimulation. Stimulation is given to the cognitive and personality aspects as well as the psychological atmosphere of the child; 2) create a conducive environment. A conducive environment needs to be created to make it easier for children to access whatever they see, hold, hear, and play with to

develop their creativity. 3) the role of the teacher in developing creativity. Creative teachers will provide proper stimulation to children so that their students become creative. 4) parental participation.

Based on the results of observations made, that SMK has several weaknesses in learning soft skills which include: 1) Learning is still limited to increasing knowledge and skills (hard skills), 2) Teachers, in the personal aspect not all of them can be a good example (role models) for students, 3) Learning strategies have not integrated learning models that can improve students' soft skills competence, 4) Unequal application of Du/In culture in the learning process, 5) Lack of Du/Di support in the soft skills development of SMK students and 6) Less optimal role of Guidance and Counseling in the development of soft skills and student character.

Weak management of soft skills learning can result in a lack of a sense of responsibility, cooperation, independence, honesty, ability to communicate and adapt. The development of soft skills learning models is a necessity in creating reliable graduates, the development of student soft skills competencies that are integrated into learning needs to be supported by the use of student soft skills learning models, the development of assessment strategies and the application of industrial culture in schools. In addition to increasing soft skills competence through learning strategies, it is also supported by non-academic coaching, namely through extracurricular activities that can improve students' soft skills competencies.

Teaching and learning activities at the Vocational High School, which is the place of research, have attempted to integrate soft skills into learning. Teachers strive to provide and develop soft skills values in every teaching and learning activity and continue to strive to keep abreast of existing developments. Even though it is felt that it is not optimal because the environment has a greater influence, the teachers are trying to continue to be better and assist students in applying the values of soft skills in everyday life. The aim is to provide provisions for students when they enter the world of work and social life so that students are not only smart but also have good skills and character.

B. SWOT analysis Improvement strategysoft skills

Data analysis activities from the results of research on strategies for improving the soft skills of

vocational students based on career-oriented skills in the 21st century are carried out through Focus Group Discussions (FGD). The FGD was carried out together with: (1) school principals, (2) vice principals for curriculum, student affairs, public relations, quality management and (3) teachers who are competent in industrial culture. FGDs were conducted to identify strengths, weaknesses, opportunities and threats.

The results of the discussions and interviews in this study then the researchers used SWOT analysis on the components of student soft skills learning: (A) Learning objectives, (B) Basic student behavior, (C) Learning Materials, (D) 21st Century skill-oriented career-based learning strategies, (E) Learning media and resources and (F) Learning evaluation. Then get

the strengths and weaknesses (IFAS) and opportunities and threats (EFAS).

1) Learning objectives

The results of the SWOT analysis of the learning objectives are in the SO development strategy (3.4; 2.9), the development strategies used are: (1) Soft skills competence is implemented in all subjects, this strategy aims to bring togetherness in realizing soft skills learning on all subjects. (2) Character development, soft skills and Du/Di culture can be applied to all study programs of expertise, which means that character culture, soft skills and Du/Di culture are school programs and it is expected that all students understand the importance of character, soft skills and culture Du/In in preparing vocational graduates for the world of business and industry. This can be seen in detail in table 3.

Table 3. Description of the results of the SWOT analysis on learning objectives

1			-					
SWOT elements	В	S	TS		SWOT elements	В	S	TS
Strength					Opportunity			
Implementing K13 Revision 2017	0.1	2	0.2		Training for teachers in curriculum development	0.1	2	0.2
Synchronize curriculum with Du/Di	0.3	4	1,2		Instructors teach at SMK	0.3	4	1,2
Active student learning in character development	0.2	2	0.4		Internship that implements Du/Di culture	0.3	3	0.9
Preparing competent graduates as a form of forming national character	0.4	4	1,6	efas	Du/Di's real support in implementing industrial work patterns and culture in Vocational Schools	0.3	2	0.6
Total Score	1	12	3,4	Ψ	Total Score	1	11	2,9
Weakness					Threat			
Learning is still oriented to hard skills	0.3	2	0.6		Learning objectives only form technical competence	0.3	2	0.6
Integration of soft skills in learning is still minimal	0.4	3	1,2		The majority of Vocational Schools have implemented the Du/Di culture	0.4	2	0.8
The implementation of Du/In culture in learning is still lacking	0.3	2	0.6		Not all Du/Di cultures are suitable for learning	0.3	3	0.9
Total Score	1	7	2,4		Total Score	1	7	2,3
IFAS					efas			
Category	Sul	b-Total			Category	S	ub-To	tal
Strength (S)		3,4			Chance (O)		2,9	
Weakness (W)	2,4				Threat (T)	2,3		
Total SW	5,8				TO total	5,2		
	Strength Implementing K13 Revision 2017 Synchronize curriculum with Du/Di Active student learning in character development Preparing competent graduates as a form of forming national character Total Score Weakness Learning is still oriented to hard skills Integration of soft skills in learning is still minimal The implementation of Du/In culture in learning is still lacking Total Score IFAS Category Strength (S) Weakness (W)	Strength Implementing K13 Revision 2017 0.1 Synchronize curriculum with Du/Di 0.3 Active student learning in character development Preparing competent graduates as a form of forming national character Total Score 1 Weakness Learning is still oriented to hard skills Integration of soft skills in learning is still minimal The implementation of Du/In culture in learning is still lacking Total Score 1 IFAS Category Sul Strength (S) Weakness (W)	Strength Implementing K13 Revision 2017 0.1 2 Synchronize curriculum with Du/Di 0.3 4 Active student learning in character development Preparing competent graduates as a form of forming national character Total Score 1 12 Weakness Learning is still oriented to hard skills Integration of soft skills in learning is still minimal The implementation of Du/In culture in learning is still lacking Total Score 1 7 IFAS Category Sub-Total Strength (S) 3,4 Weakness (W) 2,4	Strength Implementing K13 Revision 2017 0.1 2 0.2 Synchronize curriculum with Du/Di 0.3 4 1,2 Active student learning in character development Preparing competent graduates as a form of forming national character Total Score 1 12 3,4 Weakness Learning is still oriented to hard skills Integration of soft skills in learning is still minimal The implementation of Du/In culture in learning is still lacking Total Score 1 7 2,4 IFAS Category Sub-Total Strength (S) 3,4 Weakness (W) 2,4	Strength Implementing K13 Revision 2017 0.1 2 0.2 Synchronize curriculum with Du/Di 0.3 4 1,2 Active student learning in character development Preparing competent graduates as a form of forming national character Total Score 1 12 3,4 Weakness Learning is still oriented to hard skills Integration of soft skills in learning is still minimal The implementation of Du/In culture in learning is still lacking Total Score 1 7 2,4 IFAS Category Sub-Total Strength (S) 3,4 Weakness U.3 2 0.6	Strength Implementing K13 Revision 2017 0.1 2 0.2 Synchronize curriculum with Du/Di 0.3 4 1,2 Active student learning in character development Preparing competent graduates as a form of forming national character Total Score 1 12 3,4 Learning is still oriented to hard skills Integration of soft skills in learning is still minimal The implementation of Du/In culture in learning is still lacking Total Score 1 7 2,4 Total Score 1 7 7 2,4 To	Strength Opportunity Training for teachers in curriculum development O.1	Strength

2) Basic student behavior

The results of the SWOT analysis of students' basic behavior are in the SO development strategy (3.4; 4.0), the development strategies used are: (1) Making the teacher a role model for students, namely the teacher must be able to be an example or role model for students both from discipline and in behaving in front of students. (2) The teacher integrates character development, soft skills and culture Du/In learning, the teacher not only conveys subject matter but can also apply industrial culture so

that students' understanding of industrial culture is not only obtained in industry but also there is habituation of industrial culture at school. (3) Joint commitment between schools and parents of students in the development of soft skills. Soft skills are not only taught in lessons but need habituation, the development of soft skills is not only the responsibility of the teacher but also the responsibility of the students' parents because an important role in the development of soft skills is in the family. This can be seen in detail in table 4.

Table 4. Description of the results of the SWOT analysis on the basic behavior of students

	SWOT elements	В	S	TS		SWOT elements	В	S	TS	
•	Strength				_	Opportunity				
•	Attitude as an indicator of the				_					
	level increase or graduation assessment of SMK students	0.4	4	1,6		Public trust in SMK	0.5	4	2	
	Potential good student attitude	0.2	3	0.6	_					
	Student character development through extracurricular activities	0.2	3	0.6	-					
	Academic potential tests and aptitude tests are references for selection of vocational students	0.2	3	0.6	-	Du/Di's trust in SMK graduates	0.5	4	2	
•	Total Score	1	13	3,4	-	Total Score	1	8	4	
-	Weakness				-	Threat				
,	Students do not understand				-	The habituation of soft				
	Du/Di culture and the concept of soft skills	0.2	2	0.4		skills in the family is still minimal	0.3	3	0.9	
•	Teachers are not optimal in being an example for students	0.4	3	1,2	-	The discipline of SMK students is still low	0.3	2	0.6	
•	Not all teachers understand				=	Student awareness in				
	Du/Di culture and the	0.4	3	1,2		implementing Du/Di	0.4	2	0.8	
SY	concept of Soft Skills				- 10	culture is still low				
IFAS	Total Score	1	8	2,8	efas	Total Score	1	7	2,3	
IFAS					efas					
Categ			Tota1		Categ		Sub-Total			
Stren	gth (S)	3,4			Chance (O)			4		
_	rness (W)	2,8			Threat (T)		2,3			
Total	SW	6,2			TO to	otal	6,3			

3) Learning materials

The results of the SWOT analysis of learning materials are in the SO development strategy (3.2; 4.0), the development strategies used are: (1) Synchronizing curriculum based on soft skills and hard skills from the Business World and the Industrial World (Du/DI), Curriculum synchronization is

intended so that there is compatibility between the competencies of SMK graduates and the needs of Du/Di, (2) The inclusion of the development of soft skills in learning. Learning soft skills can be incorporated into learning tools in order to achieve the development of student soft skills. This can be seen in detail in table 5.

Table 5. Description of the results of the SWOT analysis on learning materials

	SWOT elements	В	S	TS		SWOT elements	В	S	TS		
	Strength					Opportunity					
IFAS	Availability of learning tools	0.4	2	0.8		Du/Di support through curriculum synchronization	0.5	4	2		
	Master visits Du/Di to learn about Du/Di culture	0.6	4	2,4	efas	Dissemination of Du/Di culture to Vocational Schools by Du/Di practitioners	0.5	4	2		
	Total Score	1	6	3,2		Total Score	1	8	4		
	Weakness					Threat					
	Not all subjects have complete learning tools	0.2	2	0.4		Learning only emphasizes the achievement of hard skills	0.4	3	1,2		

Soft skillsnot yet integrated with learning tools	. U.4 3 1,2 The Du/Di culture has not been								
Teachers have not optimally emphasized the importance of industrial culture	0.4	2	0.8	integrated into learning	0.6	2	1,2		
Total Score	1	7	2,4	Total Score	1	5	2,4		
IFAS				efas					
Category	S	Sub-Tota	al	Category Sub-T			al		
Strength (S)	Strength (S) 3,2			Chance (O)	4				
Weakness (W)	Weakness (W) 2,4			Threat (T)	Threat (T)				
Total SW	5,6			TO total		6,4			

4) Career-based learning strategies oriented to 21st Century skills

The results of the SWOT analysis of learning strategies are in SO development strategies (3.7; 3.6), the development strategies used are: (1) Soft skills learning development models, the intended learning models are teaching strategies that can grow or improve soft skills competence of students. (2) The

habituation of industrial culture in schools aims to strengthen students' thinking patterns in applying industrial culture habituation which can be started from school. (3) Teacher motivation to the rest, which means the teacher can provide motivation in developing students' soft skills. This can be seen in detail in table 6.

Table 6. Description of the results of the SWOT analysis on career-based learning strategies 21st century skills orientation

	SWOT elements	В	S	TS		SWOT elements	В	S	TS
	Strength					Opportunity			
	There is a guide document for the implementation of 21st century skill-oriented learning Training for teachers in developing	0.4	4	1,6		There are instructors, teachers and practitioners in shaping students' soft skills	0.4	3	1,2
	learning methods	0.5	4	1,2					
	Implementing Du/Di Culture	0.3	3	0.9		There is active collaboration between SMK and Du.Di in implementing the Du/Di culture	0.6	4	2,4
IFAS	Total Score	1	11	3,7	efas	Total Score	1	7	3,6
=	Weakness				a)	Threat			
	Not all teachers understand Du/Di culture and the concept of Soft Skills	0.3	2	0.6		Orientation on the achievement of students' hard skills	0.3	3	0.9
	Teachers have not integrated soft skills in learning	0.4	3	1,2	•	The Du/Di culture has not yet taken root	0.3	3	0.9
	Teachers have not actively provided guidance to students regarding the importance of soft skills	0.3	3	0.9		There is a big difference between school culture and Du/Di culture	0.4	3	1,2
	Total Score	1	8	2,7	•	Total Score	1	9	3
	IFAS					efas			
	Category Sub-Total					Category	S	ub-Tot	al
	Strength (S)		3,7			Chance (O)		3,6	
	Weakness (W)		2,7			Threat (T)		3	
	Total SW		6,4			TO total		6,6	

5) Media and learning resources

The results of the SWOT analysis of media and learning resources are in the SO development strategy (4.3; 3.6). industrial culture is the responsibility of all teachers. (2) The establishment of cooperation between schools and the business world and the

industrial world in the development of industrial culture, the purpose of this activity is to increase the application of industrial culture in schools in accordance with the development of industrial culture that exists in the business world as well as the industrial world. This can be seen in detail in table 7.

Table 7. Description of the results of the SWOT analysis on Media and Learning Resources

	SWOT elements	В	S	TS		SWOT elements	В	S	TS
	Strength					Opportunity			
	Learning Facilities and Infrastructure according to Du/Di	0.5	4	1,6		Assistance and facilitation from the government in developing soft skills and Du/Di culture in Vocational High Schools	0.4	4	1,6
	There are learning media that are in accordance with Du/Di culture	0.5	3	1.5		Active collaboration between SMK and Du/Di in SMK strategic programs	0.4	4	1,6
	Student character development through extracurricular activities	0.2	3	0.6		Availability of media and tools			
IFAS	Academic potential tests and aptitude tests are references for selection of vocational students	0.2	3	0.6	efas	to support the improvement of soft skills for SMK students	0.2	2	0.4
=	Total Score	1,4	13	4,3	a	Total Score	1	10	3,6
	Weakness					Threat			
	Teachers have not optimally motivated students in efforts to improve soft skills	0.4	4	1,6		Limited assistance and facilitation from the government in developing soft skills and Du/Di culture in Vocational High Schools	0.5	3	1.5
	Teachers lack commitment in developing the soft skills of SMK students	0.3	2	0.6		Students have not yet implemented the soft skills and	0.5	2	1
	Appeal in the form of posters or other media is not optimal	0.3	2	0.6		Du/Di culture at school			
	Total Score	1	8	2,8		Total Score	1	5	2,5
	IFAS					efas			
	Category	Ç	Sub-Tota	al		Category	S	ub-Tota	al
	Strength (S)		4,3			Chance (O)		3,6	
	Weakness (W)		2,8			Threat (T)		2,5	
	Total SW		7,1			TO total		6,1	

6) Learning evaluation

The results of the SWOT analysis of learning evaluation are in the SO development strategy (4.1; 3.2), the development strategies used are: (1) It is necessary to assess students' character and soft skills

that are integrated with all learning activities, (2) There is a need for observation and evaluation of student character development and soft skills with appropriate assessment instruments. This can be seen in detail in table 8.

Table 8. Description of the results of the SWOT analysis on learning evaluation

	SWOT elements	В	S	TS		SWOT elements	В	S	TS
	Strength					Opportunity			<u>.</u>
	Availability of instructions for assessment and evaluation of learning	0.3	4	1,6		There is training for teachers for an ongoing evaluation process	0.6	4	2,4
	Learning evaluation is fully managed by the teacher	0.3	3	0.9		SMK has an active partnership	0.4	2	
IFAS	There is an assessment of soft skills and student character in all subjects	0.4	4	1,6	efas	with LSP			0.8
	Total Score	1	11	4,1		Total Score	1	6	3,2
	Weakness					Threat			
	The character assessment instruments and soft skills of SMK students are not yet available	0.4	3	1,2		The development of students' character and soft skills is not properly observed and evaluated	0.2	3	0.6

 Weakness (W) Total SW		2,4 6,5		Threat (T) TO total	2,2 5,4					
 Strength (S)		4,1		Chance (O)	3,2					
 Category	5	Sub-Tota	al	Category	Sub-Total					
IFAS				efas						
 Total Score	1	7	2,4	Total Score	1	7	2,2			
There is no team of assessors and character developers and student soft skills yet	0.2	2	0.4	There is no special program from the school in evaluating the character development and soft skills of students	0.4	2	0.8			
There are no standards for assessing the character and soft skills of SMK students				There is no ongoing evaluation of the character and soft skills of SMK students	0.4	2	0.8			

C. Discussion

Strategy is a conscious effort to prepare students to become whole human beings who have noble character in all their roles now and in the future and efforts to form, develop, increase, maintain and improve the behavior of students so that they are willing and able to carry out their life tasks in harmony, harmony, balanced (physically and spiritually, spiritual material and social individual). Then form students into whole individuals who have noble character through guidance, habituation, teaching, and training, as well as exemplary activities.

There are six main strategies to improve the hard skills and soft skills of vocational students, namely: a) integrating soft skills competencies in learning, b) empowering teachers, both normative, adaptive and productive teachers, c) optimizing student intra and extra-curricular activities, d) optimizing link and match with Du/Di, e) Optimizing the role of school guidance and counseling and f) mentoring student character development. The description of the six strategies can be explained as follows:

a) Integrating soft skills competencies in learning

Efforts to improve the soft skills of SMK students must be integrated into classroom learning. The learning process carried out must fulfill three domains/areas, namely the cognitive, affective, and psychomotor domains. Because actually learning is a relatively fixed process of changing behavior (ability, that attitude, and behavior) exists in person/organism a result experience/training. So far, the domain that has been most sought after is the cognitive domain, so that higher hard skills are obtained compared to the results of the affective and psychomotor domains.

Graduate competency standards at the higher education level aim to prepare SMK students to become members of society who have noble character, have the knowledge, skills, independence, and attitudes to discover, develop, and apply science, technology, and art, which are beneficial to humanity. However, the reality obtained by human resources, especially the quality of SMK students, is still not optimal. This is due to several factors, including many SMK students equipped with knowledge but little practice, inadequate facilities and infrastructure, declining quality of non-academic activities, lack of character education for SMK students which causes many crimes, moral decline, drugs, brawls, robbery, promiscuity. To minimize these negative impacts,

b) Empowering teachers, both normative, adaptive and productive teachers

In general, teachers have implemented a strategy of integrating soft skills in learning starting with prior planning, namely through a learning process plan (RPP). Teaching and learning activities are carried out in accordance with the demands of the RPP that has been prepared, which contains the values of soft skills, especially character education, in the RPP. The strategy that is widely used by teachers in teaching and learning activities is cooperative learning which is applied through lectures, discussions, demonstrations, as well as being a model (role mode).

The strategy of becoming a model or role model in integrating soft skills in learning, according to the opinion of Illah Saillah (2008: 37), namely "the development of soft skills is only effective if it is carried out by way of transmission, one of which is by way of a role model". The role model is the teacher as the main role in learning because students will imitate what the teacher does. In addition to role models, practical learning can also be used as an

appropriate learning method because it will provide skills to students. This strategy is in accordance with the opinion of Made Wena (2010: 100), namely the motor learning strategy, "practical learning strategies are more emphasized in motor learning so that students will be able to master work skills optimally".

c) Optimization of student intra and extra curricular activities

Intracurricular activities aim to grow students' academic abilities. Co-curricular activities are intended to better understand the teaching material that has been studied in intra-curricular activities in class. Extracurricular activities help in the development of aspects such as interests, talents and personality. These three activities are activities that children participate in every day (Rusdi, 2010). Extracurricular activities which are often also called extracurricular activities are intended so that students can develop their personality, talents and abilities in various fields outside of academics. This activity exists at every level of education from elementary school to university (Susanti, 2012). Both of these activities need to be optimized in developing the character of SMK students, especially strengthening soft skills.

d) Optimization of link and match with Du/Di

The world of work complains a lot about the quality of the soft skills of university graduates. Indeed, the academic abilities (hard skills) of SMK students are good, but it turns out that the soft skills have not been maximized. Many graduates are not ready to work because of a lack of soft skills. There is a tendency that what is given in tertiary institutions is not fully in line with the needs of the job market. Most of the lecture material is in the form of hard skills. Even though evidence shows that 85% of a person's success is determined by soft skills. Therefore, universities in an effort to increase their graduates need to collaborate/collaborate with work partners.

This collaboration/collaboration needs to be woven from the preparation of the curriculum, so that there is a link and match between graduate producers and users. The existence of an internship program or industrial practice (prakerin) is intended so that vocational students can know the real world of work. The benefits obtained from this activity are the direct experience experienced by SMK students, so that it is expected to improve self-quality in accordance with

established graduate standards and also increase the soft skills of SMK students.

e) Optimizing the role of school guidance and counseling

Before understanding the role of guidance and counseling in schools, it is necessary to understand the basic understanding of guidance and counseling separately. Bernard and Fullmer (in Salahudin, 2010) say that guidance is an activity that aims to increase each individual's personal realization. This means that guidance helps a person in the process to fully actualize himself. In addition, Mathewson (in Salahudin, 2010) says that guidance is education and development that emphasizes a systematic learning process.

According to Surya (in Saam, 2013) said that counseling emphasizes the formation of self-concept and self-confidence in order to improve behavior. Saam (2013) adds that counseling is a process of assistance given to clients in the form of a therapeutic relationship between counselor and client so that clients can increase self-confidence and adjustment, or behave in a new way so as to gain happiness.

Based on this description, it can be emphasized that the role of counseling in the formation of student character is very strategic. Counseling guidance can work together with the school's career development center, in increasing the potential of students' soft skills, before they graduate and work in Du/Di.

f) Student character development assistance

Seeing current and future conditions, the availability of human resources with character is a very vital requirement. This is done to prepare for global challenges and the nation's competitiveness. It is not easy to produce human resources as stated in the National Education System Law. The problem is that until now Indonesian human resources still do not reflect the expected educational ideals. For example, for actual cases, there are still many students who cheat when they are facing exams, act lazy, fight among fellow students, engage in promiscuity, get involved in drugs, and so on. On the other hand, there are teachers, educators who always give bad examples to their students. For example, teachers often commit fraud in certification and in the national exam (UN).

This condition is frankly very heartbreaking and worrying for the children of the Indonesian nation. Indeed, this problem cannot be generalized, but at least this is a fact that must not be ignored because we do not want our nation's children to become immoral human beings, as we often see TV shows showing news such as theft, robbery, rape, corruption, and kidnapping, which is perpetrated not only by adults, but also by children in their teens.

In fact, most teachers have not been able to optimally assist the integration of character education in classroom learning. There are still many teachers who only focus on achieving students' cognitive competence, and ignore the importance of affective and psychomotor competence. Apart from the self-awareness of students, the active role of the teacher in bridging students to understand and implement positive values in daily activities is very important (Pradina & Faiz, 2021), so that the hope of creating a driving teacher who is able to become a facilitator in learning needs to be supported by strengthening teacher competence in managing learning in the classroom.

Mentoring activities are divided into several stages, namely: 1) planning activities: requesting permission from the Education Office and making observations; 2) organizing: coordinating with the Head of K3S, and related parties regarding the technical implementation of assistance, determining the time, place, speakers and activity participants; 3) prepare administrative and technical implementation of activities: partner letters, accommodation, consumption, materials and tools to support mentoring activities; 4) implementation of mentoring activities and documentation of activities; and 5) activity evaluation.

CONCLUSIONS AND RECOMMENDATIONS Conclusion

- 1. factual conditionsSMK has weaknesses in learning soft skills which include: 1) Learning is still limited to increasing knowledge and skills (hard skills), 2) Teachers, in the personal aspect not all of them can be a good example (role model) for students, 3) Learning strategies have not integrated learning models that can improve students' soft skills competence, 4) Unequal application of Du/Di culture in the learning process, 5) Lack of Du/Di support in the soft skills development of SMK students and 6) Less optimal role of Guidance and Counseling in the development of soft skills and student character.
- Based on the SWOT analysis conducted, obtainedproduce a strategic priority order value, namely Strength-Opportunity (SO: 3.53);

Strength-Threat (ST: 3.03); Weakness-Opportunity (WO: 3.07); and Weakness-Threat (WT: 2.56). These results mean thatimproving the soft skills of vocational students based on career-oriented learning in the 21st century, can optimize the Strength – Opportunity (SO) strategy in all aspects, namely: 1) learning objectives, 2) basic student behavior, 3) learning materials, 4) career-oriented learning strategies 21st century skills, 5) learning media and resources and 6) learning evaluation.

Suggestion

- In the context of learning activities in SMK, schools need to plan concrete steps in character development, soft skills, and habituation of the Du/Di culture in each existing teaching and learning program;
- There needs to be a special team that develops and evaluates the character and soft skills of students, outside of the guidance and counseling section;
- 3. Teachers need to be given training on character development and student soft skills;
- 4. There is a need for further research regarding character development and student soft skills, in order to encourage the quality of SMK graduates.

BIBLIOGRAPHY

- Asep Saeful Muhtadi (2012). Komunikasi Dakwah: Teori, Pendekatan, dan Aplikasi. Bandung: Simbiosa Rekatama Media
- Eko Supraptono. 2015. Soft skills Competence Development Of Vocational Teacher Candidates. *Journal Study Education* (JPP)
 - https://journal.unnes.ac.id/nju/index.php/J PP/article/view/5703
- Flynn, Matthew C., Pillay, Hitendra, & Watters, Jim. 2016. Industry–school partnerships: boundary crossing to enable school to work transitions. *Journal of Education and Work*. Volume 29, issue 3. Pages 309-331.
- Hey, Hilde. 2017. Ensuring Curriculum Relevance in Vocational Education and Training: Epistemological Perspectives in a Curriculum Research Project. International Journal for Research in Vocational Education and Training (IJRVET) Vol. 4, Issue 1, April 2017, 1-19
- Jackson, Denise, & Wilton. 2016. Career choice status among undergraduates and the influence of

- career management competencies and perceived employability. *Journal of Education and Work*. Vol. 28, issue 4. Pgs 219-230.
- Johnson, Elaine B. 2009. *Contextual teaching and learning*: menjadikan kegiatan belajar mengajar mengasyikkan dan bermakna. Bandung: Mizan Learning Center
- Kraebber, Sharon L, and Greean, James P. 2012. The Relationship between Self-Concept and Selft-Ratings of Generalizable Skills of Studnets in Postsecondary Career and Technical Programs. *Journal of Career and Technical Education*. Volume 27, No. 1. Pages 22-39.
- Laine, Kati, and Hamlainen, Raija. 2015.

 Collaborative business planning in initial vocational education and training. *Journal of Vocational Education & Training*. Volume 67 Issue 4. Pages 497-514.
- Lauster, Peter. 2002. Tes Kepribadian. Jakarta: Bumi Aksara
- Maritz, Alex, and Borwn, Chris. 2013. Enhancing entrepreneurial self-efficacy through vocational entrepreneurship education programmes. *Journal of Vocational Education & Training*. Volume 62 Issue 4. Pages 543-559.
- Ministry of National Education. 2010. Entrepreneurship Program Development Patterns in Vocational Schools. Jakarta: Dit. Vocational School Development, Directorate

- General of Elementary and Secondary Education.
- Mndebele, Comfort BS, and Mkhweli, Dumisani. 2004. Vocational Entrepreneurships Education in a Developing Country: Self-Reported Performance of Male and Female Vocational Instructors in Swaziland. International Journal of Vocational Education and Training. Volume 14, Number 1. The International Vocational Education and Training Association.
- Pillay, Hitendra; Watters, Jamnes J; Hoff, Lutz & Flynn, Matthew. 2014. Dimensions of effectiveness and efficiency: a case study on industry–school partnerships. *Journal of Vocational Education & Training*. Volumes 66, 2014 -Issue 4.Pages 537-553.
- Samsudi. 2009. Readiness of Stakeholders in the Implementation of SMK Development Policy Towards 2015. Senior Lecturer Research Report. LP2M Unnes.
- Samsudi. 2014. Development of Learning Models for Vocational High School Productive Programs to Form the Entrepreneurial Character of Graduates. *Journal of Educational Horizon* LPPMP Yogyakarta State University; Th. XXXIII No. 2.
- Warsono dan Hariyanto. 2012. Pembelajaran Aktif Teori dan Asesmen. Bandung : PT. Remaja Rosdakarya.