

Transferable Skills Needed in the Workplace

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Abstract: Transferable skills as the core skill that must be acquired by employees to support their career. This study aims to examine how much transferable skills are required in the industrial world through a cross-sectional descriptive study. We conducted a limited survey on the transferable skills needed by the industry. The samples are industries that incorporate local, national, and international industries in the fields of technology, transport, manufacturing, automotive, and electronics using a purposive sample technique. The data collected by a questionnaire using the Guttman scale. The results of the study show that the transferable skills needed by the industry according to company managers include continuous learning skills (84%), collaborative skills (81%), communication skills (81%), critical thinking skills in solving problems, finding solutions (79%), and creativity (78%). It is strongly suggested that educational institutions prepare their graduates to be qualified to join the workplace with the desired transferable skills in the industrial world.

Keywords: competency, transferable skills, vocational education.

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1. Introduction

The unemployment rate as of February 2020 was 6.88 million people, and this number has increased by 3.7 million people due to the COVID-19 case in 2020 (Zuhairah and Rosadi, 2020). With this addition, the number of unemployed in Indonesia will be around 10.58 million people. Indonesia reached 10 million unemployed people in 2007 with the Open Unemployment Rate (OUR) at 9.1%. The number was substantially higher than 2019 OUR which was at 5.28%. Therefore, a rise in unemployment has occurred. Based on the education level, results show that graduates from vocational school are in the first place with 8,63% unemployed graduates, followed by diploma graduates at 6,89%; senior high school graduates at 6,78%; undergraduate graduates at 6,24%; junior high school graduates at 5,04% respectively and the last is the elementary graduates at 2,65%. The data shows that vocational school graduates are still the number one contributor with the largest percentage of unemployment in Indonesia compared to graduates from other educational institutions (Al-Najar and El Hamarneh, 2019). This situation has been a highlight, which demonstrates that vocational schools still have a lot of homework to do, one of which is to solve problems related to graduates.

The problems encounter by vocational schools demonstrate that there is no linear relationship between the fact and the educational objectives of vocational school. Vocational education is secondary education that empowers

students to become qualified and independent in certain sectors, and vocational schools are also required to be able to generate quality and skills of the graduates to be in line with the needs of the industrial world.

The problem of disparities in science and technology above is not the main issue, but there are other obstacles, including the problem of competency that students have as a future workforce. The industrial world requires employees to produce high-quality products through decent performance. This level of competence is essential in terms of what workers in the industry must and are capable of doing, including aspects of skills, knowledge, and attitudes that are adapted to the industrial world (Ana, 2020).

The industrial world needs competent human resources to produce quality and competitive products. This is what causes the industry to be discerning in hiring workers to perfectly match their expertise, including a competent workforce in the hard skills aspect and the transferable skills aspect. The statement indicates that the most important competence of the workforce is not only that it possesses the knowledge and technical skills, but it also must be integrated with the capacity of transferable skills.

Transferable skills have an important value in the development of the industrial world. Transferable skills are one of the essential points to be acknowledged in the workplace. This indicates that learners who are graduates of vocational education must be able, indirectly, to acquire the transferable skills aspect due to job demands and work challenges in today's industrial world. The transferable skills currently required include language/communication skills, attitude skills, or the ability to act among workers while working in the industry, responsibility, discipline, honesty, loyalty, cooperation, politeness and integrity, understanding number one product quality, and persistence. Transferable skills described from Lotzar's opinion include initiative; ethics/integrity; critical thinking; willingness to learn; high commitment; high motivation, enthusiastic; reliable; communication skills; creative; analytical skills; can handle stress; self-management; ability to solve problems; can summarize; correlate/collaborate; flexible; able to work in teams; independent; listening skills; tough; argued logically, and capable of time management.

Transferable skills have a major role to play in vocational education because it includes many aspects of the work nature that are required as a valuable addition to the skills that must be acquired by students. From this point of view, however, new issues arise, namely that the teacher has not shown an optimum performance in the learning process concerning the implementation of transferable skills, such as

fostering a sense of responsibility and discipline, starting with self-preparation, work preparation, production processes, and packaging.

Vocational education, in particular vocational school, is capable of providing a larger portion of productive learning to improve the hard skills of students to meet the needs of the industry. Productive learning, in addition to teaching students to acquire skills for hard skills, should be able to teach transferable skills as a companion to the skills learned, since transferable skills are an integral part of a person's job.

Transferable skills learning will shape students into a workforce with decent quality competencies and in line with the needs of the industry to face competition. Establishing vocational school students into human capital with decent transferable skills learning is indeed challenging. It requires a learning process that supports adaptively, normatively, and productively.

Productive learning in the classroom and the workshop will stimulate the increase in hard skills and transferable skills of students. Hard skills are established through students' competencies in the process of expertise-based skills, while transferable skills manifested in the skills and self-management skills to be more developed and more competent.

Research on hard skills and soft skills has often been carried out to find solutions to problems in vocational education. However, from the results of the study that have been conducted, the researchers raise the problem of hard skills and soft skills specifically regarding transferable skills that must be possessed by graduates of vocational education students. The development of transferable skills learning is expected to be able to identify students' skills during the learning process. Developing high-quality students with hard skills and transferable skills can be obtained from the collaboration from the effective learning process, the ability of teachers, educational institutions, and industries, in the learning process through transferable learning skills for students.

2. Method

This research is a descriptive study with a cross-sectional approach. The survey is conducted on industries in Indonesia. The stages conducted in this study consisted of several stages. The first stage is the preparation of a questionnaire instrument used for data collection. The instrument used is a questionnaire. The questionnaire improvement is adjusted to transferable skills indicators

following the demands of the industrial world which consists of being creative (high motivation, always curious, having broad insight), think critically in solving problems, finding solutions, effective communication skills, collaboration. Questionnaire is scaled from 1-5 that describes most needed (5), needed (4), quite needed (3), not needed (2) and most not needed (1). The questionnaire is a tool to get data about how important transferable skills needed from the perspective of industries. The research sample is industries in Indonesia from various sectors (Figure 1).

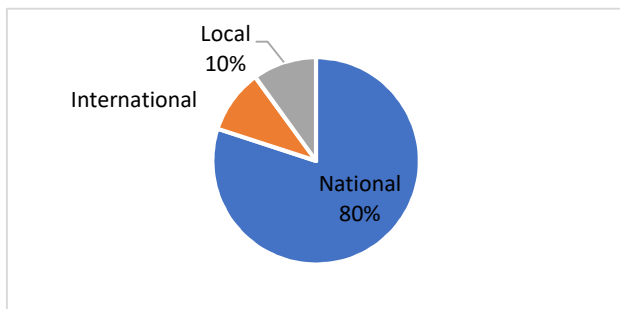


Fig. 1: Industry Distribution

The distribution of these industries shows variations from the research sample. Besides that, the industries that are sampled vary from the limited partnership (CV) to a limited company (PT). Research sample also varies from various level industries like local, national and international, and also from various industrial sectors in Indonesia. This variation in the distribution of the research sample can be seen in Table 1.

Table 1: Research Sample Distribution

No	Industry Name	Level	Location
1	PT. Labtech Penta International	International	Riau
2	PT. Siskom Media Bahasa	National	Jakarta
3	PT. Jelita Citra Solusindo	International	Tangerang
4	PT. Kojin Indonesia	National	Bekasi

No	Industry Name	Level	Location
5	PT. Mitsuba Indonesia Pipe Parts	National	Bekasi
6	FPTI	National	Padalarang
7	Farmasi	National	Jakarta
8	PT. Krisbow Indonesia	National	Jakarta
9	PT. Sato Sara Semesta	National	Tangerang
10	PT. Nissan Motor Indonesia	National	Jakarta
11	CV. Amanah Creative	Local	Yogyakarta
12	CV. Pudak Scientific	Local	Bandung
13	PT. Adhi Karya	National	Bandung

The data obtained are then processed, analyzed, and further processed with the basics of the theory that have been studied. While the analysis is carried out through a quantitative approach using relevant statistical methods and described by descriptive.

4. Results and Discussion

The concept of transversal competence has increasingly been replaced by transferable skills and is characterized as skills that can be recognized and are particularly relevant or expected in all employees as an example people's skills including communication skills, organizational skills, team motivation or team leadership, related technical skills (E. Care, R. Luo, 2016). It answered last research in Nigeria Okoye, K. R. E., & Nkanu, S. M., 2020). The competencies acquired by individuals are important to careers and employment other than those currently held (Chase, A., S. Rao, A., Lakmala, P, 2020). These competencies are obtained through non-work activities or through participating in education or training (Cindy Achat Mendes, Georgia Gwinnett College, Chantelle Anfus, Cynthia Johnson, Ben Shepler, 2020). Generally, transferable skills are competencies that have been obtained in one context or to resolve a particular situation/problem and can be transferred to another context. Figure 2 shows the results of the transferable skills needed.

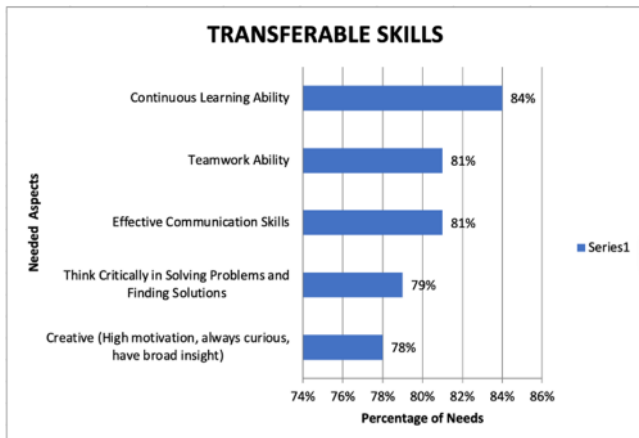


Fig. 2: Transferable skills needed by the industry

The results of this study are shown in Figure 2, which shows the most needed transferable skills by the industry is the continuous learning ability (84%). Relevant to research in Malaysia which notes that different competencies will be decent and optimal if the competencies are aligned with lifelong learning or continuous learning. Besides, teamwork and effective communication skills are both 81% indicating that the industry needs those skills. The ability to work together is considered important and necessary by the industry because, at the workplace, professionals are expected to work with people from different backgrounds (Barliana, Alhapip, Ana, Rahmawati, Muktiarni, and Dwiyantri, 2020). Indicators of critical thinking in solving problems and finding solutions are 79%, which indicates that the respondents in this study agree that critical thinking in solving problems and finding solutions are required by the industry (Liu, Yuan, Hafeez, and Yuan, 2018). In the indicators of creative competence, 78% of industry respondents state that the industries needed this competency. Related to the needs of the industry, that being creative is the expertise that the industries need to sustain the job (Haryanti, Firdaus, Lazaro, Kamis, Abas, Sallehuddin, and Yunus, 2020). More specifically, each indicator of the skills needed by the industry for transferable skills can be seen in Figure 3.

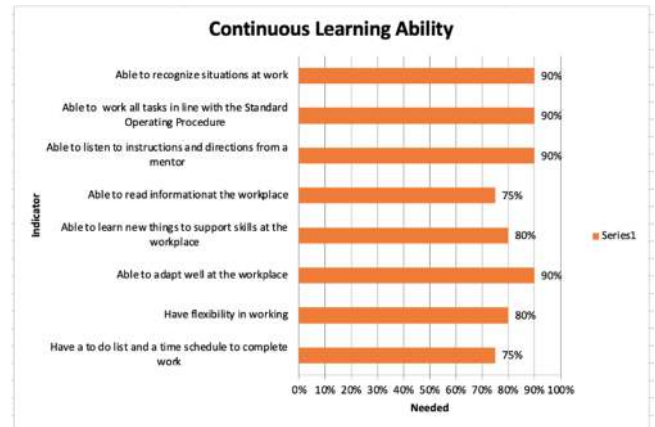


Fig. 3: Continuous learning ability needed by the industry

Continuous learning abilities include a range of indicators that must be acquired and considered necessary by the industry, including 90% for the ability to recognize the situation at work, to execute all work in compliance with Standard Operating Procedures, to listen to instructions and directions from mentors, and to adapt well at the workplace which is in line with previous research (Rocha, 2012). The indicator of being able to learn new things to support skills at the workplace and have flexibility in working are both 80%, which means the respondents stated that the industry needed those skills, and is also related to the previous research (Jones et al., 2017). Teamwork ability has five indicators, each indicator of the teamwork ability needed by the industry for transferable skills can be seen in Figure 4.

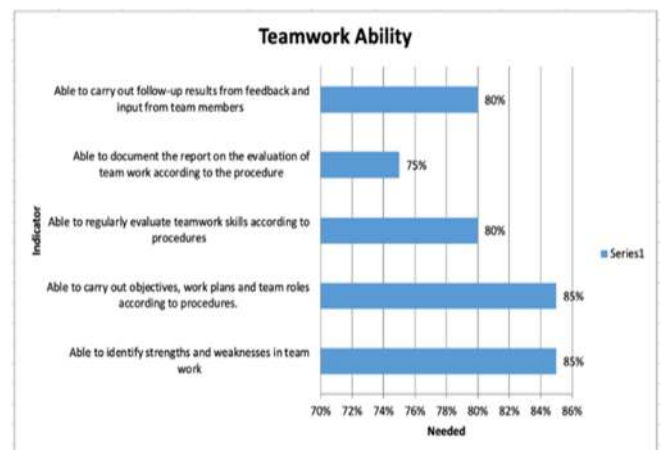


Fig. 4: Personality competencies of vocational teachers from the perspective of policymakers

The ability to carry out objectives, plans, and team roles according to procedures and also the ability to identify strengths and weaknesses in teamwork are 85% which is relevant and following previous research that every collaboration must be able to work with the team (Bag, Gupta, and Luo, 2018). As for the indicators being able to conduct follow-up results from feedback and input from team members and being able to evaluate teamwork skills regularly according to procedures are both 80%. The industry needed them and it is also relevant to the previous research (Sail and Alavi, 2010). The indicator of being able to document the report on the evaluation of teamwork according to the procedure is 75% which means the respondents stated that the skills are needed by the industry, which is relevant to previous research that found similar findings (Van Laar, van Deursen, van Dijk, and de Haan, 2020). Effective communication skills needed by the industry is shown in Figure 5.

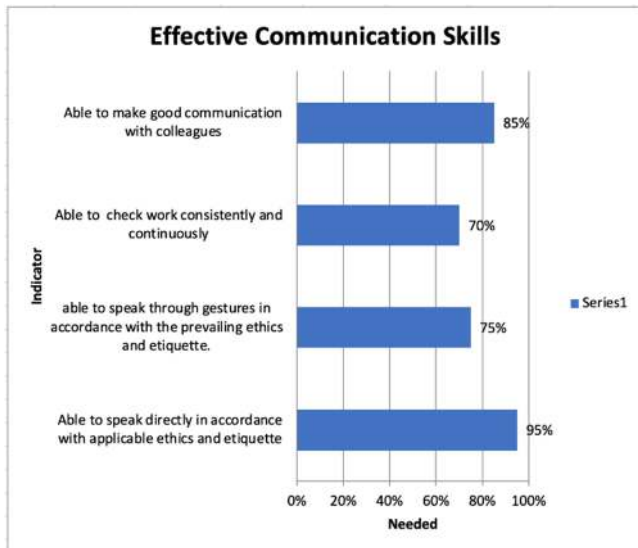


Fig. 5: Effective communication skills needed by the industry

On the indicator of being able to speak directly according to applications by the applicable ethics and etiquette, 95% of respondents stated that the industry needs it, 85% of respondents agree that being able to make good communication with colleagues is needed. 75% state that being able to speak through gestures following the prevailing ethics and etiquette is required. Also 70% agree that being able to work consistently and continuously is needed as well. These four indicators are effective communication skills needed by the industry and must be owned by workers, concerning this communication ability consisting of verbal and non-verbal communication (Sail and Alavi, 2010; van Laar, van Deursen, van Dijk, and de Haan, 2020). There are five indicators of critical thinking competencies in solving

problems and finding solutions, each indicator of the critical in solving problems and finding solutions needed by the industry can be seen in Figure 6.

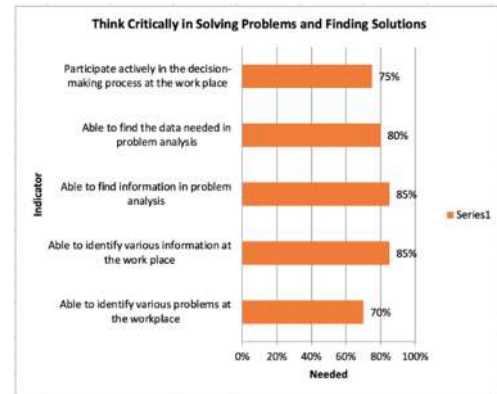
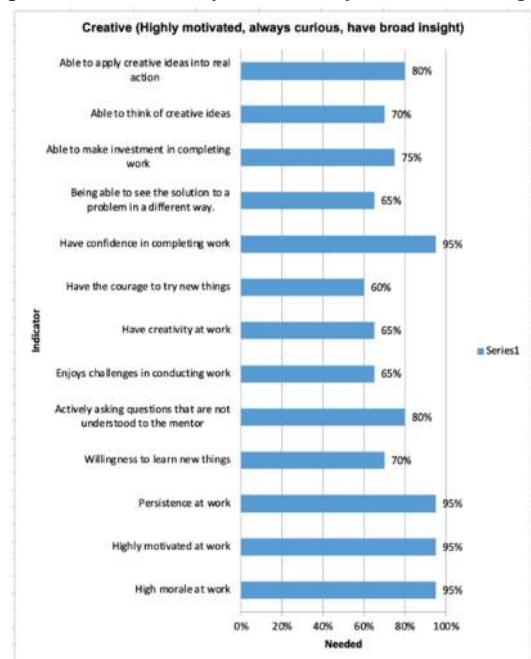


Fig. 6: Thinking critically in solving problems and finding solutions needed by the industry

There are five indicators of critical thinking competencies in solving problems and finding solutions. Indicators for being able to find information in problem analysis and being able to identify various information at the workplace are both 85%. The indicator for being able to find the data needed in problem analysis is 80%, the indicator for being able to actively participate in the decision-making process in the workplace is 75%, and the indicator of being able to identify various problems at the workplace is 70%. This critical thinking competency is very relevant, it requires industry with various demands and challenges to prepare workers according to industry needs. In creative competencies needed by the industry is shown in Figure 7.



In creative competencies with indicators of having self-confidence in completing work, being persistent at work, highly motivated, and enthusiastic for work, each indicator has 95% of respondents that state that those competencies are needed by the industry. In line with the results of this study, a relatively similar point is stated in another research (Koca, 2016).

As for the indicators of being able to apply creative ideas into real action and being active in asking questions when employees do not understand, 80% of respondents stated that the industry is needed the skills which are also relevant to another research (Thoonen, Slegers, Oort, and Peetsma, 2012). The indicator of being able to innovate has a percentage of 75%. Furthermore, for indicators being able to think of creative ideas, willingness to learn new things obtained 70% of respondents who categorized these indicators as needed by industry, in line with the willingness to continue learning is essential for workers. This creative competence is important to the needs of the industry to improve inspiration, curiosity, and insight to be able to support work. Three other indicators with a percentage of 65% of respondents categorize them as indicators needed by the industry, and 60% of respondents stated that this competency is needed by the industry which is having the courage to try new things. Based on similar research in 2019, it was found that the industry considers that creative products were discouraged because most industries already have standards for each product. This is considered as an effort to maintain the quality and quality of the product itself. Therefore, the results of research on creative indicators are still below 70%, which means that these skills are mostly not needed for a variety of indicators related to being creative and trying new things at work.

5. Conclusion

Organized competencies will be capable of supporting the work of each individual. Transferable skills may be acquired through non-work activities or participation in education or training. The five indicators are continuous learning abilities, teamwork ability, communication skills, critical thinking in problem-solving, finding solutions, and creative competency. Transferable skills are important to industrial needs and have to be well prepared by prospective employees so they can participate in the workplace to succeed and compete more effectively.

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