

# Study of the Contribution of Entrepreneurial Insights and Industrial Work Practices to Work Readiness by Student Graduates in Vocational High Schools

Khusnul Qotimah  
Universitas Negeri Surabaya  
Surabaya, Indonesia  
khusnulqotimah16070895003@mhs.unesa.ac.id

Ismet Basuki, Supari Muslim  
Universitas Negeri Surabaya  
Surabaya, Indonesia  
ismetbasuki@unesa.ac.id

**Abstract**—Vocational high schools are expected to prepare students to be productive people, able to work independently in accordance with their expertise competencies. The mission of the vocational high school is to prepare prospective skilled workers and mid-level professionals in their fields. But the reality is that not all vocational high school graduates are absorbed by the workforce well. There are vocational school graduates who work not in accordance with expertise in their fields, even some vocational high school graduates are unemployed after graduating from school. Based on the background as described above, the problem can be formulated as follows: how far is the influence of entrepreneurial insight and industrial work practices on student work readiness in vocational high school? the purpose of this study was to determine the extent of the influence of entrepreneurial insight and industrial work practices on job readiness of vocational high school graduates. Based on the literature review, the following conclusions were obtained: entrepreneurial insight and industrial work practices have a positive and significant influence on vocational readiness of vocational students. Therefore, schools need to improve entrepreneurial insight and the quality of industrial work practices to produce students with good quality vocational high school job readiness.

**Keywords**—*entrepreneurial insights, industrial work practices, work readiness.*

## I. INTRODUCTION

Government Regulation Number 29 of 1990 concerning Vocational High School article 3 Paragraph 2 confirms that "vocational secondary education prioritizes the preparation of students to enter employment and develop professional attitudes" [1]. Whereas according to the National Education System Law article 15 of the Ministry of National Education stated that "vocational education is secondary education that prepares students to work in certain fields".

Based on these objectives, the Vocational High School is expected to be able to prepare students to become productive human beings, able to work independently in accordance with their skill competencies. Missions from Vocational Schools themselves are preparing prospective workers who have the skills and professionals in their fields. Based on the vocational secondary education curriculum, the aim of the

Vocational High School is to create graduates to: (1) enter the workforce and develop professional attitudes, (2) be able to choose a career, be able to be competent and develop themselves, (3) become a mid-level workforce to fill the needs of the world business/industrial world at present and in the future, (4) being a productive, adaptive and creative workforce [2].

But the reality in the field shows that not all SMK graduates can be absorbed by employment. There are a number of vocational graduates who work not in accordance with their fields of expertise. In fact, there are many unemployed SMK graduates. The alarming number of unemployed will increase along with the enactment of the ASEAN Economic Community (AEC) free market. Every prospective worker in the MEA region including Indonesia, must be able to compete freely in fighting for available job vacancies, where the competitors, not only from Indonesia, but with foreign countries that are members of the AEC.

One of the government's efforts in dealing with the AEC is to increase the readiness and competence of local workers. The effort is to enact 85 Indonesian National Work Competency Standards (SKKNI), accreditation of 725 Vocational Training Centers (BLK) and Private Employment Training Institutions (LPKS). In addition, the government also conducts entrepreneurial training and work skills for 717,454 prospective workers and certifies 167 Professional Certification Institutions (LSP) as readiness to face MEA [3].

Based on data from the Unemployment Rate, the highest number of unemployed came from SMK graduates. Even though SMKs should be a workforce that is ready to use. Therefore, one solution to overcome the various problems above is to prepare young entrepreneurs from vocational high school graduates. One form of vocational education is a vocational school that has an orientation in the formation of life skills. Students are trained to master certain skills needed by the industrial world. The learning system is more emphasized on practical activities, so after graduation, you have expertise that is ready to use in the world of work. Thus, vocational schools have advantages compared to high schools, because vocational graduates have the skills to work, continue to college or entrepreneurship [2]. The low

absorption capacity of vocational high schools indicates that the achievement of vocational school goals is not achieved, namely increasing intelligence, knowledge, personality, noble character and the skills to live independently and follow further education in accordance with their vocational

Qualitative research conducted by Akpoyibo conducted at technical and vocational education institutions in Nigeria, suggests that entrepreneurship education has been promoted in vocational education institutions to overcome the high unemployment in Nigeria [28].

In order to overcome the occurrence of many unemployed vocational school graduates, the goal of vocational education, which not only prepares graduates to fill job vacancies but also must prepare students to be able to work independently as entrepreneurs. Readiness to work and entrepreneurship for vocational students is one of the goals important in the implementation of vocational education, where work readiness and entrepreneurship readiness, can be seen as the learning outcomes of students. Therefore, the implementation of vocational education must be able to equip students' readiness to work and entrepreneurship so that when students graduate, they will be able to work, and entrepreneurship, and able to compete in the world of work.

In order to improve work readiness and entrepreneurship readiness, students need to gain learning experience in the Business World/Industrial World (DU/DI), through industrial work practices. Industrial work practices are a form of professional skills education that combines systematic and synchronous educational programs in schools and mastery programs acquired through working directly in the world of work, aim to achieve certain levels of professional expertise [4].

Based on the above background, the formulation of the problem of this study is as follows: (1) is there a significant positive contribution between entrepreneurial insights on work readiness in vocational students? (2) is there a significant positive contribution between experience in industrial work practices on job readiness in vocational students? (3) is there a significant positive contribution together between entrepreneurial insights, experience of industrial work practices, learning outcomes of computer network techniques and locus of control on job readiness in vocational students? Based on some of the above problems, it is necessary to do research with the title " literature study on the contribution of entrepreneurial insights and industrial work practices on job readiness of graduates of vocational high schools ".

## II. THEORITICAL REVIEW

### A. *Entrepreneurial Insights*

According to the Great Indonesian Language Dictionary, the definition of insight is the result of supervision, review, or view, conception of perspective. Insight can also be interpreted as a multi-dimensional view / binocular in seeing and describing the existence of a particular field as a whole.

Literally entrepreneurship consists of basic words of entrepreneurship that gets the prefix and the end, so that it can be interpreted as entrepreneurial matters related to entrepreneurship, Alma [5] defines that an entrepreneur is a person who sees opportunities then creates an organization to

take advantage of these opportunities. Understanding entrepreneurship here emphasizes on everyone who starts a new business. While the entrepreneurial process includes all activities, functions and actions to pursue and take advantage of opportunities by creating an organization.

In relation to psychology, Ummunadi and Kennedy [6] in their research entitled "Entrepreneurial, Technical and Vocational Skills Required for Self-Reliance and Job Creation in Nigeria" combine performance and psychology. They argue that entrepreneurship can also be interpreted as a process of creating something new from value by devoting the time and effort needed to assuming financial satisfaction that accompanies psychic, personal and independence.

The concept of entrepreneurship in the narrow sense is to describe the purpose of entrepreneurial education to "become an entrepreneur", with an emphasis on preparation for establishing a business. This narrow definition includes theoretical content, especially those related to entrepreneurship, which are related to opportunities, business development, entrepreneurship, business creation, and growth. Conversely, the concept of entrepreneurship in the broad sense is "being an entrepreneur". The main focus of this approach is learning skills for entrepreneurial success, namely developing individuals who think and act entrepreneurially in every professional situation, not just in the context of establishing a business [7].

In relation to the development of a country, there is a statement from the United Nations [5], that a country will be able to build if it has 2% of the population of its entrepreneurs. So, if our country has a population of 200 million, then the entrepreneur must be around 4 million. Thus, the number of entrepreneurs in a country will determine the amount of development in a country.

The development success achieved by Japan turned out to be sponsored by entrepreneurs who amounted to 2% (medium category), and small-scale entrepreneurs as much as 20% of the total population. This is the key to the successful development of Japan [5], where Japan's success has affected other countries, including Indonesia. Therefore, lately, the transformation of entrepreneurial knowledge has developed in various countries, as well as in countries in Indonesia, entrepreneurial knowledge is taught in vocational schools, universities and in various business courses.

Entrepreneurial learning in vocational schools is directed so that vocational school graduates are ready to work independently through entrepreneurship. Vocational students need to be equipped with insight and skills that lead to work skills independently. Concrete efforts made are compulsory craft subjects and entrepreneurship in the 2013 vocational high school curriculum. the output of vocational education is expected to have the will and ability in accordance with their respective fields to develop themselves with entrepreneurship [8]. The eyes of craft and entrepreneurship are directed to print young people, not to rely on employment to the government and train the potential of educated young people to develop the surrounding resources so that it has an impact on self-prosperity and the surrounding environment.

To become an independent young generation, one must have high competitiveness, be creative, have confidence, and have reasoning, so that the spirit of independence and

entrepreneurial spirit can be achieved among students [9], through education in entrepreneurship subjects both in theory and practice in the field. Entrepreneurship education can be implemented in an integrated manner with educational activities in schools, by principals, teachers, education personnel (counselors), students together as an educational community. Entrepreneurship education is also applied to the curriculum by identifying types of activities in schools that can realize entrepreneurial education and realized students in their daily lives. In this case, entrepreneurship education programs in schools can be internalized through various aspects, for example in extracurricular or entrepreneurial subjects.

In Europe and America, entrepreneurship education and training is growing rapidly, both at the level of courses and at university. entrepreneurship course is given in the form of public lectures, and in the form of a concentration of study programs. Zenner [7] in India conducted a study entitled "Entrepreneurship Education at Indian Industrial Training Institutes (A Case Study of the Prescribed, Adopted and Enacted Curriculum in and around Bangalore)" found several indicators of entrepreneurial insight, namely: (1) basic knowledge about the world of work and entrepreneurship; (2) knowledge of business; (3) the ability to reflect entrepreneurial attitudes and identities; (4) the ability to instill the principle of self-efficacy; (5) the ability to develop creativity; (6) passion in entrepreneurship; (7) perseverance in solving problems; (8) skills in exploiting opportunities; (9) skills in strategy and planning. The indicators above are indicators of knowledge, attitudes and skills of an entrepreneur.

Furthermore, various studies in the United States [4] find that to be an entrepreneur one must have the following characteristics: (1) confidence that begins from a solid person, not easily swayed by the opinions of others, always optimistic and willing to take risks; (2) task-oriented and results-oriented, then prestige, are people who work hard, energetic, shamelessly seen by friends, the origin of what is done is halal; (3) good leadership; (4) originality (not following other people, but having their own opinions, there are original ideas, there is the ability to carry out something, original is not something new at all, but the product reflects the results of new combinations of existing components, so that gave birth to something new); (5) oriented towards the future, by having a vision to be achieved, and how to apply it. In line with the results of the study, Alma emphasized the attitudes and identities that must be possessed by an entrepreneur, namely self-confidence, task-oriented, good leadership, originality, and future-oriented.

Firmansyah, Djatmika and Hermawan about "The Effect of Adversity Quotient and Entrepreneurial Self-Efficacy on Entrepreneurial Intention Through Entrepreneurial Attitude" shows that there is an internal influence in the intention of entrepreneurship [26].

Based on some research results and opinions as described above, entrepreneurial insight is a concept or way of looking at a person's theoretical content, especially those relating to the world of work and entrepreneurship, business opportunities and development, business creation, and matters relating to a person entrepreneur.

### *B. Industrial Work Practice*

According to Hamalik [10], experience is a source of knowledge that is obtained because of the interaction between individuals and their environment. Experience is knowledge or skill that is known and mastered by a person, as a result of actions or work that has been done before, for a certain period. experienced, if you already have a level of mastery of knowledge and skills that are relevant and adequate in accordance with the area of expertise.

While Dalyono [11] argues that experience will affect the physiology of individual development which is one of the principles of the development of students' readiness in preparing themselves to enter the workforce. Broadly speaking, according to Hamalik [10], that experience is divided into 2, namely: (1) direct experience gained because of acting and participating directly; (2) substitute experiences obtained through observation, through images, through graphics, through words, and through symbols. To prepare the quality of students who are reliable and highly capable, it is necessary to improve the quality of good learning, by adding laboratory facilities, practice workshops and implementing industrial work practice programs.

Industrial work practice is a joint program between vocational schools and industries implemented in the business / industry world. In the vocational high school Curriculum [2] it is stated that industrial work practices are a pattern of training and training that is managed jointly between vocational schools and industry / professional associations as a partner institution, starting from the planning, implementation to evaluation and certification stages which constitute a single program using various forms alternative implementation, such as day release, block release and so on.

The preparation process of students' work readiness is not optimal, if only done in school. Collaboration with business / industry is needed to support student work readiness. Industrial work practices are expected to provide students with knowledge about the real working conditions and the implementation of this activity is a training for students to improve their abilities, both in terms of knowledge and skills that are in accordance with the area of expertise. Thus guidance from the world of DU/DI is needed, because it is expected that there will be a transfer of knowledge and skills so that students will be more ready to enter the workforce.

The implementation of industrial work practices will help students to strengthen learning outcomes obtained at school, and equip students with real experience in accordance with the chosen study program. Hamalik [10] states that industrial work practices are a professional preparation stage, in which a student who is close to completing formal studies, needs to work in the field with supervision by a competent administrator within a certain period, which aims to develop the ability to carry out responsibilities. In the statement, it was confirmed that there was an aspect of the discipline of time and the willingness of work of a student who carried out industrial work practices.

Referring to the Ministry of Education and Culture of the Republic of Indonesia number 323 / U / 1997 concerning the implementation of industrial work practices in Vocational Schools that the objectives of industrial work practices are:

(1) improving the quality and relevance of vocational education through participation; (2) produce graduates who have knowledge, skills, and work ethics that are in line with the demands of the workforce; (3) produce graduates who have the knowledge, skills, and attitudes that are the basis for sustainable development; (4) giving recognition and appreciation of work experience as part of the education process; (5) improve the efficiency of the implementation of vocational secondary education through the utilization of educational resources in the world of work. In addition to the high aspects of time discipline and work will, the article above also emphasizes aspects of work skills and ethos.

Hamalik [12] revealed several benefits of industrial work practices: (1) trained student skills in accordance with the area of expertise; (2) get practical experiences; (3) able to solve various problems in the field; (4) get closer and bridge the preparation of students to jump into their field of work after studying at school; (5) increased self-confidence. Of the several benefits above, it means that students will get experience and benefits both in whole and in part if carrying out industrial work practices. Hamalik added that the aspect that must be achieved in the experience of industrial work practices is the initiative and creativity, namely the attitude needed to solve various problems in the field.

In the research conducted by Santi [13], this industry work practice students will also get many benefits including: (1) the results of the students will be more meaningful because after graduating will truly have the provision of professional expertise to enter the work field so that it can improve the standard of living, and for the provision of self-development in a sustainable manner; (2) the lead time to achieve professional expertise becomes shorter because after completing industrial work practices does not require further training time to reach the ready-to-use skill level; (3) professional expertise gained through industrial work practices can raise prices and graduate self-confidence which in turn can encourage them to improve their skills at a higher level. Furthermore, Santi added that the benefits of carrying out industrial work practices are the growth of professionalism in work, including paying attention to work safety, the use of tools, materials and production processes in accordance with the Standard Operating Procedure (SOP).

Surokim [14] in "Students' Work Readiness in SMK Negeri 15 Samarinda" states that the indicators of experience in field work practices are: (1) the level of knowledge and skills possessed; and (2) mastery of work and equipment. Surokim added a new indicator for the experience of industrial work practices is the level of knowledge and skills possessed. Based on several research results and opinions as described above, the experience of industrial work practices is an experience gained by students through industry work practices, participation and direct observation in the world of work and industry, through education or training.

### C. *Work Readiness*

The meaning of readiness according to Hamalik [10] is the level or a condition that must be achieved by a person in the process of individual development at the level of growth, both mental, physical, social and emotional. While work is an activity carried out or done to make a living or livelihood.

While in the opinion of Slameto [15], readiness is the overall condition of a person who makes him ready to respond or answer in a particular way to a situation. The principles and aspects of readiness according to Slameto are: (1) all aspects of development influence each other; (2) physical and spiritual maturity is necessary to benefit from experience; (3) experiences have a positive influence on readiness; (4) basic readiness for certain activities is formed within a certain period, during the formation period during development. Furthermore, Slameto emphasized that work readiness can be seen as a certain characteristic, in the form of maturity obtained by a person from a learning experience that includes aspects of knowledge, skills and attitudes to undertake certain activities or jobs.

Malhotra conducted a study entitled "Development of Skilled Workforce through Technical and Vocational Education and Training (TVET) System in India" found that technical and vocational education could play an important and vital role in the development of human resources by creating skilled labor ready to work, improve the quality and quantity of industrial production [25].

Walker and Champbell [16] argue that job readiness is the extent to which a person has the skills and attributes that make them ready and successful at work and increasingly recognized in terms of work and career performance. This means that work readiness is assessed from the condition, both physically and mentally, where he is ready to enter the workforce. The readiness is measured by certain indicators that are linked to the workforce needs in the workplace.

Makki, Memon, Salleh and Harun [17] in their study entitled "The Relationship between Work Readiness Skills, Career Self-efficacy and Career Exploration among Engineering Graduates", found that job readiness is a condition that refers to the ability to get a job, enter new workplace, retain jobs and get new jobs, if needed. Walker and Makki emphasized that work readiness refers more to a person's psychological condition in the face of the world of work, namely one's mental endurance in the face of pressure and problems in the world of work.

However, Mali in his research "A study on locus of control and its impact on employee's performance" shows that there is a positive and significant relationship between internal locus of control and employee performance. Thus, the locus of control factor is also a factor that is considered in the work readiness of vocational students [27]. There are factors that can influence work readiness in vocational high school.

In addition to seeing in terms of graduates, work readiness can also be measured by comparing the conditions of graduates with the needs in the business world and the industrial world. That is whether the graduates are in accordance with the characteristics needed in the industry. If you look at the needs of the industrial world, the characteristics of labor needed by the industrial world [18] are: (1) skilled, meaning skilled workers, supported by learning outcomes in the cognitive, affective and psychomotor domains; (2) professional, means that the workforce controls the area of expertise; (3) productive, means that workers are able to produce work or show maximum performance; (4) high work ethic, means that workers who have a high work ethic in doing their work, (5)

independent attitude, means workers who have the ability to not always depend on other parties.

In line with the above opinion, Sudradjad [19] emphasized that the requirement to be a good worker must have the ability to work hard, act honestly, discipline in time management and keep promises, and have a creative attitude. Here Wena and Sudrajat added that in addition to aspects of skills and intelligence, there are other aspects namely the maturity of attitudes in the form of: (1) independence; (2) work hard; (3) act honestly and keep promises, and (4) creative. Based on some research results and opinions as explained above, that work readiness is the overall condition both physically and mentally considered as a mature person, thus making him ready to carry out certain activities or jobs in order to make a living.

### III. RESULT AND DISCUSSION

#### A. *Contribution of Entrepreneurial Insight to Student Work Readiness of Graduates of Vocational High Schools*

Entrepreneurship education is a learning process to change students' attitudes and mindset towards entrepreneurial career choices. Entrepreneurship education that is applied in schools is not only in the form of theory, but also in the form of good practices in schools and in industry, with the aim to increase entrepreneurship and skills in students. Entrepreneurship education materials that aim to train entrepreneurial insights and skills include training in business plan making and entrepreneurship practices. The entrepreneurial practice is in the form of establishing and managing a business. These activities require students to manage the business in real terms and really go directly to become entrepreneurs, so that students will have a lot of entrepreneurial experience and insight.

The number of students who have entrepreneurial insight and skills will give birth to young entrepreneurs who are quality, skilled and independent in creating new business opportunities. Students will be more skilled at managing a business after gaining entrepreneurial insight, so that through learning entrepreneurship education in the form of entrepreneurial theories and practices can influence and add insight into business and entrepreneurship and students' readiness to start a business after graduation.

Based on research conducted by Wijayanti, et al, there was a significant contribution between entrepreneurship knowledge on entrepreneurship readiness in TKJ's expertise package students at Nganjuk District Vocational High School. This hypothesis aims to determine how much influence entrepreneurship knowledge has on entrepreneurship readiness. regression for entrepreneurial knowledge (X1) is 0.708 and is positive. This means that entrepreneurship readiness will increase if entrepreneurship knowledge is increased [21].

Likewise, the research conducted by Nurdiana, based on the results of hypothesis testing shows that experience in the field of entrepreneurship has a significant influence on job readiness of Class XII students of Building Image Engineering Expertise Program at SMK Negeri 3 Yogyakarta [20]. With entrepreneurial insights obtained by students from the learning process in class and through learning materials as well as from other sources, it is expected to provide an

overview and provision of entrepreneurship that can be used as a consideration for someone to determine the future and is expected to encourage students to be ready to face the world of work and entrepreneurship.

Edmond, et al in his research entitled "The Relationship between Internal Locus of Control and Experience of Industrial Work Practices with Career Maturity in Students of Computer and Informatics Engineering Expertise Study Program" also concluded that entrepreneurship could be used as a strategy for revitalizing technical education to improve work readiness especially in the field of informatics engineering [29].

Giving entrepreneurship insights by teachers in entrepreneurship subjects is one of the factors outside of students that can affect student work readiness. Because when students learn about business and entrepreneurship, students will automatically learn and apply entrepreneurial attitudes, such as using occupational health and safety (K3), independence, working hard, acting honestly and keeping promises and being creative. Based on the description above, it can be concluded that there is a significant positive contribution between the experience of entrepreneurial insight and job readiness of vocational students

#### B. *Contribution of Industrial Work Practices to Work Readiness of Students Graduates of Vocational Schools*

As described in the introduction, one of the objectives of vocational school is to prepare students to be ready to enter the business / industry world. To equip students, the Ministry of Education and Culture issues regulations concerning industrial work practices as a legal and basic foundation for vocational schools to carry out industrial work practices for their students.

Industrial work practices are training for students to be able to improve students' abilities and skills in accordance with their field of expertise. In industrial work practices, students will receive guidance and direction from teachers and mentors in DU/DI, so students will get a lot of knowledge, experience and skills. In addition, students can apply and combine the knowledge they get in school with the knowledge they get during industrial work practices for their provision in preparing to enter the workforce.

The placement of industrial work practices that are appropriate and in accordance with the program of expertise for students will provide additional experience, knowledge and new skills that are not obtained at school. Students can also adjust to the conditions and regulations in the workplace that apply. This will affect the vocational readiness of vocational students to enter the workforce. Because students have previously been given a little picture of the world of work so that later students can estimate what skills are needed in the field and how to respond to conditions and regulations in the workplace that are different from those in school.

The experience of industrial work practices on job readiness also has a significant influence as stated by Santi. In this study there was a significant influence on the experience of industrial work practices on job readiness in class XII students of SMK Negeri 1 Purwosari [13]. This is consistent with the research conducted by Suratna which states that there is a significant relationship between

the results of industrial work practices with vocational school students' job readiness in Surakarta City [22]. Students who have high industrial work practices show that the student has a level of readiness high entering the workforce, and vice versa, students who have low industrial work practices show that the student also has a low level of readiness in entering the workforce.

Industrial work practices are directed at achieving the professional abilities of students in accordance with the work demands that apply in the work field. Educational programs can be achieved if there is mutual cooperation between educational institutions and the world of work. In addition, with the presence of instructors / field supervisors who are one of the employees where students carry out industrial work practices that will direct, teach, and guide students so that they gain a lot of experience, knowledge and skills in the work world directly which is important for work readiness. It can be concluded that there is a significant positive contribution between the experience of industrial work practices and vocational readiness of vocational students.

### *C. Contribution of entrepreneurial insight into Entrepreneurship Insights and Industrial Work Practices Against Work Readiness of Students Graduates of Vocational Schools*

Given the importance of the readiness of mid-level workers, the government needs to increase the quantity and quality of secondary education institutions that produce graduates ready for use. This led to a government plan to increase the number of vocational schools that were originally 30% to 70% of the comparison of the number of high schools in Indonesia. As a vocational high school, student work readiness is one of the goals of education.

In order for vocational students to have good job readiness, what needs to be considered is learning in school and outside school. In addition, it should be noted also the factors that affect the vocational readiness of vocational students after graduating from school later. Factors that influence student work readiness are factors within students and there are factors that originate from outside students. Among the factors that exist, there is a factor in the experience of industrial work practices. In the aspect of experience in industrial work practices, the knowledge and skills acquired by students while carrying out industrial work practices are the basic capital that must be used to work after completing industrial work practices and after graduating from school. Vocational graduates are expected to be able to work in employment that matches their respective fields of expertise.

In addition to factors of experience in industrial work practices, other factors that are thought to have contributed to work readiness are entrepreneurial insights. The problem of not absorbing job seekers from vocational high school graduates can be overcome by improving the quality of human resources, creating new jobs and growing entrepreneurial businesses. Therefore, vocational students are expected to have good entrepreneurial insights so that after graduation, not only rely on employment, but can create their own jobs in accordance with their respective expertise programs.

Idhkan and Adam in their study in Makassar entitled "The Impact of Entrepreneurship Soul and Industrial Practice Results on Vocational Preparedness of Vocational Students Mechanical Engineering Expertise Package in Makassar City" concluded that the results of an entrepreneurial soul analysis and the results of industrial work practices that are in good condition, there are significant between the entrepreneurial spirit and the work readiness of students in the machining technical expertise package at vocational high school in Makassar city [23]. The research above reinforces that entrepreneurial insight factors and industrial work practices are important factors in supporting work readiness.

Research conducted by Wijayanti, Sutikno and Sukarnati entitled "Entrepreneurship Knowledge Contributions, Experiences of Industrial Work Practices, and Creativity to Entrepreneurial Readiness" found that the contribution of entrepreneurial knowledge to entrepreneurship readiness was 50.1%, the contribution of industry work experience to entrepreneurship readiness was 47, 7%, the contribution of creativity to entrepreneurship readiness is 49.7%, and the contribution of entrepreneurship knowledge, experience of industrial work practices, and creativity towards simultaneous entrepreneurship readiness is 61.5% [21]. Peter in his research entitled "Relevance of Entrepreneurial Studies as Education by Undergraduate Students in Nigeria" concluded that entrepreneurship education in the view of respondents had a positive influence in preparing students for entrepreneurial careers in the future [24]. Based on this description there can be stated positive contributions a significant insight into entrepreneurship and experience of industrial work practices on vocational readiness of vocational students.

## IV. CONCLUSION

Based on several literature studies discussed above, it can be concluded that the entrepreneurship insight and industrial work practices have a significant contribution to work readiness by students graduates in vocational high schools. In some studies, it is necessary to emphasize the mastery of skills and ICT. This effort was made to reduce the difference between learning in schools and workplaces.

## ACKNOWLEDGMENT

Our thanks to all of people who helped guide and evaluate the process of making this article and other parties that could not be mentioned individually and the STEACH reviewer team that was pleased to give input to receive our article. Hopefully this article is useful for other researchers and those who need it.

## REFERENCES

- [1] Pemerintah Republik Indonesia, "Peraturan Pemerintah RI Nomor 29, Tahun 1990, tentang Pendidikan Menengah", Jakarta, 2008.
- [2] Dikmenjur, "Kurikulum SMK", Jakarta: Dikmenjur, 2008.
- [3] Republika, "Ini kesiapan pemerintah menghadapi MEA", <http://www.republika.co.id/berita/ekonomi/makro/16/01/05/o0hnma29-9-ini-kesiapan-pemerintah-menghadapi-mea>, 2 Januari 2016.
- [4] W. Djojonegoro, "Pengembangan sumberdaya manusia melalui Sekolah Menengah Kejuruan (SMK)", Jakarta: PT Jayakarta Agung Offset, 1998.
- [5] B. Alma, "Kewirausahaan", Bandung: Penerbit Alfabeta, 2013.
- [6] Ummunadi & E. Kennedy, "Entrepreneurial, technical and vocational skills required for self-reliance and job creation in Nigeria", *British Journal of Education*, Juni 2013, vol.2, no.5, pp.48-56.

- [7] L. N. Zenner, L., Kumar, K., & Pilz, M. "Entrepreneurship education at Indian industrial training institutes: a case study of the prescribed, adopted and enacted curriculum in and around Bangalore". *International Journal for Research in Vocational Education and Training (IJRVET)*, 2017, vol.4, no.1, p.69-94.
- [8] A. Ramadani, D. Sudjimat, & S. Soekopitojo, "Kontribusi pengetahuan kewirausahaan, prestasi praktek kerja industri, kompetensi keahlian terhadap minat berwirausaha dan kesiapan berwirausaha siswa SMK paket keahlian teknik pemesinan di Madura". *Teknologi dan Kejuruan*, 2015, vol. 38, no. 2, pp. 199-210.
- [9] I. A. Damasanti, "Kesiapan kerja ditinjau dari motivasi kerja, sikap kewirausahaan, dan kompetensi keahlian busana wanita pada siswa SMKN", *Jurnal Pendidikan Sains*, 2014, vol. 2, no. 2, 114-124.
- [10] O. Hamalik, "Proses belajar mengajar". Jakarta: Bumi Aksara, 2005.
- [11] Nurdiana, "Pengaruh praktik kerja industri dan pengalaman di bidang kewirausahaan terhadap kesiapan kerja siswa kelas XII Program Keahlian Teknik Gambar Bangunan SMK Negeri 3 Yogyakarta". *Jurnal Pendidikan Teknik Sipil dan Perencanaan*, 2017, p. 1-13.
- [12] Pemerintah Republik Indonesia, "Peraturan Mendiknas RI No 19 tahun 2005, tentang Pendidikan Nasional", Jakarta, 2005.
- [13] M. E. Santi, "Pengaruh pengalaman praktik kerja industri, kompetensi keahlian, dan intensitas pendidikan kewirausahaan dalam keluarga terhadap kesiapan berwirausaha", *Jurnal Pendidikan Humaniora*, Juni 2013, vol.1, no.2, p. 127-135.
- [14] Surokim, "Pengaruh pengalaman praktek kerja lapangan dan kepercayaan diri terhadap kesiapan kerja siswa SMK Negeri 15 Samarinda", *PSIKOBORNEO*, 2016, vol. 4, no. 3, pp. 565 – 573.
- [15] Slameto, "Belajar dan faktor-faktor yang mempengaruhinya", Jakarta: Rineka Cipta, 2010.
- [16] A. Wallker, & K. Campbell, "Work readiness of graduate nurses and the impact on job satisfaction, work engagement and intention to remain", *Nurse Education Today*, 2015, vol. 10, no. 6, pp. 1-6.
- [17] I. B. Makki, M. A. Memon, R. Salleh, dan H. Harun, "The relationship between work readiness skills, career self-efficacy and career exploration among engineering graduates: a proposed framework", *Research Journal of Applied Sciences, Engineering and Technology*, 2015, vol. 10, no.9, p. 1007-1011.
- [18] M. Wena, "Pendidikan sistem ganda". Bandung: Tarsito, 1996.
- [19] Sudradjat, "Kiat mengentaskan pengangguran melalui wirausaha", Jakarta: Bumi Aksara, 2005.
- [20] Nurdiana, "Pengaruh praktik kerja industri dan pengalaman di bidang kewirausahaan terhadap kesiapan kerja siswa kelas XII Program Keahlian Teknik Gambar Bangunan SMK Negeri 3 Yogyakarta". *Jurnal Pendidikan Teknik Sipil dan Perencanaan*, 2017, p. 1-13.
- [21] L. N. Wijayanti, "Kontribusi pengetahuan kewirausahaan, pengalaman praktek kerja industri, dan kreativitas terhadap kesiapan berwirausaha", *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 2016, vol. 1, no. 7, pp. 1364—1375.
- [22] Suratna, "Hubungan antara prestasi akademik dan hasil praktek kerja industri dengan kesiapan kerja siswa SMK kelompok Teknologi Industri di Kota Surakarta", Tesis tidak diterbitkan, Malang: FBS UM, 2007.
- [23] A. M. Idhkan, et al, "Dampak jiwa kewirausahaan dan hasil praktik industri terhadap kesiapan kerja siswa SMK Paket Keahlian Teknik Pemesinan di Kota Makassar", *Jurnal Media Komunikasi Pendidikan Teknologi dan Kejuruan*, 2016, vol. 3, no. 1, pp. 17-26.
- [24] I. Peter, "Relevance of entrepreneurial studies as perceived by vocational education undergraduate students in Nigeria." *British Journal of Education*, 2016, vol.4, no.12, p.13-24.
- [25] S. Malhotra & D. Malhotra, "Development of skilled workforce through Technical and Vocational Education and Training (TVET) system in India." *International Journal of Science and Research*, 2015, vol.4, no.4, p. 2547-2550.
- [26] A. H. Firmansyah, E. T. Djatmika, A. Hermawan, "The effect of adversity quotient and entrepreneurial self-efficacy on entrepreneurial intention through entrepreneurial attitude." *Journal of Business and Management (IOSR-JBM)*, 2016, vol.18, no.5, p.45-55.
- [27] V. Mali, "A study on locus of control and it's impact on employee's performance." *International Journal of Science and Research*, 2013, vo.2, no.12, p.149-151.
- [28] Akpoyibo, "Entrepreneurship into Technical, Vocational Education and Training (TVET) in Nigeria." *International Journal of Innovative Science, Engineering & Technology*, 2015, vol. 2, no.9, p. 463-470.
- [29] A. Edmond, A. Oluniyi, D. Isaiyah, B. Garba. "Strategies for revitalizing the implementation of entrepreneurship education in Technical, Vocational Education and Training (TVET) to enhance self-employment in Nigeria." *British Journal of Education*, 2016, vo.2, no. 4, p. 50-62.