

Student entrepreneurial skills in facing ASEAN Economic Community: A case study at Universitas Terbuka, Indonesia

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ABSTRACT

As part of the skills demographic bonus towards ASEAN Economic Community (AEC), student preparation still needs to be improved, especially in entrepreneurship skills. The purpose of this research is to find out the entrepreneurial abilities of Universitas Terbuka students and how to improve these abilities. This research was conducted through a mixed methods design consisting of two survey research designs that aim to clearly map and make recommendations from students regarding entrepreneurial skills. This research involved 730 students at the Universitas Terbuka, Indonesia. Data were collected through observation, questionnaires, interviews, and documentation which were then analyzed descriptively and inferentially. The results of the study showed that: i) Students' entrepreneurial abilities are categorized as good; and ii) Gender affects students' entrepreneurial abilities. Therefore, it needs support and concrete steps from stakeholders in welcoming the AEC. There are several necessary steps carried out by faculty leaders and the chancellor so that students have the desire to develop an entrepreneurial spirit, including: by conducting regular monitoring and evaluation of Universitas Terbuka students, providing reward and punishment and equal justice without discrimination and providing training in accordance with their fields, giving permission to continue studies and provide training that can support good performance by coordinating and evaluating work.

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1. INTRODUCTION

Globalization which occurs in almost all aspects of life leads to the importance of entrepreneurship (entrepreneurial skills) which is felt by almost everyone and every nation [1]. Higher education has a general vision of producing educated people who are characterized, intelligent, skilled in developing the Indonesian nation that is dignified and highly competitive, has complete comprehensive capabilities, and higher education able to create prosperity, security, welfare, and justice. Such vision can be reached if the higher education developed an effective curriculum that can meet the students' needs, values of science and technology skills, abilities, mental attitudes, and ethics as responsible Indonesian citizens as well as global citizens who contribute to building civility, benefit, and happiness for the community, nation in particular, and humanity in general [2].

In the context of industrial competition that occurs in developing countries, such as Indonesia, such policy and perspective have led to work termination policy, thus increases the number of the unemployed population [1]. Education is the key to all progress and quality development in a country, because, with education, humans can realize all the potential that exists within themselves both as individuals and as citizens [3]. A higher-education graduate should not only learn various concepts and knowledge but also be prepared with skills needed in this 21st century which has entered the era of the Association of Southeast Asian Nations (ASEAN) Economic Community. In this case, competencies and skills are very important to bring students to be successful in the field of work. The competition that becomes fiercer and more competitive requires anyone, especially higher education graduates to create jobs, instead of only hoping to find and apply for a job.

The problems in this research based on the Global Competitiveness Report 2015/2016 created by the World Economic Forum (WEF), the competitiveness of Indonesia occupied 41st position, while Indonesia's infrastructure quality is in the 82nd position of 148 countries or 4th among ASEAN core countries. This fact indicates that Indonesia is left behind other countries in the field of services and infrastructure provision [4]. Furthermore, based on data issued by the Organization for Economic Co-operation and Development Center for Development, Medium-Term Framework (MPF)-2016 notes that Myanmar has the highest economic development location among ASEAN countries. Indonesia has good productivity opportunities, so it is possible to compete with other ASEAN countries.

The human resources (HR) of Indonesia cannot provide any benefits without improving its quality. Data by the ASEAN Productivity Organization (APO) reported that only 4.3% of 1,000 Indonesian workers are skilled, while the Philippines is 8.3%, Malaysia is 32.6% and Singapore is 34.7% of 1,000 people. In terms of the education level, the workers are dominated by elementary school graduates (80%), while only 7% are university graduates, whereas currently most of the workers are required to be university graduates. This is very contrast to Malaysia, where most of the population is bachelor graduates. The opportunities to get evenly distributed education throughout Indonesia are difficult, so the awareness to pursue higher education is very low. This condition then affects based on experience shows that the Indonesian workers who are only considered as laborers or unskilled laborers in the international labor market [5].

One of the institutions that contribute to the quality of education is Education Personnel Education Institute, in which one of them is Universitas Terbuka. The learning process of Universitas Terbuka is carried out by implementing distance education as well as face-to-face meetings for eight times in one semester. This provides big opportunity for students to develop entrepreneurial skills. Students must see ASEAN Economic Community (AEC) as an open opportunity to improve their competencies quality so that they can increase their competitiveness by paying attention to the scientific developments, both soft skills and hard skills. Students must also be critical and dynamic about environmental changes where they will later be involved. Mastery of competence becomes a positive thing and is very important in increasing expertise. However, this is not only related to the science occupied, but also a challenge and threat for them to be able to manage their competitiveness in the AEC era.

In this case, students need thorough preparation when they graduate and have to compete in finding work and in doing work. They should not only be equipped with intellectual intelligence but also emotional, spiritual intelligence, foreign language skills, and information technology (IT) management. Furthermore, the graduates' competence should not only be in the form of academic, but also entrepreneurial skills, so that they are ready to face AEC. Therefore, Universitas Terbuka can produce students or graduates who can generate income from entrepreneurial skills that are wide open when studying at Universitas Terbuka.

There is novelty in this research that the entrepreneurial spirit is very important in society, especially in within an intellectual (student). Entrepreneurship is an ability to be creative and innovative, keen to see opportunities and always open to any positive input and changes that can grow and develop the business. In addition, entrepreneurship is intelligence and talent to recognize, discover, and construct, as well as a source of life energy and enthusiasm. The growing business world will open up new job opportunities and this can be a direct solution in decreasing the high unemployment rate. The current economic globalization era has led humans in social interaction due to new discoveries in the field of technology and information which previously are unimaginable phenomena. It further becomes a demand for humans to be creative and innovative in economic activity [6].

In the past, entrepreneurship was all about direct field experience. Therefore, entrepreneurship is an innate talent from birth (entrepreneurship is born not made), so entrepreneurship cannot be learned and taught. Entrepreneurship is not only a field business but is a discipline that can be learned and taught. "Entrepreneurship not only born but also made," ASEAN Economic Community that entrepreneurship is not only an innate talent from birth or a matter of field experience but can also be learned and taught. Someone who has entrepreneurial talent can develop his talent through education. In order to become a successful entrepreneur, people need to have talent and knowledge of all aspects of the business they will be engaged in. Expectations to be accepted into the world of work are certainly not wrong, but it cannot be denied that job

opportunities are also very limited and not linearly proportional to graduates of educational institutions, whether primary, secondary, and higher education.

Therefore, all parties must think and realize real work continuously in overcoming the gap between employment and graduates of educational institutions. One of the solutions is to produce graduates who have the potential to develop their skills into independent businesses. In addition to being a solution for the graduates themselves, such a phenomenon also brings blessings to other people who are recruited as employees or workers in the business established [7]. That is where the role of universities is not only to produce people who are ready to work but also to produce jobs.

In fact, one of the current problems encountered by the Indonesian nation is the low quality and competence of the human resources, especially the low entrepreneurial skills among students. Such conditions will affect Indonesia's competitiveness with other countries in the world. Therefore, competency building is needed to improve the quality of human resources comprehensively as a long-term investment for the better future of the Indonesian nation and country. Efforts to build excellent Indonesian human resources can be done by improving the quality of education, particularly the entrepreneurial skills [8]. According to Saroni, the better the student's ability to maintain their life by implementing the skills provided from the educational process, the more creative their life [9].

Furthermore, based on the results of the previous research done by Wiyono and Hu [10], it is expected that by providing entrepreneurial spirit and mindset in the students of Universitas Terbuka, they are able to find many entrepreneurial opportunities. In addition, Universitas Terbuka should provide entrepreneurial training for prospective alumni of the students of Universitas Terbuka through various educational and training activities. Based on the description, it is clear that the topic of entrepreneurship in the community is important to be reviewed, especially concerning a student, who belongs to university intellectual community so that it can advance the economy by making creative and innovative efforts so that it is profitable for the community [7]. Therefore, there is demand for a smart breakthrough that can be an alternative thought to make ASEAN Economic Community changes. In this case, the researchers wanted to develop and strengthen the entrepreneurial skills of Universitas Terbuka students in facing the challenges of ASEAN Economic Community. Thus, the researchers confidently conducted an initial research related to mapping the entrepreneurial skills of Universitas Terbuka students to face the ASEAN Economic Community (AEC) and it is hoped that this research can be sources and powerful ways to improve entrepreneurial skills for students.

2. RESEARCH METHOD

This research was conducted through a survey with the aim of mapping the entrepreneurial skills of students. Data were collected using questionnaires [11], which were adopted from previous research [8]. The questionnaire consisted of seven scales comprising 11 constructs [12] with a Cronbach alpha value of 0.910, thus it is reliable to AEC and evaluate students' entrepreneurial skills. The validity and reliability of these instruments were assessed to ensure the quality of the tools used in this study. This process was carried out to determine what should be AEC.

This research involved 730 students of Universitas Terbuka in Indonesia with various ethnic groups including Malay, Minang, Javanese, Batak, and others, and at a fairly energetic age, which is between 20 to 27 years old. Since this survey involved a large number of respondents, it was expected that it could improve the quality of the instrument developed. Furthermore, researchers also performed stratified and random sampling to ensure that each member of the population had the same probability of being selected as sample. After questionnaires were distributed and data were collected on the entrepreneurial skills for basic education students at Universitas Terbuka of Riau Region, the data were then processed using the Statistical Package for Social Sciences (SPSS) version 23.00 for Windows to see the mapping results of students' entrepreneurial skills.

3. RESULTS AND DISCUSSION

This study involved 730 students of Universitas Terbuka in Indonesia. This research analyzed the reliability of the instrument used and obtained a Cronbach alpha value of 0.910. According to previous studies [13], [14], if the correlation number is above 0.60 and below 1, then the instrument has a high or reliable correlation, whereas if the correlation number is below 0.50 and below 1, then the instrument has a low correlation or is not reliable. Furthermore, each construct in this research instrument was categorized as good or very good. Therefore, the instrument employed is very good and feasible to assess the entrepreneurial skills of students.

The entrepreneurial skills of the students of Universitas Terbuka which were categorized as very good. These included the calculated risk-taking (5.55); commitment and perseverance (5.47); integrity and reliability (5.59); creativity (5.36); self-confidence (5.26); independence (6.13); team-building (5.35); foresight (5.96); managerial and leadership (5.72); independent learning (5.55); and start-up (ICT) (5.85). These students' entrepreneurial skills were categorized as very good because they have up to six modes. Therefore, it can be concluded that the students of Universitas Terbuka have an average entrepreneurial skill of 5.62 which is a good category.

Furthermore, one-way ANOVA variance analysis was carried out to compare the students' entrepreneurial skills based on gender. However, before this analysis was done, the data normality was tested through normality test. According to Pallant [15], if the research samples involved exceeds 30, then the population data is considered normal. In this study, a total of 4,730 students of Universitas Terbuka were involved. Therefore, the population data has met the requirements of being normal thus one-way ANOVA analysis could be carried out. The results were then analyzed inferentially and presented in Table 1.

Table 1. One-Way ANOVA analysis on the students' entrepreneurial skills based on gender

	Sum of squares	df	AECn square	F	Sig.
Between groups	7727742	1	7727742	6,974319	0.043
Within groups	806644506	728	1108028		
Total	814372248	729			

Table 1 presents the results of one-way ANOVA test, it is shown that gender has a significant effect on entrepreneurial skills in the model with the sig value <0.05 ($0.043 < 0.05$). This is also strengthened by the AEC value for male students of 359 and for female students of 353. This AEC that both male and female students have a high desire to have entrepreneurial skills. It can be seen that male and female have almost equal abilities to carry out entrepreneurial activities so that female should have the same opportunities as male to achieve success.

Data on students' entrepreneurial skills were obtained using a questionnaire. The analysis results indicate that the students have good entrepreneurial skills. The students' literacy ability was seen based on 11 constructs, including: calculated risk-taking; commitment and perseverance; integrity and reliability; creativity; self-confidence; independence; team-building; foresight; managerial and leadership; independent learning; and start-up (ICT).

The AEC score of the calculated risk-taking construct of the students was 5.55 which is categorized as good. This score was obtained because most students already have the willingness to take risks; like risk even though they are realistic in reaching their goals, a great risk is not an obstacle to opening a business, and a failure does not scare them when they want to start. The Youth Entrepreneurship Program offered by the Youth Institute is a Life Skills Education Program specially designed to provide learning opportunities for young people of working age. This program aims to equip them with knowledge, skills, and foster an entrepreneurial spirit. This entrepreneurial spirit is characterized by a creative, innovative, professional, responsible, and risk-taking mindset in managing their potential and their environment to enhance their quality of life [16].

Furthermore, an entrepreneur's decision-making should consider the level of tolerance for risk [17]–[19]. An entrepreneur is considered as risk-averse (avoiding risk) when they only want to take opportunities without risk [20], [21] and risk-lover (like risk) when they take opportunities with a high level of risk [22]. Any activities will always have a risk that is in accordance with the rate of return [23], [24]. If an entrepreneur wants high returns, they must also accept the high level of risk given. Each individual has a different level of risk tolerance. Some people like to take a risk as long as they obtain the desired rate of return, while some others are afraid of taking risks.

Furthermore, the AEC score of the commitment and perseverance construct was 5.47, which is categorized as good. This score was obtained because most students will fix failures to be better, able to produce original ideas and try to make them happen, are not ashamed to sell products, find it difficult to have original ideas in opening a business, and frequently have feelings of shame in the environment. True entrepreneurs consider failure as a beginning and a stepping stone to renew their business performance in the future [25], [26], as leaders do not spend their time thinking about failure.

Therefore, a strategy is needed to be carried out starting from product development that is based on creative and original ideas so that it becomes a distinctive factor compared to products from competitors in addition to the company's internal processes to marketing strategies of the product [27], [28]. The results of previous researches [29], [30] are expected to be the assistance of the entrepreneurial model to motivate

students, thus encouraging students' interest in running their businesses without any hesitation or shame starting from scratch with small capital.

In addition, the AEC score of the integrity and reliability construct was 5.89, which is categorized as a good category. This score was obtained because most entrepreneurial students can practice honesty [31], [32], are able to carry out the mandate, have a work ethic, are serious and deserve to be trusted, giving the real reason if you make a mistake. Therefore, entrepreneurs should not be late or cancel unilateral plans because it can cause inconvenience and break promises that have been made, come to an event on time, and easily practice honesty in entrepreneurship.

The construct of creativity in students obtained an AEC score of 5.36 which is categorized as good. This score was obtained because most students choose entrepreneurship since they have creative ideas to continue developing their business, have high imagination, can think “out of the box”, and difficult to find ways to make products more valuable. A research project was conducted by several researchers [33], [34] supported this study in which in terms of the dimensions of self-realization, the highest motivation value is implementing ideas or making innovation.

The demand of an entrepreneur is that they should be creative, have new ideas, and take advantage of opportunities found with the aim of competing with competitors and surviving in the market. In this motivation, it is shown that the largest number is in students who are already interested in entrepreneurship but have not yet started [35]–[37]. This shows that these students already have an idea or innovation, but various reasons make them have not realized it yet. Furthermore, an entrepreneur will think creatively in dealing with a problem, in this case a true entrepreneur is certainly not someone who is easily discouraged when facing failure [38]. When an individual already has that mindset, then they will also think about the future of many people regarding their welfare. That is why someone who has this mindset will generally create a business opportunity to help the welfare of many people.

Furthermore, the self-confidence in students construct obtained an AEC score of 5.26, thus it is categorized as good. This is because most students believe that they will be successful if they become entrepreneurs, have entrepreneur skills, have the required capabilities to be successful entrepreneurs, understand their strengths and weaknesses, are confident in entrepreneurship, and easily develop a business. The aspect that must be possessed by people who want to be entrepreneurship is self-confidence [39]. Self-confidence can be in the form of when you always get used to solving your own problems without relying on others. Such attitude will support an entrepreneur not to be afraid of failure, not easily discouraged, and will always consider themselves capable and does not hesitate in solving the problems faced [40]. This is in accordance with the results of research carried out by Embi, Jaiyeoba, and Yusof [41] stating that an entrepreneur who has high self-confidence AEC that he also has a high sense of responsibility.

Additionally, the AEC score obtained in the independence for students' construct was 6.13, thus it is categorized as good. This score was obtained because most of the students do not like to rely on others, use their personal capital without the help of parents in entrepreneurship, and are able to meet the needs of their own selves and their family, thus entrepreneurship can increase independence. An entrepreneur is centered on independence so that entrepreneurs are considered independent and successful people as successful entrepreneurs [39]. Independence is an absolute trait that must be possessed by an entrepreneur [42]. Entrepreneurship also forces young people who want to achieve success to think innovatively, which is a thought process that produces solutions and ideas outside the conservative frame [43]. By thinking innovatively, entrepreneurial youth have utilized their thoughts, imagination abilities, various stimulants, and individuals who surround them in producing new products, both for themselves and their environment.

Furthermore, for the team building construct, an AEC score of 5.35 was obtained, indicating a good category. This score was achieved because most students can work together with others, accept criticism and input, prioritize group interests, are able to solve problems with a team, and easily communicate in teams. Since building trust and cooperation in a business is very important, this can be employed as a strategy by the company to maintain and develop its business [44]. In addition, the characteristics of entrepreneurs include willingness to accept criticism from others, respecting others' opinions, making evaluations to make improvements in the future, accepting negative assessments from others regarding the work that has been carried out, and being willing to use other people as a reference in making decisions [44].

In addition to having a cooperative attitude and accepting criticism, entrepreneurs are required to be able to solve important problems or make important decisions in a short time [45]. In addition, entrepreneurs must also have the ability to influence other parties [46]. Being an entrepreneur AEC that someone must have the ability to affect other people through either direct or indirect communication with the intention of moving these people so that they are fully understanding, aware, and willing to follow the entrepreneurs' wishes.

In the foresight for students construct, the AEC score obtained was 5.96, thus it is categorized as good. This score was achieved since most students continuously learn the entrepreneurship concept, meet great entrepreneurs to learn more, read books related to entrepreneurship to gain insight, and are willing to

participate in entrepreneurship training. Basically, students really like entrepreneurship, because they think that entrepreneurial people will have their own satisfaction.

In addition to that, they can increase their knowledge because they will always learn and think ahead to develop their business and improve its quality [39]. One of the efforts to continuously learn about entrepreneurship is to participate in entrepreneurship training. This training can increase understanding and mastery of entrepreneurial knowledge and motivation as well as provide a solution to the imbalance issues between the availability of employment and workers which will result in an increase in the number of unemployed and eventually affects the community economy [47].

In the managerial and leadership constructs for students, the ASEAN Economic Community score obtained was 5.72, which is categorized as good. This score was obtained because most students are leaders who will open up job's opportunities, have the ability to take initiative, can interact with other personalities, have the ability to affect others, motivate members who experience failure, better prepare things from afar in order to minimize failure, usually following the opinion of friends, can increase their independence, and does not have any doubt.

Entrepreneurship education is also expected to give birth to creative entrepreneurs who can create jobs opportunities, and can help decrease the unemployment rate [48], [49]. Furthermore, adults who have not worked need to equip themselves with motivation and enthusiasm for entrepreneurship. Therefore, it is very necessary to develop them to make them willing and have a passion for entrepreneurship because the environment is very supportive to start or develop a business, especially small businesses from the younger generation.

In addition, for the independent learning construct, the AEC score obtained was 5.55, which is categorized as good. This score was obtained since most students follow the guidance of entrepreneurial mentors in the independent learning program, participate in the education in universities that encourage them to become entrepreneurs, support independent learning programs that can increase their potential in entrepreneurship, enroll in the entrepreneurial activity of *Kampus Merdeka-Merdeka Belajar* program, and choose the entrepreneurship field in the independent study program. In this case, entrepreneurship is one of the learning activities outside of tertiary institutions [50], [51].

In the curriculum of *Kampus Merdeka-Merdeka Belajar*, students have the right to participate in learning outside the study program on campus and outside the campus in various activities such as student exchanges, internships/work practices, teaching assistance in education units, research, humanitarian projects, entrepreneurial activities, independent studies/projects, and building a village/Thematic Real Work Lecture [52]. Through the *Kampus Merdeka-Merdeka Belajar* program, students will have an entrepreneurial spirit and analytical skills; innovative and creative; lifelong learning, responsible, good at adapting; and open-minded [53]. The basic core of educational achievement, especially about spirituality and life values, can be fulfilled by an educator, especially a religious teacher.

Furthermore, the start-up construct (ICT) obtained an AEC score of 5.85, which is categorized as good. This score was achieved because as online entrepreneurs, most students employed e-commerce, such as Bukalapak, Gojek, and Tokopedia which are start-up businesses in Indonesia, business in the service sector will grow rapidly through online business, the existence of technology emerges the ideas of entrepreneurship, technology encourages the entrepreneurship, entrepreneurship is not tied to working time, looking for market potential in the field of technology and information, and easy to find ideas in the field of online business. By using the Technology Acceptance Model (TAM) dimension, namely the perception of convenience, it is easier for them to use information technology for entrepreneurship, thus encouraging them to use IT as an entrepreneur [54].

Furthermore, the previous research conducted by Chaniago and Sayuti [55] provide the recent description regarding the influence of the adoption of social media technology in encouraging the growth of entrepreneurial intentions among Bandung State Polytechnic engineering students. Therefore, through the development of IT entrepreneurs, they transform into "Technopreneurs" who provide an overview of entrepreneurship by using technology-based innovations [56]. The technopreneur concept is based on using technology as an entrepreneurial tool [57], [58]. For example, the emergence of an online application business, a security system business, and so on.

In addition to looking at each construct of entrepreneurial skills, this study also obtained results regarding the influence of gender on students' entrepreneurial skills. Gender is the difference in roles, functions, and responsibilities between men and women which is the result of social construction that can change as time goes by Greene and Kahn [59]. This indicates that men and women can improve their entrepreneurial skills by understanding the different roles, functions, and responsibilities that come from social construction. If the concept of gender is well-understood then it is easy to understand the concept of entrepreneurship as well. Men are usually responsible for financial decisions in various households and are therefore more likely to understand financial concepts better than women [60].

Furthermore, gender sometimes influences the planning and selection of a person's career [61]. This is supported by the results of research done by Nowiński *et al.* [62] that there is a significant relationship between gender and entrepreneurial interest. Gender has a role in moderating the influence of knowledge on entrepreneurial attitudes and interests [63]. In addition, the biological differences between male and female students allow them to develop different attitudes and behaviors. The elaboration of the results of this study explains that the students' interest in entrepreneurship is categorized as good. In addition, it is also found that gender significantly affected entrepreneurial skills. This explains that good entrepreneurial skills are affected by many factors, one of them is gender.

4. CONCLUSION

The conclusion that can be drawn based on the analysis and discussion conducted in this research is that the ASEAN Economic Community score of students of Universitas Terbuka in entrepreneurial skills is 5.62, which is categorized as good. In this case, the instrument used was a digital literacy ability questionnaire consisting of 11 constructs with an average Cronbach alpha value of 0.910 with high criteria. Besides, the results also show that gender significantly affected the students' entrepreneurial skills ($0.043 < 0.05$). Therefore, it is suggested for faculty leaders and rectors to make efforts so that students are willing to develop their entrepreneurial skills, including by providing regular monitoring and evaluation, providing rewards and punishments as well as equitable justice without discrimination, providing training in accordance with their field of interest, giving permission for the students to continue studies. Furthermore, there is also a need for providing training that can support good performance with work coordination and evaluation.

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