

Entrepreneurship in Higher Education Curricula: Evidence from Indonesia

Albet Maydiantoro^{1*}, Ridwan Ridwan², Rias Tusianah³, Tubagus Ali Rachman Puja Kesuma⁴, Usastiaawaty C.A.S Isnainy⁵, M. Arifki Zainaro⁵

¹Universitas Lampung, Indonesia

²SMP Negeri 3 Way Pengubuan, Indonesia

³SMP Negeri 1 Simpang Agung, Indonesia

⁴Institut Agama Islam Negeri Metro, Indonesia

^{5,6}Universitas Malahayati, Indonesia

*Corresponding author: albet.maydiantoro@fkip.unila.ac.id

ABSTRACT

Entrepreneurship education in Indonesian universities does not yet have a clear model. This systematic literature review was carried out by analyzing 15 selected articles (2015-2020) to study the overview of entrepreneurial curricula in universities in Indonesia. The study shows that most of the (8) analyzed papers focused on knowing the effect or relationship of entrepreneurship education on independent variables or using methods with a quantitative approach. However, a small proportion (6) of articles are focused on developing entrepreneurship learning in higher education, and only (3) articles discuss teaching materials and models of entrepreneurship development in universities in Indonesia. Entrepreneurship education in tertiary institutions is related to building entrepreneurial personality, an entrepreneurial mindset, and entrepreneurial habits that are every time creative and innovative, creating added utility or good values, taking benefit of opportunity, and taking hazard. Facing the defiance of highly competitive coming times, entrepreneurial habits is necessary for all occupations or professions. Therefore entrepreneurship education can be implemented in tertiary institutions and applied to all students regardless of the sector of knowledge creature studied. Indonesia has developed a higher education entrepreneurship curriculum by applying technopreneurship, digitalpreneurship, edupreneurship, ecopreneurship, sosiopreneurship materials. Indonesia is a multi-ethnic, multi-cultural and multi-cultural country, but ethnography-based entrepreneurship has never been proposed and studied, so research on the relationship between entrepreneurship and ethnography (ethnopreneurship) needs to be carried out by further researchers to produce local wisdom-based entrepreneurs who can be called Ethnopreneurs.

Keywords

Entrepreneurship education; literature review; College; Curriculum; Indonesia

Introduction

The influence of the flow of globalization has led to various kinds of technology which are now replacing the role of humans as workers (David, 2015; Schwab, 2017), thus leading to possible technological unemployment (Horta, Meoli, & Vismara, 2016; Van Roy, Vértesy, & Vivarelli, 2018) although the technological development is uneven in replacing the workforce in each country. Globally, the number of educated people has always increased, but this has not been matched by an increase in the number of available jobs (Mirandola & Lorenzini, 2016; Simonson, Zvacek, & Smaldino, 2019) So that it causes an increase in the number of unemployed and becomes a very urgent problem to be resolved.

The open unemployment rate in Indonesia is quite high, according to (Statistik, 2019) The open unemployment rate in Indonesia reached 7.05 million or 5.28% of the workforce which reached 133.56 million. 42%, diploma I, II, and III graduates reached 5.99% and higher education graduates, at least S-1, there was 5.67%. To reduce the open unemployment rate, one way that can be done is to develop

an entrepreneurial character as early as possible. In 2017, the number of entrepreneurs in Singapore was 8.76%, Malaysia 4.74%, and Thailand 4.26%, Indonesia with a population of around 260 million, the amount of enterpriser was 3.47%, which means that they are still below Southeast Asian countries (Anggadwita & Dhewanto, 2016; Babbitt, Brown, & Mazaheri, 2015).

The demographic bonus that will occur in Indonesia in 2025 - 2035 will increase the number of people who are of productive age more than the number of people classified as non-productive age (Kustanto, 2020; Slamet, Nakayasu, & Bai, 2016; Wisnumurti, Darma, & Suasih, 2018), However, the challenge of the demographic bonus in Indonesia results in a large number of job seekers and an accumulation of unemployment if not properly prepared from now on (Ahmed, Cruz, Go, Maliszewska, & Osorio-Rodarte, 2016; Gardnier & Gardnier, 2017; Organization, 2015; Turbat, 2017), the readiness that needs to be done is to continue to emphasize educational institutions in producing young entrepreneur candidates so that they can open up employment opportunities for others (Afolabi, 2015; Courtois, 2019).

The biggest challenge for higher education today is that it must be able to result in high-quality output that can synergize with the business world (Agasisti & Bowers, 2017). It is even hoped that these outputs can create new jobs, both for themselves and for others, so that they can contribute to employment and reduce unemployment (Aithal & Aithal, 2019; Fox, Senbet, & Simbanegavi, 2016; Maxton & Randers, 2016). But in fact, the culture of the society in Indonesia still considers being a civil servant a prestige and pride that is still the desire of most college graduates (Garrison et al., 2017). Most college graduates still dream of working as civil servants rather than becoming entrepreneurs, whereas according to (Stanley, 2016; Vandenabeele, Depré, Hondenghem, & Yan, 2015), Currently, the opportunity to become a civil servant is very small and limited, meanwhile if you want to live properly and be rich, the container is entrepreneurship, not a civil servant. This has attracted the attention of university managers to offer entrepreneurship material as a general subject or as part of the curriculum (S. Z. Ahmad & Buchanan, 2015) however, entrepreneurship material is still a phenomenon that is not clearly taught in universities (S. Z. Ahmad, Bakar, & Ahmad, 2018).

Individual success is not determined solely by knowledge and technical skills (hard skills), but rather by the ability to control oneself and others (soft skills). This study states, success is determined by only about 20% of hard skills and the remaining 80% of soft skills (Cimatti, 2016). In building an entrepreneurial spirit and increasing entrepreneurship, the Government of Indonesia has issued Presidential Instruction Number 4 of 1995 concerning the national movement to promote and instill entrepreneurship. This order instructs all people to develop entrepreneurial activities. The government is well aware that the business world is the backbone of the national economy, so efforts must be made to improve sustainably. From this movement, it is hoped that the spirit of entrepreneurship will become part of the culture of the Indonesian people, so that they can get tenacious, strong, and independent young entrepreneurs, especially in universities. In line with this, according to (Kasali, 2013), To build independent young entrepreneurs at the university, students need to change their mindset so that they don't think of being civil servants but are willing and brave to become entrepreneurs. For this reason, it is necessary to make strategic breakthroughs in order to increase the interest, spirit, and entrepreneurial spirit of students (Chen et al., 2015; Kaijun & Sholihah, 2015).

The entrepreneurship curriculum at universities in Indonesia has developed several materials, namely technopreneurship (H. Hidayat, Herawati, Syahmaidi, Hidayati, & Ardi, 2018; Joshua, Swastika, & Primakara, 2018; Saudi, Wijaya & Ichsan, 2016), digitalpreneurship (Radianto & Wijaya, 2018; Soegoto, 2018), sociopreneurship (Lubis, 2016; Widyaningrum, 2018; Yardi & Suryani, 2017), ecopreneurship (Haris, Haryoko, Malago, & Pertiwi, 2019; Lubis, 2016; Martini, Rosdiana, Subekti, & Setiawan, 2018;

Sutiyaniti & Budijastuti, 2018) dan edupreneurship (Nurcahya & Khabibah, 2019; Sahlan, Mansur, & Djoumoi, 2019; Sulisworo, Sulistiyo, & Akhsan, 2017). Therefore, this literature review aims to describe entrepreneurship curricula in universities in Indonesia.

Methodology

This study uses a systematic literature review with the procedures suggested by (Cooper, Hedges, & Valentine, 2019), for literature synthesis. This systematic procedure consists of (a) formulating problems, (b) collecting documents, (c) evaluating the feasibility of documents, (d) analyzing and interpreting relevant documents, and (e) organizing and presenting outputs. Then the output is compared with the problem of current entrepreneurship curricula in higher education institutions in Indonesia.

This article reviews the study of entrepreneurship curricula in universities. The author selects articles published in the journal's academic references from 2015 to 2020 by using Google Scholar. Using Boolean operators (AND, OR, and NOT) (Buchmann, 2020), The keywords used in the search were as follows: University, Curriculum, Entrepreneurship, and Indonesia. The author uses AND as a connector between levels, and uses OR between words at each level. Then the author uses NO to exclude words and concepts from the author search. Article creation was carried out based on the following inclusion criteria:

- The article focuses on Entrepreneurship
- Entrepreneurship is used in a curriculum context
- The curriculum is applied to colleges in Indonesia
- The article was published between 2015 and 2020
- Articles are published in Scopus indexed journals

Overall, the 43 selected articles were further analyzed, with 15 of them specifically meeting the criteria for implementing entrepreneurship curricula in Indonesian universities. Thus, the approach was chosen to provide an analysis of existing data and offer insight into the application of entrepreneurship curricula to Indonesian universities.

Results

The articles analyzed are all those at the college level, with most of them (8) focusing on knowing the influence or relationship of entrepreneurship education on independent variables or using methods with a quantitative approach. However, a small proportion (6) of the articles are focused on developing entrepreneurship learning in higher education, although only (3) articles discuss teaching materials and entrepreneurship development models in universities in Indonesia.

Table 1. Literature Review Matrix

No.	Title, Author, Journal Name and Year	Research Methods	Research Results
1.	Competency-Based Learning for Effective Entrepreneurship Education at the Faculty of Indonesian Business and Management Dyah Kusumastuti Journal of Institutional Research South East Asia JIRSEA 2015	This study explores the entrepreneurial types of students and determines the learning styles that will accommodate them. A leading entrepreneurship researcher adopted the questionnaire, which was randomly distributed to 270 students from the Faculty of Management and Industry, Widyatama University.	The findings showed that students at Widyatama University's Faculty of Management and Business were categorized into four categories, namely, Communicator-Trainer, Advisor-Counselor, Builder-Creator and Entertainer-Host. Entrepreneurial competence, achievement focus, human service, management, experience, administrative and personal effectiveness are the six constructs. While all types of entrepreneurs can not be catered for, a competency-based learning style built from the competencies of the top three or four defined students can influence the alignment that can allow the resulting learning impact. The low percentage of conventional graduates today indicates the promise of this strategy. If asked about their graduation day, the teaching-learning style prefers to be entrepreneurial. Since the implementation of this CBL-style is only recently underway, it is important to carry out longitudinal investigations to ensure the same groups are traced.
2.	Entrepreneurship policy implementation model at PT Indonesia. Mirzanti, Simatupang, Larso, & Situmorang Int. J. Entrepreneurship and Small Business, 2017	The method of reading documents and categorizing entrepreneurial policy initiatives based on material and analytical levels is used in this report (micro, meso and macro levels).	The results show that there are 12 entrepreneurship-related government programs which aim to increase the number of entrepreneurs or new enterprises. The policy is aimed at individuals at the micro level, which includes business skills, the recognition of prospects for skills, and psychological benefits, including self-motivation. At the Meso Level, entrepreneurs are described as an organization that, through an entrepreneurial process, generates added value with content like business incentives and administrative costs. At the macro level, the effect of entrepreneurship affects job creation and the creation of start-ups nationally, where entrepreneurial culture, entrepreneurial infrastructure and education are included in the substance of the policy.
3.	Entrepreneurship-Based Curriculum Development Design through the Balanced Scorecard Approach. Muhammad Hidayat, Chalid Imran Musa, Siti Haerani & Indrianti Sudirman. International Education Studies 2015	This analysis is a qualitative report. Done using the method of research and development. The data was collected through field observations, interviewing respondents who, according to the balanced scorecard concept, were divided into four classes, and documentation. Concerning the curriculum used by STIE Nobel Indonesia and also the discussions of the Focus Group (FGD).	The results of the study found that the core data in the creation of entrepreneurship-based curricula in entrepreneurship are fundamental entrepreneurial skills. According to the balanced scorecard theory, the researchers grouped these skills into four market perspectives. This study shows that the balanced scorecard method can be used at STIE Nobel Indonesia as a tool for mapping curriculum and teaching themes for entrepreneurship.

No.	Title, Author, Journal Name and Year	Research Methods	Research Results
4.	<p>The characteristics of entrepreneurship as a mediation of entrepreneurial education have an effect on entrepreneurial intentions</p> <p>Anik Kusmintarti, Armanu Thoyib, Ghozali Maskie, Khusnul Ashar,</p> <p>Journal Of Entrepreneurship Education 2016</p>	<p>Both students from the State Polytechnic of Malang and Universitas Brawijaya Malang who had been attending entrepreneurship education were the research population. Consideration of the method of sampling used. The data collection method was analyzed using a questionnaire, amounting to 206 data. Descriptive statistics and path analysis were used to evaluate the results.</p>	<p>The findings showed that students who attended entrepreneurship education appeared to develop new companies in the future with entrepreneurial characteristics.</p>
5.	<p>Entrepreneurship Education and Entrepreneurship Role Models: How do they influence entrepreneurial intentions? (Studying in Management and Business Students at the University of Indonesia)</p> <p>Tommy Christian Efrata 2016</p>	<p>Sampling is carried out using a stratified proportional random sampling method; 209 students were the number of respondents. Using generalized structural component analysis (GSCA) software, data was analyzed by structural equation modeling to calculate the relationship and accuracy (suitability) of the model and the Sobel test to detect mediating variables.</p>	<p>The study findings show that entrepreneurship education has an effect on increasing entrepreneurial intentions through the self-perceptions of students regarding entrepreneurial skills (perceived feasibility). Entrepreneurship, on the other hand, has a strong influence on education about negative entrepreneurial intentions. Style of entrepreneurship Public university education is a form of awareness education. This has the ability to cause them to have adverse effects. By mediating expectations and perceptions of perceived worthiness, entrepreneurial role models strengthen the entrepreneurial intentions of students. Entrepreneurial role models do not explicitly influence the intentions of entrepreneurs. The disparity between role models and learners in entrepreneurial characteristics has the potential to be the cause of the low impact between them. The findings of the study indicate contradictions with previous studies exploring the link between education in entrepreneurship and entrepreneurial intentions. In addition, the findings of this study also show the mediating function of the perceived desirability and perceived viability of the relationship between entrepreneurial role models and entrepreneurial intentions that in previous studies received less attention. For managers and stakeholders in entrepreneurship education in universities, the findings of his research are useful in making graduates choose entrepreneurial professions.</p>

No.	Title, Author, Journal Name and Year	Research Methods	Research Results
6.	<p>The Role of Creative Courses in Entrepreneurship Education: A Case Study in Indonesia.</p> <p>Dwi Larso a and Dona Saphiranti</p> <p>International Journal Of Business. 2016</p>	<p>ITB, in collaboration with Goldsmiths, University of London in England, is developing an MBA program in Creative and Entrepreneurship Culture through the School of Business and Management in collaboration with the Faculty of Art and Design.</p>	<p>The program is (1) structured to meet MBA training requirements, (2) highly focused on creating 'right brain' skills through innovation, design, arts, and culture classes, and (3) is highly intended to nurture students through mentoring by entrepreneurs in the development and initiation of their business processes.</p> <p>There were three creative courses developed: (1) Design Thought, (2) Imagination in Art, Design, and Culture, and (3) Contextual Existence. These courses cultivate creative and innovative thinking to produce high-quality goods/services for the market and to introduce students to the abundance of Indonesian arts and cultural products.</p>
7.	<p>Analysis of entrepreneurship programs in higher education (case study of business management institutions at PT Telekomunikasi and Informatics, telkom university - Indonesia)</p> <p>Mariana Yosephine Frima, Astri Ghina.</p> <p>International Journal of Education and Practice. 2017</p>	<p>Study assesses entrepreneurship education initiatives to define learning processes (including EE concepts and goals, content of courses, teaching strategies, and community outreach activities) and tests the effect of learning processes (using entrepreneurial competencies).</p> <p>This research was conducted at Telkom University's Department of Business Management in Telecommunications and Informatics, Faculty of Economics and Business.</p>	<p>The findings are aimed at enhancing the institutional learning process. This study, on the other hand, is expected to help the university achieve its goal of becoming a Global Entrepreneurial University in 2038, especially to create global graduates of entrepreneurship. By growing the role of universities in creating graduates to become entrepreneurs, this study is also expected to increase economic growth.</p>
8.	<p>The Influence of Entrepreneurship Education on Entrepreneurial Intention is Mediated by Motivation and Attitudes among Management Students, State University of Malang, Indonesia.</p> <p>Angga Martha Mahendra, Ery Tri Djatmika & Agus Hermawan</p> <p>International Education Studies. 2017</p>	<p>The study employed descriptive correlation designs and the random sampling of 540 students from three study programs was taken by a proportionate number of 230 students. Windows path analysis is used to analyze the relationship between variables with the use of LISREL 8.50.</p>	<p>The findings show that entrepreneurship is indirectly affected by entrepreneurial education, which means that the motivation and the conduct of students in entrepreneurship is two significant variables.</p>

No.	Title, Author, Journal Name and Year	Research Methods	Research Results
9.	<p>Entrepreneurship education programs as value creation empirical findings of universities in Bandung, Indonesia.</p> <p>Leo Aldianto, Grisna Anggadwita, Aang Noviyana Umbara</p> <p>Journal of Science and Technology Policy Management. 2018</p>	<p>Plan / Procedures / Methods - This research offers objective proof of the effects of EEP inputs and processes. The findings are based on survey information gathered at Bandung University in Indonesia. The questionnaire was collected by a total of 222 respondents. For the evaluation of the proposed hypothesis is used the structural modeling equation.</p>	<p>Findings - This analysis shows the input is linked to the EEP process positively and significantly. The study also showed that the method had a significant and important influence on the production of EEP. Input has meanwhile a detrimental and negative effect on the performance of the EEP. The study found that EEP needs to be incorporated in providing students with insights into how to handle value creation by defining inputs, processes, and outputs.</p> <p>Practical Impacts – From a university and government point of view, this study highlights the most important EEPs for the production of value, i.e. growing the number of young entrepreneurs and business growth.</p>
10.	<p>Learning Entrepreneurship in the Industrial 4.0 era (case study in Indonesian Higher Education)</p> <p>Muhammad Hidayat and Ulani Yunus</p> <p>Journal of Entrepreneurship Education 2019</p>	<p>A complete interview of 60 PT lecturers was performed. Business groups of different universities in Makassar, Indonesia, and Jakarta continued discussions with the focus group (FGD) in order to gain an awareness of the curriculum for productive material in the face of a revolution in industrialism 4.0. This research has four stages: (1) skills mapping stage (2) course planning (3) learning strategies (4) industrial adaptation revolution 4.0 special findings of Jakarta University in Bina Nusantara (participant observation).</p>	<p>In this study, three significant subjects can be grouped: 1) Data Literacy, 2) Tech Literacy, and 3) Human Literacy. It is covered by 40 subjects in seven semesters. This study also indicates that classroom preparation in the form of more rigorous apprenticeship programs should be incorporated into field learning.</p>
11.	<p>Comparative Study of Student Entrepreneurship of UNESA Indonesia and UPSI Malaysia</p> <p>Riza Yonisa Kurniawan, Novi Trisnawati, Yoyok Soesatyo, Osman Jusoh.</p> <p>International Journal of Supply Chain Management 2019</p>	<p>A descriptive analogy with quantitative approach is the tool employed in this study. Samples were taken using a purposeful sampling method to determine the sample or test specimen.</p> <p>In the 2014 survey, the focus of the study was 305 students at the University of Surabaya, Indonesia and 199 at the Faculty of Economics and Management (UPSI), Malaysia, and the Ministry of Education, Malaysia. The students of UNESA and UPSI were selected for this research as each campus offers a degree in economic education.</p>	<p>Duration of the contact is the essential distinction. UPSI has an average contact time of 4.28 > 3.66 higher than UNESA. The student interest in enterprise at UNESA and UPSI is substantially different.</p> <p>The UNESA students have a greater measure of achievement than those of UPSI students (4.19 > 4.05), but UPSI students are more likely than UNESA students to have access to entrepreneurial knowledge (3.93 > 3.78).</p> <p>The results of the study gave the Sultan Idris Education University Malaysia a statistical overview of the environment for learning in the Department of Economic Education, the Faculty of Economics of the State University of Surabaya, and the Faculty of Economics.</p> <p>UNESA values more than UPSI (3.9011 > 3.7519) in the learning environment. Based on the findings from the Paired Sample Test correlation, the environment of entrepreneurial learning in UNESA and UPSI is substantially different.</p> <p>The value of entrepreneurial interest in UNESA is higher than that of UPSI (4.0147 > 3.6692).</p>

No.	Title, Author, Journal Name and Year	Research Methods	Research Results
12.	<p>Developing an Entrepreneurship Model to Improve Students' Entrepreneurial Skills: Project Action Research in Indonesian Universities</p> <p>Blesia, Iek, Ratang, & Hutajulu</p> <p>2019</p>	<p>The students enrolled in a structured course in second year economics, which focuses on entrepreneurship activities and provides them with start-up funding, intensive training, traineeships and the oversight of project team members, undertaken a preneurship project through an action study project.</p>	<p>The results reflect a shift in student attitude, where the strongest and overriding element in training the spirit of enterprise of students is self-confidence.</p> <p>The curriculum makes a significant contribution to the national accreditation criteria of the university and makes entrepreneurship a faculty-wide compulsory subject. The models are initiated by an administrative process defining the interests of students. Then, interviews and in-depth observation will be used for evaluating students' business proposals. This is followed by a phase of implementation, with student entrepreneurial activities as the main project, accompanied by intensive monitoring and evaluation. Institutional commitment and support for the learning environment, financing and coordination between related parties are key contributors to the sustainability of the programme.</p>
13	<p>Impact of entrepreneurship education and student entrepreneurial mindset: the mediating role of attitudes and self-efficacy.</p> <p>Ludi Wishnu Wardana, Bagus Shandy Narmaditya, Agus Wibowo, Angga Martha Mahendra, Nyuherno Aris Wibowo, Gleydis Harwida, Arip Nur Rohman</p> <p>Heliyon</p> <p>2020</p>	<p>The methodology used in this analysis is the random sampling process that is commonly used in the business world for convenience. Neurship Studies. An online survey was carried out by participants recruited from several universities in Malang, East Java in Indonesia and measured using structural equation modeling (SEM).</p>	<p>Current research results show that entrepreneurship education has been effective in shaping entrepreneurs' self-efficacy, entrepreneurial attitudes, and entrepreneurial mindsets. In the other hand, entrepreneurial self-efficacy, rather than an entrepreneurial mentality, is a pro-motive for entrepreneurial attitudes. In addition, entrepreneurial attitudes play an important role in mediating the education of entrepreneurship and self-efficacy in enrolling the preneurial mentality of learners.</p>
14.	<p>The Effect of Entrepreneurship Learning on Entrepreneurial Intentions of Indonesian Women.</p> <p>Charly Hongdiyanto, Theophilus, Timotius Fcw Sutrisno, Putu Sonnia Paramaesyia Dewanti</p> <p>Journal of Asian Finance, Economics and Business</p>	<p>Quantitative approaches and SmartPLS 3.0 are used in this study to support statistical evidence.</p> <p>Indonesian women aged around 17 years and over who had experience of studying entrepreneurship in educational institutions were respondents.</p> <p>Sampling using objective and selective purposeful sampling to help researchers have evidence for generalizing the sample analyzed from a total of 149 respondents</p>	<p>The findings in this study are that, with the aid of two mediations, entrepreneurial attitudes and perceptions of behavior management, entrepreneurship learning affects the entrepreneurial intent of Indonesian women. For Indonesian women, subjective norms have been found to have no major impact on the growth of entrepreneurial intentions.</p>

No.	Title, Author, Journal Name and Year	Research Methods	Research Results
	2020	from different regions in Indonesia, in order to show more detailed results.	
15	Sculpting Factors among Entrepreneurship for University Students in Indonesia. Zakky Zamrudi, Farida Yulianti Entrepreneurial Business and Economics Review 2020	Template & Analysis Methods: The study sample was obtained using an online survey form sent using email and group chat, including 652 undergraduate students distributed across different universities on the five largest islands in Indonesia. In order to investigate the hypotheses suggested in the model, the collected data were analyzed using least squares structural equation modeling (PLS-SEM).	Findings: The findings show that we agree that entrepreneurial self-efficacy shows negligible effects on entrepreneurial intention from the structural model. The greatest impact of the enabling conditions, however, showed more effects on entrepreneurial self-efficacy than on regulation of actions. Implications & Recommendations: The non-significant impact on entrepreneurial intentions of entrepreneurial self-efficacy indicates that having enough entrepreneurial expertise alone is not sufficient to apply it without self-confidence.

Source: Data Analysis 2021

Entrepreneurship Curriculum at Higher Education in Indonesia

The results of this study show that the program is structured to meet educational expectations, education is very focused on developing 'right-brain' skills through innovation, design, art, and culture classes, and aims to inspire students through mentoring by entrepreneurs to build and initiate their business processes (Larso & Saphiranti, 2016). Three innovative courses need to be developed: (1) Design Thinking, (2) Architecture, Design and Culture, and (3) The Qualitative Essence of Innovation and Creativity. These courses cultivate creative and innovative thinking to produce high-quality goods/services for the market and to introduce students to the abundance of Indonesian arts and cultural products (Larso & Saphiranti, 2016).

Another finding is that skill-based learning classifies students into four styles or types, namely, communicator-trainer, consultant-counselor, builder-creator, and host-entertainer. There are then six entrepreneurial constructs, namely (1) entrepreneurial competence, (2) orientation of accomplishment, (3) human service, (4) leadership, (5) experience, (6) management and personal performance. A competency-based learning style that is formed from the competencies of the top three or four students defined as forming the alignment should make the resulting learning successful, although it is not possible to appeal to all types of entrepreneurs. The promise of this strategy is demonstrated by the limited proportion of conventional graduates today. (Kusumastuti, 2015).

Other results suggest that the key data in the creation of entrepreneurship-based curricula are fundamental entrepreneurial skills. According to the balanced scorecard

theory, the researchers grouped these skills into four market perspectives. This research shows that the balanced scorecard approach can be used in Indonesia as a way of mapping curricula and teaching entrepreneurship themes (M. Hidayat, Musa, Haerani, & Sudirman, 2015). In the meantime, other results indicate a shift in the attitude of students, where self-confidence is the largest and most influential factor in the creation of student entrepreneurship (Blesia, Iek, Ratang, & Hutajulu, 2019). The implementation of an entrepreneurial development model is another discovery, with the process beginning with the phase of administration that recognizes student interests. Evaluations are then made of the business plans of the students using interviews and in-depth observation. This is preceded by a period of implementation, with the main project being student entrepreneurial initiatives, accompanied by intense monitoring of mentoring and assessment. The key contributors to the success of the program are institutional involvement and support for the learning environment, funding, and collaboration between relevant parties (Blesia et al., 2019).

Other studies have found that three major literacies, namely 1) Data Literacy 2) Technology Literacy, and 3) Human Literacy, can be grouped into course settings. 40 subjects over seven semesters are included. This study also suggests that classroom learning in the form of a more rigorous apprenticeship program should be incorporated into field learning (M. Hidayat & Yunus, 2019). Based on the literature review conducted, it was found that, with the aid of two mediations, entrepreneurial attitudes and perceptions of behavior management, entrepreneurial learning has an influence on the entrepreneurial intent of Indonesian women. Subjective expectations were found to have no substantial influence on the growth of Indonesian women's entrepreneurial intentions, another finding that entrepreneurship education succeeded in shaping entrepreneurs' self-efficacy, entrepreneurial attitudes, and

entrepreneurial mindsets. In addition, entrepreneurial attitudes play an important role in mediating entrepreneurial education and self-efficacy towards the entrepreneurial mentality of learners (Wardana et al., 2020).

Other findings show that the duration of student interaction, interest in entrepreneurship, ease of access to entrepreneurial information, and learning atmosphere also affect student interest in entrepreneurship (Kurniawan, Soesatyo, Trisnawati, & Jusoh, 2019). Findings A further analysis showed that student feedback was positively and substantially linked to the phase of entrepreneurial education. The study also shows that the method has a positive and relevant influence on the production of education in entrepreneurship. Input, meanwhile, has a negative and negligible effect on the production of education for entrepreneurship. The study concluded that entrepreneurship education should be incorporated to provide students with learning to facilitate business creation by defining inputs, procedures, and outputs to provide insight into how to handle value creation (Aldianto, Anggadwita, & Umbara, 2018). From a university and government perspective, the results are also important, demonstrating the most productive EEPs to generate value for growing the number of young entrepreneurs and generating market.

Other research indicates that entrepreneurial intent is indirectly affected by entrepreneurship education, which means that the entrepreneurial drive and attitude of students are two major mediating factors (Mahendra, Djatmika, & Hermawan, 2017). Other studies show that entrepreneurship education has an impact on increasing entrepreneurial intentions through the self-perception of students regarding entrepreneurial skills (perceived feasibility). Entrepreneurship education, on the other hand, has no direct effects on student entrepreneurial intentions. Awareness education is the type of entrepreneurship education in public tertiary institutions, which can cause adverse effects among students (Efrata, Hadiwidjojo, & Aisjah, 2016).

The use of role models in entrepreneurship is thought to increase the entrepreneurial intentions of students by mediating perceived expectations and beliefs in other results. The consequence, however, is that models of entrepreneurial positions do not specifically impact entrepreneurial intentions. The disparity between student motivation and ability in business characteristics is the source of the low impact on student entrepreneurial intentions (Kusmintarti, Thoyib, Ashar, & Maskie, 2014). The results of the study show discrepancies with previous research examining the connection between education in entrepreneurship and entrepreneurial intentions (Efrata et al., 2016). Also, the findings of this study show that the perceived desirability and expectations of the viability of the relationship between entrepreneurial motivation and entrepreneurial intentions that have received less attention in previous studies have a mediating effect. The findings of this study may be helpful for university entrepreneurship education managers and stakeholders to make graduates choose careers to become entrepreneurs (Efrata et al., 2016; Markley, Lyons, & Macke,

2015; Olugbola, 2017) The findings of this study also show that students obtaining entrepreneurship education appear to have entrepreneurial characteristics in the future to create new businesses (Kusumastuti, 2015; Mahendra et al., 2017)

In other research, it is shown that the application of structural models confirms that entrepreneurship's self-efficacy produces negligible results for entrepreneurial intentions. The biggest effect on entrepreneurial intentions, however, is on entrepreneurial self-efficacy instead of actions (Zamrudi & Yulianti, 2020). The non-significant impact of entrepreneurial self-efficacy on entrepreneurial intentions indicates that it is not enough to have enough entrepreneurial expertise to apply it without self-confidence (Blesia et al., 2019; M. Hidayat et al., 2015; Zamrudi & Yulianti, 2020).

Discussions

Entrepreneurship Development in Higher Education

Discussing entrepreneurship provides various definitions. There are many definitions of entrepreneurship, which in general terms, entrepreneurship can be interpreted as the ability of an individual to create economic opportunities from a small or large scale business idea (Burns, 2016; Markley et al., 2015; Olugbola, 2017). In addition, entrepreneurship can have a good impact on Indonesia's economic development. The more entrepreneurs, the stronger the resilience of the national economy. Entrepreneurs are able to provide a good alternative to reduce and even eliminate the growing unemployment rate. If the number of entrepreneurs increases, of course, the resilience to the economic crisis is expected to increase. In developed countries such as America and Europe, for example, the percentage of entrepreneurs to the total population is almost certain to exceed 2%, which is the ideal minimum number of entrepreneurs if the country wants to be independent (N. Ahmad & Hoffmann, 2008; Bosma & Levie, 2010; Reynolds, Hay, & Camp, 1999).

The entrepreneur is an entity that creates, manages, develops, and institutionalizes the capacity of his own company or someone to see and analyze business opportunities, collects the resources required to take effective action, and take advantage of them to succeed (Aksorn & Hadikusumo, 2008; Coronado & Antony, 2002; Loh & Koh, 2004; Umble, Haft, & Umble, 2003), People who build new companies by finding opportunities and combining the resources necessary to set them up by taking risks and uncertainty for benefit and growth (Cabrera & Mauricio, 2017; Koryak et al., 2015; Venkataraman, 2019).

Entrepreneurship is a science that studies the development and growth of a spirit of imagination and the courage to take risks in order to perform these works (Alonso-Gonzalez, Plata-Rugeles, Peris-Ortiz, & Rueda-Armengot, 2017; Apriana, Kristiawan, & Wardiah, 2019; Bujor & Avasilcai, 2016; Burns, 2016). The bravery to take risks is possessed by an entrepreneur because if the company he is doing does not

have the importance of interest in the market, he must be courageous and ready. There are two positions in the role of an entrepreneur, namely as an inventor and as a planner. New goods, new technology and processes, new concepts, and new business organizations are found and developed by entrepreneurial inventors. In the meantime, entrepreneurship plays a role as a strategist in developing new companies, planning new strategic strategies, planning company innovations and opportunities (Muratovski, 2015; Rogers, 2016; Tukker & Tischner, 2017).

The definition of entrepreneurship refers to the essence, personality, and characteristics of someone who has a strong desire to put new concepts into the real business world and can resiliently grow them (Cacciotti & Hayton, 2015; Holbeche, 2015; Rahdari, Sepasi, & Moradi, 2016). Entrepreneurship is the use of imagination and ingenuity to solve challenges and take advantage of daily opportunities (Ferreira, Coelho, & Moutinho, 2020; Kabukcu, 2015). This is a blend of ingenuity, imagination, and bravery to face the risks of working hard to build and sustain new companies (Apriana et al., 2019; Hill & Davis, 2017; Okpara, 2007).

Entrepreneurship is a soul on the psychological side that has passion, hopes, dares to try, has a deep desire, is imaginative, wants accomplishment, has a vision of life, and is autonomous (Byrne, Fattoum, & Diaz Garcia, 2019; Frederick, O'Connor, & Kuratko, 2018). Anyone, whether merchants, entrepreneurs, employees, or society in general, who is able to control themselves and their environment so that ideas, inventions, new discoveries, imagination, new excitement, and new markets are created will possess this kind of spirit. What we sometimes hear and mean, in general, is that entrepreneurship is the same as or is often synonymous with knowing manufacturing and trading firms. Currently, not only as an entity as an "entrepreneur" but as a person who is able to manage themselves and their environment, the concept of entrepreneurship has evolved so that ideas, inventions, new discoveries, imagination, new excitement, and new markets are created (Rigolizzo & Amabile, 2015; Shu, Ren, & Zheng, 2018; Tidd & Bessant, 2020). Entrepreneurship is something that will result in numerous activities (social, political, educational), company, and business in the soul of an individual, community, and organization. Entrepreneurship is a very wide area of practice, ranging from individual entrepreneurship to social entrepreneurship (Cohen & Peachey, 2015; Kraus, Niemand, Halberstadt, Shaw, & Syrjä, 2017; Rawhouser, Cummings, & Newbert, 2019).

Entrepreneur-Based Education Today, we can no longer teach kids like we used to. Nowadays, educators play an important role in educating or instilling a mentality to become an entrepreneur in addition to parents, it is crucial to be imaginative and inventive in educating (Hasan, Khan, & Nabi, 2017; Jabeen, Faisal, & Katsiolouides, 2017). Education in entrepreneurship will shape students' mentality, attitude, and actions to become true entrepreneurs, directing them to choose entrepreneurship as a career option (Jena, 2020; Otache, 2019; Vodă & Florea, 2019). By growing awareness

about a business and creating psychological attributions such as self-confidence, self-respect, and self-efficacy, education can shape entrepreneurship (Erozkan, Dogan, & Adiguzel, 2016; Hassi, 2016). It is also clarified that 1) Growing the number of skilled entrepreneurs is the goal of developing entrepreneurship in schools, colleges, and communities. 2) Recognizing the potential and strengthening of entrepreneurs to generate the community's capacity and welfare. 3) Among students, students, and society in general, cultivate the spirit, attitude, conduct, and capacity of entrepreneurship. 4) Fostering a strong and strong understanding and orientation of entrepreneurship towards students, students, and society in general (Hoque, Khan, & Mohammad, 2015; Rae & Melton, 2017).

Based on the literature review of journal articles at universities in Indonesia above, it was found that there were no Scopus indexed journal articles that discussed the development of technology-based entrepreneurship material (Technopreneurship) (Ismail, Samsudi, & Widjanarko, 2017; Nurdianto, 2018; Okorie, Kwa, Olusunle, Akinyanmi, & Momoh, 2014; Tatpuje, 2007), digital-based entrepreneurship material (digitalpreneurship) (Aurik & Astri, 2018; Kusuma & Pramesti, 2020; Simatupang, Rustiadi, & Situmorang, 2012), the material on community-based entrepreneurship (sociopreneurship) (Asmahasanah, Ibdalsyah, & Sa'diyah, 2018; Hamam, 2018; Masithoh & Nugraha, 2020; Rani, 2016), environmental-based entrepreneurship material (ecopreneurship) (Kleshchov, 2018; Martini et al., 2018; McEwen, 2013; Sunarti, Hariyono, Setyarsih, Kurnia, & Suyidno, 2020), although it has been found in various international journal articles, it has not been indexed by Scopus. On the other hand, Indonesia is a multi-ethnic, multi-ethnic, multi-cultural and multi-cultural country that has a diversity which can be opportunities and potentials that need to be developed, one of which is by implementing ethnography-based entrepreneurship material (ethnopreneurship).

Conclusion

In tertiary institutions, entrepreneurship education is linked to the development of an entrepreneurial character, an entrepreneurial mentality, and entrepreneurial conduct that is often creative and imaginative produces added value or good value, takes advantage of opportunities, and is willing to take risks. Entrepreneurial conduct is required for every work or career in the face of the challenges of a highly competitive future. Entrepreneurship education can also be incorporated in higher education and extended to all learners, irrespective of their area of expertise. Indonesia has developed a higher education entrepreneurship curriculum by applying technopreneurship, digitalpreneurship, edupreneurship, ecopreneurship, sosiopreneurship materials.

That Indonesia is a multi-ethnic, multi-cultural and multi-cultural country, but ethnography-based entrepreneurship has never been discussed and studied. Therefore, research on the relationship between entrepreneurship and ethnography

(ethnpreneurship) needs to be carried out by further researchers so as to produce entrepreneurs based on local wisdom who can be called Ethnpreneurs.

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