CURRICULUM DEVELOPMENT DESIGN OF ENTREPRENEURSHIP EDUCATION: A CASE STUDY ON INDONESIAN HIGHER EDUCATION PRODUCING MOST STARTUP FOUNDER

Wahidmurni, Universitas Islam Negeri Maulana Malik Ibrahim Malang
Muhamad Amin Nur, Universitas Islam Negeri Maulana Malik Ibrahim Malang
Abdussakir, Universitas Islam Negeri Maulana Malik Ibrahim Malang
Mulyadi, Universitas Islam Negeri Maulana Malik Ibrahim Malang
Baharuddin, Universitas Islam Negeri Maulana Malik Ibrahim Malang

ABSTRACT

This study aims to investigate the concept, implementation, and the review of curriculum development of entrepreneurship education on two Indonesian higher educations that have successfully produced startup founder in Indonesia. This paper employs a case study approach of the qualitative method to fit the objective of this study. The data were collected through interview, observation, and documentation. Concerning data analysis, the researchers did data reduction and data presentation and drew a conclusion or verification that is used for inter-case studies comparison. Besides, the researchers also make use of source and method of triangulation to validate the findings in the present paper.

The results show that:

1. *The concept of curriculum development of entrepreneurship education is located as a mandatory course, elective course, and extracurricular course.*
2. *The curriculum development of entrepreneurship education is implemented by hiring business team with highly qualified, realized, and developed business plan under supervision of the mentor during business practice. In addition, the university also facilitates potential funding and events hosting that enable students to meet prominent policymakers such as the government, private, industry, startup community, and consumers.*
3. *In the process of curriculum development of entrepreneurship education review, the quality assurance institution and the department did meticulous observation on entrepreneurship education course developed through intra-curricular activities. Other business institutions, units, or incubators administering entrepreneurship education program are also involved in supporting such review in the sense that they have fruitful experiences in the investigated case.*

Keywords: Startup, Entrepreneurship Education, Entrepreneurship Curriculum.

INTRODUCTION

Due to the increasing number of global unemployment, the government in several countries demands a more crucial role of universities in responding to the problem. University is considered the main promising actor in decreasing the number of unemployment as it offers an entrepreneurship education program from which prospective entrepreneurs might be born. Many researchers have agreed on similar ideas that entrepreneurship education program is highly

necessary to encourage students' entrepreneurial motivation. They believe that entrepreneurship education program is the essential variable that directly and significantly influences students' entrepreneurial intention (Dogan, 2015; Nakayama, 2016; Turker & Selcuk, 2009; Denanyoh et al., 2015; Carda et al., 2016).

Susilaningsih (2015) further strengthened the result from various research and literature reviews on entrepreneurship education in higher educational institutions across countries. She found that any field of study requires entrepreneurship education in a way that this course may produce entrepreneurial students who are creative, innovative, risk-taking for competitive future, and able to take advantage of opportunities and to create value-added goods or services. The 2008 Interregional Seminar organized by UNESCO (2008) in Thailand even recommended the administering of Entrepreneurship Education program in universities. This course is necessary because it provides the students with the ability and vision on how to access and transform several chances to help them anticipate and respond to social changes.

iPrice is a meta-search site group that operates is South East Asian countries: Indonesia, Malaysia, Philippines, Thailand, Hongkong, and Vietnam. Together with Ventura, one of investment companies, iPrice launches its research findings on the educational background of Indonesian successful startup founders, employing more than 50+ startups and 100 startup founders as the respondents. The parameter of *"success"* used in their research is whenever the start-up founder receives at least type–A funding. The result of the study shows that Bandung Institute of Technology ranked the first in producing startup founders (out of fourteen founders, six of them founded two leading startups), consecutively followed by Bina Nusantara University with eight founders, University of Indonesia with four founders, Taruma Negara University with three founders, and Pelita Harapan University with 2 founders (iPrice, 2017). The success of these five higher educational institutions may be the role model for other Indonesian universities to prepare graduates who can seize current opportunities, especially for some people in the country who do not consider entrepreneurship as a promising career path (Wahidmurni, 2017).

It is different from the learning process of entrepreneurship in higher education institutions in Indonesia in general, in which the orientation of entrepreneurship education does not leads students to have a good intention for entrepreneurship itself (Patricia & Silangen, 2016). Sulastri et al. (2017) also confirms that there is no similarity in terms of the material given in the university, nor within departments in the university. They further state that the implementation of learning model applied in university is less relevant to produce entrepreneurial students who are creative, innovative, risk-taking for competitive future. Moreover, Acs et al. (2018) study, from The Global Entrepreneurship and Development Institute on the attitude, ability, and aspiration aspect of entrepreneurship, places Indonesia in 94 out of 137 countries in the Global Entrepreneurship Index (GEI). Indonesia ranks far below its neighbor, for example Philippines (84), Thailand (71), Malaysia (58), Brunei (53), and Singapore (27).

Kasih (2013) proposes three essential aspects in administering entrepreneurship education in universities. They are: first, firm commitment of the university staffs in positioning the institution as an entrepreneurial university; second, well-designed and specific entrepreneurship curriculum integrated with various supporting activities; third, good ability to design a gradual and sustainable learning process. Furthermore, McClure (2015) reveals four circumstances under which American universities develop and support the transformation of innovative entrepreneurship curriculum as a field of study for all undergraduate students. They are: (1) rapid economic changes which require the improvement of students' entrepreneurial

skills; (2) broader opportunities and stronger demands to learn and practice entrepreneurship, (3) greater interest of university investors to develop innovative entrepreneurship curriculum; and (4) higher aspiration to adopt the success of other universities which have enforced innovative entrepreneurship curriculum transformation.

The above studies suggest the necessity to develop a curriculum model for entrepreneurial education which may equip students with entrepreneurial knowledge and skill to become strong individuals within the dynamic of society. This study affords to find a model for developing entrepreneurship education in Indonesian universities to create the most startup founders. Besides, the results can be used as a reference for other universities interested in conducting entrepreneurship education programs.

LITERATURE REVIEW

Entrepreneurship education aims to provide a learning experience from cognitive, affective, and psychomotor aspects to create the leading entrepreneurs in the future. Thus, several universities have developed a variety of entrepreneurship education programs, some of which are identified by Kuswara (2012) comprising:

1. The establishment of Campus Entrepreneurship Centers.
2. Entrepreneurship Priority.
3. The development of Entrepreneurial Student Programs.
4. Independent Entrepreneurship Programs for students.
5. Skill Enhancement Program for Workers and Productivity for Students.
6. Business Capital Support for Students.

However, only a small proportion of 2,679 private universities and 82 state universities in Indonesia concern about the prominence of entrepreneurship education to change the social mindset.

Zaman (2013) proves the significance of entrepreneurship education to create prospective graduates well-prepared to compete and survive in the future. Students tend to be entrepreneurially more innovative, behaviorally risk-taking, highly-motivated to achieve the dream, and more confident with high internal locus control. Zhou & Xu (2012) provide the following recommendations for the improvement of university entrepreneurship education system in China after comparing the implementation of entrepreneurship education in China and United States:

1. Expanding the definition of entrepreneurship, that entrepreneurship deals with not only business but also entrepreneurial spirit.
2. Launching national strategy to call for active involvement of all stakeholders.
3. Developing a policy framework to emphasize on entrepreneurship in higher education.
4. Providing sustainable funding to support entrepreneurial education activities.
5. Integrating entrepreneurship programs within the course.
6. Developing strong partnerships between higher education institutions, businesses, and other community organizations.
7. Providing intensive training to teachers/lecturers.
8. Providing incentives for faculty members to conduct entrepreneurship education research.

9. Supporting infrastructure such as incubators for business teams.
10. Evaluating the effects of entrepreneurship education and proving its validity on campus.

A study by Seun et al. (2017) shows that entrepreneurial education plays an important role as a moderator variable to increase motivation for entrepreneurship (both intrinsic and extrinsic motives) so that the students are prepared to start a business. Extrinsic motives are found to have a higher impact than the intrinsic ones, to start a new business among students.

Human capital is related to the stock of knowledge and characteristics of an individual (both innate and acquired) which contributes to their productivity (Acemoglu & Autor, 2013). This definition implies that the characteristics can be obtained from educational activities, training, or other activities for self-quality improvement, and this is a part of the human capital investment. It means that schools, colleges, and institutions with education and training programs play an essential role in applying the concept of investment in human resources.

One of the critical components in education is curriculum because it is directly related to the competency standard of university graduates. The curriculum is not only a formulation of the contents with particular objectives of every activity formulated in the academic text in campus, but the entire experience explored by students while taking or completing the education program. Ornstein and Hunkins (Khan & Law, 2015) suggest that curriculum development includes how the curriculum is planned, implemented, and evaluated, as well as the objects, processes, and procedures.

Khan & Law (2015) state that higher education will be ideal provided curriculum development employs an integrative approach. Even though the implications and challenges are rapid due to the dynamic change of workplace and social environment, differences in students' learning and lecture's teaching styles are found, that finding a match between the two is not easy. Therefore, the culture of higher education institutions is an important factor in curriculum development.

Welsh & Drăguşin (2011) conclude that teaching entrepreneurship is not consensually standardized, yet it is generally accepted that the content and pedagogics should target three main characteristics of an entrepreneur and innovator: knowledge, skills, and attitudes. This conclusion was made after they compare the implementation of entrepreneurship education based on successful experience from the University of North Carolina Greensboro United States and the Romanian higher education system in Europe.

CONCEPTUAL FRAMEWORK

A study on student entrepreneurial intentions by Indarti & Rostiani (2008) shows that the difference in entrepreneurial intentions between students of business economics study and those of non-business economic program in Japan, Norway, and Indonesia. Moreover, the entrepreneurship intention of non-economic business students, especially engineering, are higher. This finding turned out to be supported by the position of ITB as the first rank in creating successful entrepreneurs. The finding indicates the need to review the curriculum, especially in the faculties of economics and business, who are unable to increase the interest and intention of student entrepreneurship even though they study economics and business theories and practices.
YEDAC (Young Entrepreneurship-Developing in Action) is a European project, which addresses economic and development challenges, and it has developed tools and frameworks to facilitate and encourage educational programs to focus on entrepreneurship and innovation. They develop a model graphically illustrated as five teeth, each of which is:

1. Entrepreneurship as competence.
2. Real-world learning environments.
3. Participative learning culture.
4. Empowering learning activities.
5. Contextualized curriculum.

Entrepreneurship development activities can only occur if all teeth move simultaneously.

Khan & Law (2015) divide five stages to develop curriculum: the first stage is to comprehend the internal and external environment thoroughly; the second stage is to develop student personal, professional, and institutional competencies; the third stage is to design a curriculum by taking into account the two previous stages; the fourth stage is to determine the most relevant and useful pedagogical strategies; and the fifth is to establish an evaluation mechanism for the follow-up to the implementation of the curriculum. Thus, dynamic, participatory and pro-active institutional leadership are highly necessary to develop an entrepreneurial culture by designing and implementing a model for developing entrepreneurship education curriculum relevant to the need of the society.

RESEARCH METHOD

This study aims to reveal the development model of entrepreneurship education curriculum in Bandung Institute of Technology and Bina Nusantara University, two universities with the most startup founders in Indonesia. The researcher affords to interact and explore the experience of curriculum developers and academicians upon the concept, the implementation, and the overview of entrepreneurship education curriculum development. Qualitative approaches are used because the researcher may take part in the process of collecting and analyzing the data as participants along with informants (Corbin & Strauss, 2015). Since the practice of entrepreneurship education is still ongoing until now, the researcher employs a case study research. Yin (2009) states that a case study is a contemporary empirical investigation in real-life contexts, especially when the boundaries between phenomena and contexts are relatively unclear.

Data are collected through interview, observation, and documentation techniques. In-depth interview techniques are carried out with 11 program managers (8 from ITB and 3 from Binus), 5 lecturers and mentors (4 from ITB and 1 from Binus), and 10 program participants (8 from ITB and 2 from Binus). Observation techniques are used to observe teaching and learning activities, discussions in the incubator room, entrepreneurial fairs and festivals, workshops, and business competition presentations held by government and private parties. The documentation technique is done by reviewing various documents such as catalogs, work programs, and news on the university website.

Data analysis is carried out simultaneously with data collection until the end of the research process. Some of the activities are reducing data, presenting data, and making conclusion and verification that the presented data reflect the patterns of development of entrepreneurship education programs carried out in each university. The validity of the research findings is done through triangulation of data collection techniques and data sources.

RESEARCH FINDINGS

Based on analysis of data from observations, interviews, and documents, cross-site findings are presented in Table 1.

TABLE 1
CROSS-SITE FINDINGS

No.	ITB	Binus	Conclusion
1.	**The Concept of Entrepreneurship Education Curriculum Development**		
a.	The idea of the development is initiated by the leaders (the board member of Majelis Wali Amanah, head of the industrial engineering department) and student activists for the student activity unit	The idea comes from the founders and rectors	The idea of entrepreneurship development comes from the leaders
b.	The implicit vision and mission of the university which contains the values of entrepreneurship and a dream of creating an entrepreneurial university	The implied vision and mission of the university support entrepreneurship as the quality target. The existence of the term *enterprise* and *entrepreneurship* in the formulation of the vision and mission of the university.	The vision and mission of the university which supports entrepreneurship and dream of creating an *entrepreneurial university*.
c.	Creating a curriculum/program development team	Creating a curriculum/program development team	The existence of a team upon developing the formulated program to realize the ideas
d.	Entrepreneurship is made an elective course, and some integrate it with the course	Entrepreneurship becomes a mandatory course for all study programs, and some courses are integrated	Entrepreneurship is offered as mandatory and elective courses, and some courses are integrated
e.	There are units or institutions responsible for overseeing entrepreneurship development programs, which is the School of Business and Management (SBM) as the organizer of the curricular program, the Institute for Innovation and Entrepreneurship Development (LPIK), and the Techno Entrepreneur Club (TEC) as organizers of extracurricular activities.	There is a unit or institution responsible for overseeing entrepreneurship development programs, Binus Entrepreneurship Center (BEC)	There is a unit or institution responsible for overseeing an entrepreneurship development program
f.	The curriculum is designed to give entrepreneurial experience	The curriculum is designed to give entrepreneurial experience	The curriculum is designed to give entrepreneurial experience
g.	Facilitating the participants to meet prospective work partners by holding exhibitions, seminars, or festivals.	Facilitating the participants to meet prospective work partners that enable collaboration through exhibitions, seminars, or festivals.	Facilitating the participants to meet prospective work partners that enable collaboration through exhibitions, seminars, orfestivals.
2.	**The Implementation of Entrepreneurship Education Curriculum Development**		
a.	Entrepreneurship is an elective course and/or integrated in certain subjects. Examples of elective courses are presented in the Faculty of Arts and Design	Entrepreneurship I and Entrepreneurship 2 are university mandatory courses, in addition to 2 other courses in each department that integrate entrepreneurship.	Entrepreneurship courses are compulsory subjects, elective courses, or integrated in other subjects

	Entrepreneurship (2 Credits) **Topics:** Business motivation; Indonesian and world entrepreneurs; Cooperative; Corporate legal entity; Innovation and creativity; Business and business feasibility studies; Business financing; Franchise; Product design and packaging; Export; Marketing of products and services; marketing training. An example of entrepreneurship is integrated in the subject of the Mechanical Engineering Study Program, the name of the course: Engineering Economics and **Management (2 Credits)** **Topics:** Engineering and Business World, Guest Lecture in Business World, Business Structure of Business Costs, Product Development, Prototyping, Product Excellence Analysis, Guest Lecture on Product Development to Production, Patent & Company Establishment, Calculation of Production Costs, Feasibility Studies, Business Management, Cash Flow and Balance Sheet.	**Entrepreneurship I (2 Credits)** **Topics:** Identify the innovative business ideas; value proposition of the created business idea; Assess the value proposition of the created business idea. Topics: Why Entrepreneurship?; Ideation and Market Research; Customer Profile; Value Proposition and Value Proposition Design; Customer Profiling and Value Proposition: Class Workshop; Effective Presentation and Negotiation Skill; Presentation and Negotiation: Class Workshop; Prototyping; Understanding Your Customer; Assessing Our Value Proposition; Business Model Design; Aligning Value Proposition to Business Model; Business Model Design: Class Workshop. **Entrepreneurship II (2 Credits)** **Topics:** Create an innovative business model; Generate business strategies to make a sustainable business; Assess the requirement for starting up a business. Topics: Introduction, Value Propositions, & Customer Segments; Business Model Overview; Channels & Customer Relationship; Marketing; Operational; Key Resources, Key Activities, Key Partnerships; Revenue Streams & Cost Structure; Finance; Prototyping; Business Model Patterns; Investment; Intellectual Property Right; Final Presentation.	
b.	Entrepreneurship is implemented in the study programs that set it as mandatory subjects, and that integrate them into specific subjects.	All study programs provide Entrepreneurship I and Entrepreneurship 2 courses, in addition to 2 other courses integrated with entrepreneurship.	Some make entrepreneurship mandatory, and some make it elective. Also, some integrate it into specific subjects.
c.	Implementing team-based learning and business practice	Implementing team-based learning and business practice	Implementing team-based learning and business practice
d.	The course is supervised by lecturers with business background, and some run a business	The course is supervised by lecturers with various background, but they run a business	The course is supervised by lecturers with business background, or those without business background, but running their own business
e.	Alumni are involved in some programs as speakers	Alumni are involved in some programs as speakers	Alumni are involved in some programs as speakers
f.	Mentors are provided in a business incubator program whose job is to give assistance and consultation that they	Mentors are provided in a business incubator program whose job is to give assistance and consultation that	Mentors are provided in a business incubator program whose job is to give

	are facilitated along the process of developing their business	they are facilitated along the process of developing their business	assistance and consultation that they are facilitated along the process of developing their business
g.	Organizing various activities to support the participants to develop their business, such as festivals, exhibitions, seminars. The activities are usually integrated (the business ecosystem is very supportive).	Organizing various activities to support the participants to develop their business, such as festivals, exhibitions, seminars. The activities are usually integrated (the business ecosystem is very supportive).	Organizing various activities to support the participants to develop their business, such as festivals, exhibitions, seminars. The activities are usually integrated (the business ecosystem is very supportive).
h.	Entrepreneurship courses are carried out theoretically and practically. Entrepreneurship activities are applied with business practices both internally and externally.	Entrepreneurship courses are carried out theoretically and practically. External business activities are conducted in an incubator program.	Entrepreneurship Courses are conducted theoretically along with the business practices
3.	**The Overview of Entrepreneurship Education Curriculum Development**		
a.	The review of the Entrepreneurship Curriculum as a course is audited by a Quality Control unit as the common subject; but the business practices are evaluated by the study program. Entrepreneurship is an extracurricular activity; curriculum review is carried out by the institution/unit based on the experience of the previous business team.	The curriculum is reviewed by the Quality Management System (QMS) unit. The working scope also ensures that quality objectives 2/3 of Binus University graduates work as entrepreneurs and/or work for global companies.	The curriculum of entrepreneurship as a course is reviewed by the institution/ university quality assurance unit like other academic programs, while those held by institutions/units as extracurricular activities reviewed by the respective institution.
b.	Evaluation System: Intracurricular: Multicomponent include: a) Independent/group assignments: Homework, projects, journaling; b) Exams: Final Semester Exams, Middle Semester Exams and quizzes; c) Practicum. Extracurricular: Business team progress reports periodically to mentors and follow-up depending on their agreement.	Evaluation System: Intracurricular: Subjects that have a practical work: Final Score of Semester (FSS) = (FST x% Weight of Theory) + (FSP x% Weight of Practical Work) Extra-curricular: Business team progress reports periodically to mentors and follow-up depending on their agreement.	Entrepreneurship as an intracurricular activity evaluation system is similar to other subject evaluation systems by considering the weight of theory and practical activities, while Entrepreneurship as an extracurricular activity of the evaluation system depends on the progress of the business program carried out and assessed by the mentor.
c.	Changes in team formulation that previously consist of only one study program to cross-study programs under the advice/ideas of the rector. It is intended to gain the process of graduate growth for a career as an entrepreneur	An effort to create a team consisting of cross-study students from the beginning of the "Entrepreneurship 1" course. It may increase the solidity of the business team from the beginning to the business incubator.	An awareness towards the need of business team from across science to accelerate the target of graduates for careers as entrepreneurs.

The findings of this research can be described with the model as seen in Figure 1.

RESULTS AND DISCUSSION

The Concept of Entrepreneurship Education Curriculum Development

The research findings show that the curriculum development concept of entrepreneurship education is initiated by the leader. The leader plays a vital role within the dynamic changes of era due to the responsibility to succeed the organization. Leadership has a central role in the evolution and growth of organizations. The process of organizational changes requires highly capable and competent leadership to understand the most desirable forms of organization and to address the problem most appropriately. Abbas & Asghar (2010) found that complex organizational changes can effectively be managed by leadership with *"vision"* and *"innovative approaches"* along with other characteristics. The long-term key to organizational success in facing changes is innovation within the organization. Leithwood (2004) suggests two different approaches a leader can apply to succeed in cultural and socioeconomic contexts for integrated leadership. The first approach is to implement proven and best policies and initiatives available to serve students, such as developing a diverse and sustainable curriculum. The second approach is leadership aims to ensure that other identified policies and initiatives are fairly implemented. Both are well implemented in two research sites, such as the ideas and policies to build units/institutions responsible for developing an entrepreneurial culture, and facilitating the units/institutions formed with various facilities so that development programs of entrepreneurial culture are realized in the university.

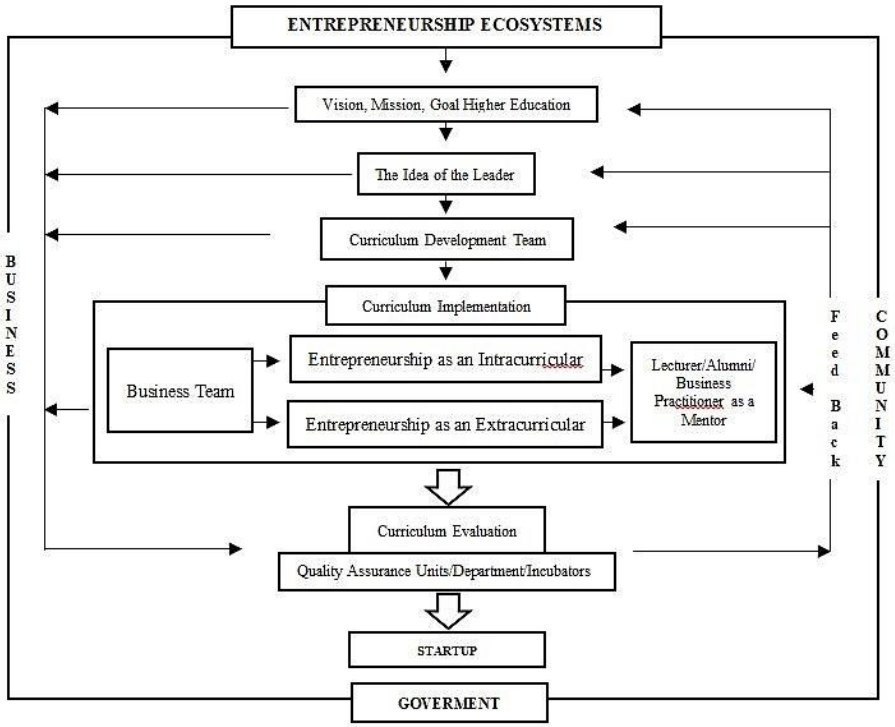

FIGURE 1
THE MODEL OF ENTREPRENEURSHIP EDUCATION CURRICULUM DEVELOPMENT IN THE UNIVERSITIES WITH THE MOST STARTUP FOUNDER IN INDONESIA

The idea of developing entrepreneurship education is explained in the formulation of the university's vision and mission and the dream of the university's rector/leader to create an entrepreneurial university. It strengthens the study of Kasih (2013) that the important point for the implementation of entrepreneurship education in higher education is the strong commitment of the academics in branding a university as an entrepreneurial university.

The leader's idea is then developed by a development team appointed by the rector to formulate the curriculum design and the achievement process. The experience of every university is distinct, for example ITB, whose entrepreneurship is developed as the elective course in all study programs, except the entrepreneurship study program managed by SBM. In addition to the study program, they integrate entrepreneurship into certain subjects. In addition, LPIK and TEC are also the organizers of the entrepreneurship program to provide services to academics who have an interest in entrepreneurship, while entrepreneurship in Bina Nusantara University is a mandatory subject for all study programs in two courses. Moreover, two additional courses integrated with entrepreneurship are provided. It is in line with the finding of Ibrahim et al. (2016) which reveals that the enthusiasm and motivation of entrepreneurial students can be achieved with the following steps:

Entrepreneurship as a special subject in the education curriculum.

1. The need for different reorientation so that entrepreneurship courses can increase the students' courage to run a business.
2. Entrepreneurship as an extracurricular activity.
3. Integration of various subjects under the education of a company, so that the courage for being an entrepreneur increases.

The similarity in curriculum development in both universities is giving a huge portion for students to do business practices. Students are facilitated with many theory review and business practice experiences by running a business in groups/teams guided by a mentor. It is intended to bring them together with business practitioners prospective to be partners (as potential investors, consumers, or others). The forums enabling them to meet are exhibition, seminar, and festival and generally the programs are run together. Through the activities, they have experience handling a business. This business experience is the key to create a successful graduate ready to choose entrepreneur as a career. It supports the evaluation of Pretorius & Wlodarczyk (2007) on an entrepreneurship training program organized by the Danish Ministry of Manpower that the main strength of the program is the use of experiential approaches that require learners to create a new real business.

The role of a mentor in business practice is giving considerations to solve the problems of the business team. The final decision is still on them. Therefore, curriculum in business practice is based on the request or problem of the business team. Blass (2018) concludes that there is no traditional curriculum in entrepreneurship education although students can easily be directed. Assessment allows students to develop their own propositions and to make decisions for the next step. Learning design starts by exploring

"What they need to experience" and "what they have to prove they have been through the learning process". A curriculum is needed here.

Such conditions also occur in China, in response to the need to create significant innovation and entrepreneurship culture, and the role of formal education is the most prominent to achieve it.

The former Dean of the Shanghai Tech Entrepreneurship and Management School recommends combining the core need of curriculum design to educate innovative talents by:

1. Offering experience-based courses with student-centered design.
2. Exposing real problems to students.
3. Providing entry points for students to think innovatively in solving business problems (Lee & Yuan, 2018).

The Implementation of Curriculum Development of Entrepreneurship Education

Since the beginning, the students have to join the business team in entrepreneurial business practice activities. They are responsible for designing the business plan until it is well-developed. Different processes are found in the formation of business teams. If entrepreneurship is a course, members of the business team contain students from one study program, while that in an extracurricular activity, the business team contains participants from across the study programs. Team-based learning is deemed appropriate due to cooperation made to achieve the business goals. This finding supports Chad's (2012) study which concluded that Team-Based Learning proves effective in stimulating and enhancing student learning experiences. The results of his research also recommend that marketing educators use the team-based learning strategy create an effective and interesting class.

Entrepreneurship, as either intra or extracurricular activities, emphasizes business practices, and this activity proves to be able to develop students' abilities and interests to go on with their business projects. It is in line with the findings of Ghadas et al. (2014) that business practices are the most preferred learning techniques so that entrepreneurship education can increase the interest to be entrepreneurs. Besides, Olokundun et al. (2017) show that experience-based pedagogy significantly influences students' vision to identify business opportunities as an indication of entrepreneurial intentions. It means that learning through experience can motivate students to identify business opportunities as a manifestation of the success of the entrepreneurship program.

ITB, within entrepreneurship learning process, involves teachers with a business background, even some run businesses. Besides, Entrepreneurship courses in Bina Nusantara University are taught by lecturers with diverse scientific backgrounds, but they run a business. Alumni who succeed in business are involved for activities and mentors. The mentor in the business incubator program is responsible to provide assistance, consultation, and facility towards the teams to develop their business. The role of the mentor is very crucial for business growth. A survey report of The Startup Studio, KPMG Slovakia (2016), proves the existence of a mature ecosystem and the involvement of experienced entrepreneurs who have succeeded as mentors and investors in some new Startups, and this is highly encouraging.

In addition to emphasizing business practices, universities also facilitate the participants to meet prospective work partners (potential investors, consumers, and fellow startups) that lead into a collaboration to hold exhibitions, seminars, and festivals. The facility is an effort to provide a conducive climate for business teams to grow and develop optimally. It is in line with the findings of Ghina et al. (2017) that entrepreneurship education is effective at SBM-ITB because this educational institution provides much internal support for the learning process. The supports are: providing a center for entrepreneurship, internal and external funding to take part in competitions, internal and external training, financial and non-financial inputs provided to the academic community.

It also happens to students in some universities or other institutions in Malaysia, such as Persatuan Usahawan Muda Malaysia (PUMM), Youth Entrepreneur Society (YES), Kreative Entrepreneurs Association Malaysia (KREAM), and the students actively join entrepreneurship. Data show that 84% of students involved in this entrepreneurship program have an interest in entrepreneurship (Ghadas et al., 2014). Fernández-Nogueira et al. (2018) in their study on the good practices at two Spanish universities, the University of the Basque Country and the Oliva University Century shows that both have made collaboration by creating a network of state industrial university, using knowledge-based economics and connecting social with *"triple helix"*, which is previously only doing education and research on entrepreneurship.

Business ecosystems play an important role in the growth of start-up entrepreneurs from both universities. The involvement of external parties such as industry and government through the Creative Economic Agency, Indonesia Stock Exchange, for example, can encourage the growth of start-ups through various competition events and workshops. Khan (2016) explains that the Saudi Arabian government has taken a proactive stance in developing entrepreneurial ecosystems and startup landscapes, and highlight the transformation of ecosystem strategies.

The Review of Developing Entrepreneurship Education Curriculum

The review on entrepreneurship education curriculum as a course is conducted by quality assurance institutions of a respective university, while that as extracurricular activities are monitored by the respective unit/institution based on the previous curriculum. One of the different results of the curriculum review is that the students' growing awareness to build a business team from across study programs. It happens to entrepreneurship education as a course, while that as an extracurricular already has team members from across the study program. The fact that diverse scientific background of this team members is a lot novel may strengthen the study of Horwitz's (2005) theory of cognitive resource diversity, hypothesizing that there is an overall positive relationship between diversity and team performance. It concludes that the composition of the right individual attributes dramatically determines the success of teamwork. The unique characteristics and strengths of the members essentially determine the quality and effectiveness of teamwork. Thus, an organization is supposed to understand that the synergistic effects of individual characteristics on team performance can only be achieved through coordinating and integrating diversity into one cohesive entity. The survey of The Startup Studio related to Startup Ecosystem shows that those who work in teams (containing three or more people) have more successful opportunities (KPMG, 2016). This is due to the combination of various skills and backgrounds of the members.

However, Lacerenza et al. (2018) state that effective teams need to be prepared with knowledge, skills, and attitude in both individual and team level so that they can carry out high-quality working processes and to fulfill the growing performance guidance. Therefore, team members must also show their competence and the capabilities of the leader. Besides, the team is supposed to be involved in the effective interpersonal processing of the team.

CONCLUSIONS

The university develops the entrepreneurship education curriculum under the vision and mission that locate entrepreneurship as a part of the targeted goal. Besides, the university also dreams to be an entrepreneurship university. The ideas are further developed by curriculum developer in lower stages, such as the department, to produce the concept of entrepreneurship as

intra-curricular and extracurricular activities. In the former form, the entrepreneurship is offered as a mandatory or elective course, and meanwhile, in the latter form, the entrepreneurship is given as entrepreneurship program for students with a high interest in it.

The implementation of the entrepreneurship program is initiated with business team input, comprising of making the business plan and doing the business project. Mentors accompany the students during the practice and provide them with sufficient supervision and introduce them with a potential working partner. Also, the university facilitates business team with workshop, exhibition, and meeting with stakeholders such as government or company. The business ecosystem plays an essential role in encouraging the development of the startup. The university also conducts many programs that enable startup entrepreneurs to study, compete, and get funding and guidance from competence institution.

The review and evaluation of the curriculum in universities providing entrepreneurship education as an elective or mandatory course is conducted through Quality Assurance. Meanwhile, evaluation of the entrepreneurship program as an extracurricular activity is made by the respective unit or institution based on the provided history of services. The evidence of the curriculum review on entrepreneurship education as an intra-curricular activity is the composition change of the team members, who were from the same program of the study to the inter-department member. Whilst, the evidence of the curriculum review on entrepreneurship education as extracurricular activities is the flexibility of material change following the needs of the business team.

REFERENCES

Abbas, W., & Asghar, I. (2010). *The role of leadership in organizational change: relating the successful organizational change to visionary and innovative leadership*. Master's Thesis in Industrial Engineering and Management, Faculty of Engineering and Sustainable Development, University of Gavle.

Acemoglu, D., & Autor, D. (2013). *The basic theory of human capital: Lectures in labor economics* (Chapter 1), Massachusetts Institute of Technology.

Acs, Z.J., Szerb, L., Lafuente, E., & Lloyd, A. (2018). *The global entrepreneurship index 2018.* Washington, D.C., USA: The Global Entrepreneurship and Development Institute.

Blass, E. (2018). Developing a curriculum for aspiring entrepreneurs: What do they really need to learn? *Journal of Entrepreneurship Education, 21*(4), 1-14.

Carda, A.Z., Kageyama, K. & Akai, K. (2016). Effects of risk attitude, entrepreneurship education and self-efficacy on entrepreneurial intention: a structure equation model approach to entrepreneurship. *International Review of Management and Business Research, 5*(4), 1424-1433.

Chad, P. (2012). The use of team-based learning as an approach to increased engagement and learning for marketing students: A case study. *Journal of Marketing Education, 34*(2), 128-139.

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research techniques and procedures for developing grounded theory, fourth edition.* Los Angeles: SAGE Publications, Inc.

Denanyoh, R., Adjaei, K., & Nyemekye, G.E. (2015). Factors that impact on entrepreneurial intention of tertiary students in Ghana. *International Journal Business and Social Research, 5*(3), 19-29.

Dogan, E. (2015). The effect of entrepreneurship education on entrepreneurial intentions of university students in Turkey. *Ekonometri ve Istatistik e-Dergisi*, (23), 79-93.

Fernández-Nogueira, D., Arruti, A., Markuerkiaga, L., & Sáenz, N. (2018). The entrepreneurial university: A selection of good practices. *Journal of Entrepreneurship Education, 21*(3), 1-17.

Ghadas, Z.A.A., Muslim, H., & Hamid, Z. (2014). "Legal eagle" entrepreneurship education for law students: Special reference to International Islamic University Malaysia. *Pertanika Journal of Social Sciences & Humanities. 22*(S), 83-98.

Ghina, A., Simatupang, T.M., & Gustomo, A. (2017). The relevancy of graduates' competencies to the effectiveness of entrepreneurship education: A case study at SBM ITB–Indonesia. *Journal of Entrepreneurship Education, 20*(1), 1-24.

Horwitz, S.K. (2005). The compositional impact of team diversity on performance: Theoretical considerations. *Human Resource Development Review, 4*(2), 219-245.

Ibrahim, A.Z., Khan, S.J.M., & Anuar, A.R. (2016). Do young inspire to be an entrepreneur? A case of secondary students perception in Malaysia. *International Review of Management and Marketing, 6*(S8), 264-269.

Indarti, N., & Rostiani, R. (2008). Student entrepreneurial intentions: Comparative studies between Indonesia, Japan and Norway. *Jurnal Ekonomika dan Bisnis Indonesia, 23*(4), 369-384.

iPrice. (2017). *Educational Background Founder of Successful Startup Indonesia***.** Retrieved from https://iprice.co.id/trend/insights/latar-belakang-pendidikan-pendiri-startup-sukses-indonesia/

Kasih, Y. (2013). Realizing entrepreneurship education in universities through a continuous learning process. *Forum Bisnis dan Kewirausahaan Jurnal Ilmiah STIE MDP, 2*(2), 164-181.

Khan, M.A. & Law, L.S. (2015). An integrative approach to curriculum development in higher education in the USA: A theoretical framework. *International Education Studies, 8*(3), 66-76.

Khan, M.R. (2016). Entrepreneurship ecosystem evolution strategy of Saudi Arabia. *International Entrepreneurship, 2*(2), 67-92.

KPMG. (2016). *Startup ecosystem survey.* Slovakia: The Startup Studio.

Kuswara, H. (2012). *The strategy of universities embodies entrepreneurial campus.* Retrieved from www.ristekdikti.go.id.

Lacerenza, C.N., Marlow, S.L., Tannenbaum, S.L., & Salas, E. (2018). Team development interventions: Evidence-based approaches for improving teamwork. *American Psychological Association, 73*(4), 517-531.

Lee, R.M., & Yuan, Y.S. (2018). Innovation education in China: Preparing attitudes, approaches, and intellectual environments for life in the automation economy. In: *Higher Education in the Era of the Fourth Industrial Revolution*. Palgrave Macmillan, Singapore, 93-119.

Leithwood, K., Louis, K.S., Anderson, S., & Wahlstrom, K. (2004). *Review of Research: How leadership influences student learning*. Canada: Ontario Institute for Studies in Education at the University of Toronto.

McClure, K.R. (2015). Exploring curricular transformation to promote innovation and entrepreneurship: An institutional case study. *Innovative Higher Education*, *40*(5), 429-442.

Nakayama, T. (2016). Entrepreneurial intention in Japan: An empirical study on Japanese university students. *International Journal of Business and General Management*, *5*(3), 81-96.

Olokundun, M.A., Ibidunni, A.S., Peter, F., Amaihian, A.B., Moses, C.L., & Lyiola, O.O. (2017). Experiential pedagogy and shared vision: a focus on identification of business opportunities by Nigerian university students. *Journal of Entrepreneurship Education*, *20*(2), 1-12.

Patricia., & Silangen, C. (2016). The effect of entrepreneurship education on entrepreneurial intention in Indonesia, *DeReMa Jurnal Manajemen*, *11*(1), 67-86.

Pretorius, M., & Wlodarczyk, T. (2007). Entrepreneurial training curriculum assessment: the case of new venture creation learnerships: Management. *South African Journal of Economic and Management Sciences*, *10*(4), 504-529.

Retrieved from http://www.yedac.eu/media/5565/yedac_korttekst_UK_web.pdf.

Seun, A.O., Kalsom, A.W., Bilkis, A. & Raheem A.I. (2017). What motivates youth entrepreneurship? Born or made. *Pertanika Journal of Social Sciences & Humanities*, *25*(3), 1419-1448.

Sulastri., Wahab, Z., & Sununianti, V.V. (2017). Relevance of materials and methods in entrepreneurship learning processes at higher education levels. *Matrik: Jurnal Manajemen, Strategi Bisnis dan Kewirausahaan, 11*(1), 26-39.

Susilaningsih. (2015). Entrepreneurship education in college: Important for all professions? *Jurnal Economia, 11*(1), 1-9.

Turker, D. & Selcuk, S.S. (2009). Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, *33*(2), 142-159.

UNESCO. (2008). *Final report: Inter-regional seminar on promoting entrepreneurship education in secondary schools.* Thailand: 11-15 February.

Wahidmurni. (2017). Overcoming business obstacles: A case study of young entrepreneurs in Malang. *Pertanika Journal of Social Sciences & Humanities*. *25*(S): 145-154.

Welsh, D.H., & Dragusin, M. (2011). Entrepreneurship education in higher education institutions as a requirement in building excellence in business: The case of the University of North Carolina at Greensboro. *Forumware International*, *1*, 266-272.

Yin, R.K. (2009). *Case study research, design and methods.* London: SAGE Publications.

Zaman, M. (2013). Entrepreneurial characteristics among university atudents: Implications for entrepreneurship education and training in Pakistan. *African Journal of Business Management, 7*(39), 4053-4058.

Zhou, M., & Xu, H. (2012). A review of entrepreneurship education for college students in China. *Administrative Sciences, 2*(1), 82-98.