

Incorporating entrepreneurship education into curriculum: case studies from the University of Surabaya, Indonesia and Tokai University, Japan

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ABSTRACT: One of the happening topics discussed in various seminars, workshops and even echoed by the government is creating new entrepreneurs, especially from university graduates. The problem is even business schools are not focused on equipping students with entrepreneurial knowledge and skills. This problem needs to be handled systematically. One of the efforts to equip the students is by incorporating the entrepreneurship concept and practice into the university curriculum. This paper presents various approaches to equip students in understanding the concepts, knowledge and even skills of entrepreneurship in order to obtain strategic efforts to increase the number of entrepreneurs significantly. Broadly speaking, the concept, knowledge, and skills of entrepreneurship should be incorporated into the university curriculum so that its output can be monitored and evaluated. This paper uses a case study from the Supply Chain Management course taught at the University of Surabaya, Indonesia and from the marketing course taught at Tokai University in Japan.

Keywords: entrepreneur, entrepreneurship, curriculum, supply chain management

1 INTRODUCTION

According to the Indonesian Central Bureau of Statistics (the BPS) in February 2016, the number of unemployed university graduate reached 695,000. That number rose 20 percent compared to the February 2015 data. This relatively high unemployment number contributed significantly to the growth of national unemployment that hampered the country's economic growth. High unemployment occurs because the absorptive capacity of employment is not proportional to the number of graduates who tend to only work on an established organization. Realizing that, it is necessary to create new jobs to accommodate university graduates who have not been employed in order to avoid a new problem for the country. Based on the BPS data, Indonesia's entrepreneur ratio is only 3.10 percent of the total population. This ratio is still far behind the neighboring countries like Malaysia with 6% ratio and Singapore with 7% ratio (the BPS 2016).

The same thing happens in the University of Surabaya (Udaya) as evidenced by 50% of fresh graduates attended an on-campus job and recruitment fair

offered by dozens of companies annually. Recognizing the above condition, Indonesian Ministry of Research Technology and Higher Education (Kemendikdik) intensifies entrepreneurship training programs for university students nationwide. However, the number of qualified students is less than 0.1% of the total Indonesian students each year. The Udaya as a private university with students from various backgrounds has been implementing policies to equip students with the entrepreneurial concept, knowledge, and skills systematically and it is done formally by incorporating entrepreneurship education into the curriculum.

In Japan, Ministry of Education, Culture, Sports, Science, and Technology (MEXT) has launched the grant program (EDGE (2014-16)) to promote educational projects at universities which foster entrepreneurs who create jobs in the future. Despite good outcomes of various projects conducted at universities throughout the nation, the number of university graduates who became entrepreneurs was still low.

This paper discusses the process of incorporating entrepreneurship into the curriculum and examples of its application in the Supply Chain Management

course delivered at the International Business Networking (IBN) program of Ubaya Faculty of Business and Economics (FBE). The paper also demonstrates some feedbacks from a business and marketing seminar course taught at Tokai University in Japan.

According to Kirby (2004), the word “entrepreneur” formerly came from the French verb “*entreprendre*” meaning “to undertake”. In other words, an entrepreneur refers to individuals who undertake something to make things happen. Lumsdaine & Binks (2003) scrutinize different perspective as they depict entrepreneurs as individuals who drive business, create new jobs and are very essential to the economy.

Entrepreneurship refers to a dynamic process of vision, change, and creation that requires an application of energy and passion towards the creation and implementation of novel ideas and innovative solutions. Key components of entrepreneurship include the willingness to take estimated risks in terms of time, equity, or career; the ability to formulate an effective business enterprise team; the creative skill to manage relevant resources; essential skills of building solid business plan; and finally, the vision to utilize opportunities where others see chaos, contradiction, and confusion (Kuratko & Hodgetts 2004).

In order to stimulate entrepreneurship, Klofsten (2000) propose three primary activities that can be done by a university. Firstly, activities to nurture and sustain an enduring entrepreneurial culture at the university and ensuring it as an integrated part of all courses, researches, and external activity. Secondly, the provision of distinctive entrepreneurship programs for students. Thirdly, the possibility of certain training programs for those who are willing to run their own business.

Definitions of curriculum might be varied, according to the different conceptions of education, the functions, and types of the schools. The recent study of Offorma (2017) defines curriculum as a program that covers the program of studies, program of activities, and program of guidance. People cannot confer about curriculum without referring to the program of studies, which is seen in form of subjects, contents, subject substances and bodies of knowledge. The program of activities implies all the learning experiences learned by the students.

Based on the aforementioned definition, on this paper, we conclude that entrepreneur is someone who possesses the attitude, skills, and knowledge to develop an activity or business with the courage to undertake and accept the risk of the decision that he made. To help instilling entrepreneurship defined as a dynamic process of vision, change, and creation that requires an application of energy and passion

towards the creation and implementation of novel ideas and innovative solutions to students, the learners must be equipped with entrepreneurial knowledge and given hands-on/practical experiences in the real world. The authors believe this process can be implemented in a university through a clear and systematic curriculum. The curriculum should include critical thinking, conceptual thinking and learning experiences for students.

2 RESEARCH METHODS

This paper used a case study from the Supply Chain Management course taught in the Ubaya IBN and Industrial Engineering study programs. The Supply Management course is one IBN course, which is an undergraduate program delivered under the Ubaya FBE and the Industrial Engineering that is an undergraduate program under the Ubaya Faculty of Engineering.

For the purposes of this study, the authors applied four (4) stages as the process to incorporate entrepreneurship into the curriculum. They are evaluating and analyzing the needs of a curriculum oriented to the market need, focused on the evaluation and analysis of the market need towards an entrepreneurship curriculum collected through questionnaires from stakeholders. The second stage, benchmarking successful entrepreneurship programs of organizations and individuals, looked at other successful entrepreneurship programs and determined key success factors that are applicable to the curriculum. The third stage, preparing the substance of entrepreneurship materials that will be incorporated into the curriculum, focused on ensuring the market needs and key success factors are incorporated into the curriculum and exemplified into the materials. The final stage, implementing the curriculum through limited case studies that are evaluated for full implementation, emphasized on monitoring and evaluating the implementation of the curriculum by taking a case study as a pilot project that can be applied throughout the university.

3 RESULTS AND DISCUSSIONS

a. *Evaluating and analyzing the needs of a curriculum oriented to the market need*

Ubaya began to deliver an entrepreneurship course since 2008. In 2010, the university assigned a task team to conduct a survey about the actual market needs towards entrepreneurship to design a proper entrepreneurship course and curriculum. The survey report shows:

1. 30% of students are interested to be an entrepreneur after they studied an entrepreneurship course.
2. Various Ubaya entrepreneurial activities give an image that the university excels in knowledge and real-world application;
3. 70% of Ubaya students' parents are entrepreneurs;
4. To succeed as an entrepreneur, the ability to work with others from other disciplinary field is crucial;
5. Entrepreneurship topic has been taken very seriously by Ubaya's competitors in Surabaya.

Some recommendations from the report are the followings:

1. The university should deliver entrepreneurship education to equip students with entrepreneurial knowledge and skills and encourage more new entrepreneurs;
2. Support from the university through business incubator will help students in mastering the knowledge and skills;
3. The synergy between universities and industry and or Small-Medium Enterprises (SMEs) should be maximized to encourage more SMEs (i.e. entrepreneurs).

b. Benchmarking successful entrepreneurship programs of organizations and individuals

This paper uses 2 entrepreneurship modules from the Indonesian Ministry of Education (2013) and Culture and *Rumah Perubahan* (Change House 2010) as benchmarks. The two modules were chosen as both have been widely used Indonesian-wide as a reference to develop entrepreneurship education in high school and university. The Ministry module highlighted that to equip students with entrepreneurial knowledge and skills, educators should first nurture cognitive (in order to instill entrepreneurial character), second psychometric (to make students acting as an entrepreneur), and third affective (to make entrepreneurship as lifestyle and character). It is then embodied in modules of:

1. Entrepreneurship character development
2. Communication skills
3. Leadership
4. Self-motivation/ability to motivate others
5. Creativity and innovation
6. Selling skills
7. Management of business
8. Evaluation and management of business

From the 2 modules, the authors summarize the key success factors of delivering entrepreneurship education are as follows:

1. Fun and applicative;

2. Sharing success story by successful entrepreneurs;
3. Need for critical thinking, negotiation and communication skills;
4. Bring practical/hands-on experience.

c. Preparing the substance of entrepreneurship materials

In order to prepare the substance of the entrepreneurship materials that fit with student needs well, the university combines several methods of comparative study, interview, and survey to students & parents. A comparative study to other universities in Surabaya was conducted to see the real implementation of the modules as most of the Indonesian universities used the modules for their entrepreneurship education. From both modules, the university determined weekly teaching materials for 1 semester (i.e. 14 weeks).

From the results of interview and survey to students & parents conducted by the task team (Efferin 2010), the university determined:

1. Institutional aspects of the course including course code and course name, credit units of the course, and course prerequisites;
2. Learning objectives and core competencies;
3. Learning method;
4. Matrixes of teaching materials and methods.

d. Implementing the curriculum through limited case studies that are evaluated for full implementation.

Taking a supply chain management course as a case study for this paper, it can be seen from the syllabus that all key success factors have been embodied in the course. The first factor of fun and applicative takes place where students do not only learn theories in the classroom but also applications beyond the classroom. After learning various supply chain management theories, entrepreneurship knowledge and forming group on the first week of the class, students were brought to visit Center of SMEs in Surabaya, a place that gathers many SMEs in one location. All groups need to show the real prototype of the innovative idea they proposed and present it. The other key success factor is sharing a session with a successful entrepreneur to broaden students' horizon upon entrepreneurship. To realize that, every semester, Ubaya invited a very successful entrepreneur to share their experience.

One of the authors has been conducting various industry-university collaborative projects in a marketing seminar course at Tokai University, Japan.

One of these projects was new product development and its marketing activities for printed stickers. It contained an entrepreneurship training module and supported by the local SME that produces stickers for various industrial uses. First, students had conducted research on printed stickers' market and several surveys in town. Based on their results, they developed the new original product ideas and created the prototype working with SME employees. After several market-testing, the final product was introduced into the real market. Then, students were responsible for the planning of press release events. They took initiatives in sales and promotion activities of the product at particular retail outlets. These entrepreneurial marketing efforts were succeeded to next-year students for several years.

CEO of this SME often came to visit the university providing lectures and discussions about how to startup the business with adequate financing and human resources. In reverse, students visited the company and its factory several times to learn how stickers were manufactured.

As to its course assessment, complied with syllabus, students were evaluated individually according to following three criteria; 1) comprehension of basic theories and logic related to entrepreneurship, leadership, and strategic decision making, 2) development of practical skills in business and marketing operations, and 3) cooperation with peers, managing communications with business persons in the on/off campus activities during the course.

4 CONCLUSION

From a case study of supply chain management course described on this paper, it can be concluded that Ubaya has incorporated entrepreneurship education in the curriculum quite well. Even though the incorporation process requires great efforts but it has attracted students. Students are able to directly feel the benefits and have the opportunity to open their created business. Based on the results of this case study, we discussed a broader implementation in the other courses and integrated into the study program in order to be well coordinated. In order to well expand it to the other courses, we see the importance of conducting continuous monitoring and evaluating to the recent implementation.

Similar to the outcomes observed from Ubaya's efforts, incorporation of entrepreneurship education into the curriculum of business-related courses in Tokai University has brought many positive effects on the learning process of students. With visible business outputs in sales and immense attention from mass media, students have shown strong confi-

dence and self-esteem during the project. They became highly motivated to study in other courses as well. Their off-campus experiences and learning opportunities improved their skills not only of interpersonal.

Regardless of generation, Japanese in general tend to avoid uncertainty. Japanese companies still administer lifetime employment and seniority system. Hence, such a mindset of people and rigid job market influence students to hesitate to launch his/her own business and prefer to seek jobs at large companies. As explained in the cases of both universities, however, incorporating entrepreneurship education into curriculum successfully triggered to improve students' practical business skills and to increase motivation to start up their own business. Analyses and discussions in this paper provided evidence to recognize the significance of such challenges in university.

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