

# Applied Entrepreneurship Education at University of Manadonorth Sulawesi Indonesia

Recky H. E. Sendouw<sup>1\*</sup>, Sisca B. Kairupan<sup>2</sup>, Revolson A. Mege<sup>3</sup>

<sup>1</sup>Universitas Negeri Manado North Sulawesi Indonesia

<sup>2</sup>Universitas Negeri Manado North Sulawesi Indonesia

<sup>3</sup>Universitas Negeri Manado North Sulawesi Indonesia

\*Corresponding author E-mail: [reckysendouw@unima.ac.id](mailto:reckysendouw@unima.ac.id)

## Abstract

The University of Manado's (Unima) students have great potential to become successful entrepreneurs if they have good knowledge and adequate entrepreneurial skills. However, although entrepreneurship subject has been taught for years in several faculties, however it was hard to identify the students' entrepreneurs at Unima. By making use of qualitative method, this study examines student entrepreneurship development; and identify the factors that influence the development of student entrepreneurship at University of Manado. The conclusion is the entrepreneurship course at Unima before 2015 just focused on the theory, that is the reason why there was not start-up student entrepreneur. However, since the curriculum has been improving and more focus on applied entrepreneurship education, some students have successfully started their business. The factors that encourage entrepreneurship development at University of Manado are the support of various parties, both internal and external campus.

**Keywords:** Applied Entrepreneurship; Higher Education Student; Unima; North Sulawesi; Indonesia.

## 1. Introduction

University of Manado (Unima) has more than 20.000 regular students. Many of them, potentially to be successful entrepreneurs if the university may provide sufficient knowledge and skills of entrepreneurship as well as facilities. Although some faculties had entrepreneurship subjects in their curriculum for years and Ministry National Education Provided Grants namely Student Entrepreneurship Program since 2009 for Unima's students, however, until 2015 it is hard to find successful student entrepreneurs at Unima. As a comparison, from the website of State University of Makassar (UNM) we can find that in 2012 and 2013, Student Entrepreneurship Centre of UNM had provided incubator for 30 and 45 start-up groups, respectively.

Since 2012 Unima collaborates with Humber Business School Canada to develop an entrepreneurship education program. This program aims to change the existing entrepreneurship curriculum at University of Manado which has tended to focus on the theory to be more applicative. In addition to changing the curriculum of entrepreneurship courses, a student entrepreneurship center called Unima Humber Entrepreneurship Center (UHEC) is also created that helps entrepreneurial students in extra-curricular form by providing training, seminars and incubation of entrepreneurship, mentoring and coaching clinic, also conducting marketplace or expo.

In 2015 a new entrepreneurship curriculum called applied entrepreneurship course is being tested in 13 Study Programs in 4 Faculties at University of Manado. There are 526 students who took the courses. Through this program, in addition to taking applied

entrepreneurship courses, students are also provided support and assistance through extra-curricular activities conducted by UHEC.

By making use of qualitative method, this study would like to know whether applied entrepreneurship education can produce student entrepreneurs. This study also would like to describe factors that support entrepreneurship education at University of Manado.

The article is structured as follows. Section 1 is introduction, and section 2 is a review literature describing the theories that support this research. While in section 3 explained about method used in this study. Section 4 describes the results and findings obtained in this study and section 5 is the conclusion of this study.

## 2. Literature Review

According to (1), entrepreneurship can be defined as a dynamic process of creating incremental wealth where the wealth is created by individuals who undertake the risks involved in terms of equity, time and career. The authors mentioned that entrepreneurship can also be defined as a process of creating something new with by devoting time, and effort by assuming the financial, psychic and social risks and as a return, receiving the rewards of monetary and personal satisfaction. On the other hand, Bygrave (1989) as cited by (2), defined entrepreneurship as "a process of becoming, and the change involved usually takes place in quantum leaps in a holistic process in which existing stability disappears".

Entrepreneurship education refers to a collection of formalized teachings that inform, train and educate learners who are interested in setting up a business or small business development (3). Entrepreneurship education can be also be defined as skills that can be taught and the characteristics that can be engendered to

enable the individual to develop new and innovative plans (4). While (5) mention that entrepreneurship education has traditionally been narrowly defined as education that provides the needed skills to set up a new business and defined entrepreneur education as more than a business management or starting a new business. It is about “learning”, learning that integrates experiences, skills and knowledge and the preparedness to start a new venture.

The importance of entrepreneurship education on the economic future of a nation has been much lauded by researchers, for example, (5) and (6). In their research, entrepreneurship education is more than creating a new business venture, but also denotes the understanding of the essence of entrepreneurship such as learning to be innovative, i.e., thinking out of the box, high readiness to change and being able to integrate and synthesize experience, skills and knowledge to create, innovate and evaluate abundant entrepreneurial opportunities they are trained to identify.

According to (5) entrepreneurship education brings important returns to graduates and also to society in terms of encouraging the society as a whole to be more responsive towards new technology changes. In their research, (2) also report that entrepreneurial behavior is an innovative approach that constitutes a viable platform for economic development in any society.

From Hegarty's perspective, education has assumed a vital role in enabling learners to be more entrepreneurial-minded (7). This position reflects that expressed in a study conducted by (8) indicating that individuals graduating with a major in entrepreneurship are more likely to start new businesses and have stronger entrepreneurial ambitions than those without. However, this type of education may not lead directly to an increase in the number of start-ups, yet it may develop and be delivered under specific conditions to create expected outcomes (9). It raises the need for supporting environments, which are both internal HEIs, e.g. Facilities, structure, regulation, culture (10) and external Higher Education Institutions (HEIs), e.g. family, friends, role models in the society (7).

Entrepreneurship is clearly one such type of academic program that can make links to socio-economic and ecological concerns and build applied skills to address them. Entrepreneurship education can be divided into two types: education about entrepreneurship and education for entrepreneurship (11). The former is largely theory driven while the latter equips students with the ability to become entrepreneurs. The latter requires an applied pedagogical approach that builds entrepreneurship skills where a process of ‘doing’ is central to the learning experience (12);(13). An applied pedagogy does not, however, mean ignoring traditional teaching methods. Effective entrepreneurship education should make use of a mixed pedagogical approach that draws on both traditional and applied methods (14);(15); (11).

A mixed pedagogical approach is important as there is evidence that the ability of education to build entrepreneurial motivation in addition to the acquisition of skills requires mixed learning experiences combining theoretical understanding and applied skills (16). The fostering of self-efficacy, or the confidence to be successful, is particularly important to build entrepreneurial motivation, especially among students (17);(18). Among Indonesians in particular, self-efficacy and education are the best predictors of increased entrepreneurship intentions (19). Using a mixed pedagogical approach that builds motivation and real-world skills is therefore a critical part of effective entrepreneurship education. Just as importantly, applied content and teaching methods need to reflect their cultural and social environments (20).

### 3. Method

This research was qualitative. It was conducted from March 1<sup>st</sup>, 2017 until August 30<sup>th</sup>, 2017. It was held in University of Manado (Unima). The subjects of this research were the 8 lecturers of applied entrepreneurship courses, and the 50 students who has taken applied entrepreneurship class. Data collection methods used in

this research were observation, interviews, and documentation. Data analysis was done through data reduction, data presentation, and conclusion. Triangulation method used is done by checking the degrees of trust discovery both in research results and data collection. Interview guidelines were instruments that used to avoid questions arising which were not relevant with the research purposes.

### 4. Results and Findings

We started by showing the results of applied entrepreneurship education after Unima had re-designed the curriculum and entrepreneurship center and delivered them for approximately two years. This allowed time for students to apply their learning to the start-up and management of businesses. Overall, until June 2017, the data show that 23% of students had started a business. These businesses are generating an average monthly revenue of more than 4.5 million Indonesian rupiah. While these businesses are relatively new, they are also creating employment. 34% of the businesses have created at least one job. These numbers indicate that considerable success is emerging after only two years of delivering applied entrepreneurship courses, because we cannot find the data of start-up student entrepreneurs as a result of entrepreneurship course, before 2015. What are the factors that have driven this success? The qualitative data collected from students and lecturers enable us to explore the factors behind these numbers. The findings can be drawn as follows.

One of the main objectives of applied entrepreneurship education at Unima was to equip students and graduates with a set of applied skills and knowledge that enable them to start and manage businesses. The experience of the 50 respondents indicates that the project was successful in fulfilling this objective. Moreover, it was successful in building entrepreneurship skills among a group of respondents from diverse study programs ranging from business to the social sciences to the natural sciences. The ability of applied entrepreneurship courses to equip students with applied entrepreneurship skills can be seen in two ways: respondents' reported skills used in setting-up and running their businesses and respondents' perceptions of applied learning.

Respondents discussed at length how they applied to their business specific knowledge and skills learned through the courses. Two things were notable. First, marketing and market segmentation are overwhelmingly the most important skills respondents applied to both the start-up and management of their businesses. “Marketing skill was most important,” said one respondent, “as we learned how to be innovative in the market.” Such sentiments were common. Given that problems with marketing are identified in the literature as a key barrier for Indonesian entrepreneurs (21), this should bode well for successful student entrepreneurship. Beyond the dominance of marketing and market segmentation, the skills identified by respondents as applied in practice were wide ranging. The Business Model Canvas (BMC) was mentioned by many respondents as a key learning applied in practice. These respondents reported that the structured approach of the BMC reshaped how they thought about business in a more systematic way and, as a result, revised their perception of their own role as an entrepreneur.

A second notable issue emerged from respondents' discussions of the skills and knowledge they applied in practice. Their applied course learning was most effective in helping them with starting-up their businesses. It was less influential in providing them with skills for the on-going management of the businesses. This is not to say the skills were not applicable to management but their influence was more pronounced on start-up. Respondents learned meaningful skills in the courses that were frequently and successfully applied in starting their businesses.

In addition to the reported knowledge and skills respondents applied to their businesses, the success of the applied entrepreneurship education can be seen in how respondents felt about the applied curriculum they experienced. Respondents often spoke of how the courses differed from other university courses in both content and delivery methods. Without exception they overwhelmingly preferred the applied focus of the courses. The degree of their preference for applied curriculum cannot be overstated. It created a sense of enthusiasm for learning given its real-world implications. One student referred to the applied approach as exciting because "it is like making a list of my dreams." Many recommended the applied approach be used in all courses at university. They identified the use of class visits by entrepreneurs, simulations and shadowing of entrepreneurs as key learning experiences. Most often they pointed to those courses that involve the actual development of a product or business as the most effective learning experience. Developing a product or business in class was a source of excitement for students as it linked their learning to the real world and propelled them to action.

The enthusiasm of student respondents for the applied nature of the courses was mirrored in reflections by lecturers. Lecturers identified the opportunity to learn how to develop and deliver applied entrepreneurship curriculum as the key benefit of the program. Many of them reported adapting this learning to apply it in other study program or in courses unrelated to entrepreneurship. In some cases, lecturers used their learning to become entrepreneurs themselves. Others aspire to open businesses in the future. Overall, the applied nature of curriculum provided student respondents with real world skills and re-shaped the preferences of both students and lecturers for an applied and student-centered learning approach.

Unima designed and delivered entrepreneurship center such as coaching to assist students in the start-up and management of their businesses. Extra-curricular activities such as marketplace or expo events also enabled students to market and sell their products in a real-world business setting. These services and activities acted as a critical link for respondents to move from learning about entrepreneurship to starting and managing businesses. Respondents were particularly enthusiastic about the marketplace and expo events. By putting their skills into practice, these events enabled respondents to gain confidence in their products and in dealing with customers. In some cases, these activities enabled respondents to gain long-term customers. While respondents were most enthusiastic about the marketplace and expo activities, coaching services were the activity that was most influential. Coaches assisted respondents with specific technical and day-to-day business issues not covered in the courses.

One of the key factors that predicts the motivation to become an entrepreneur among Indonesians is self-efficacy, or the confidence one has the necessary entrepreneurial knowledge and skills to be successful (19). Having the appropriate entrepreneurial skills needs to be partnered with self-efficacy to successfully motivate a person to actually start a small business. This is particularly important for Indonesian university students. Research has found that while Indonesian adults generally have high entrepreneurial self-efficacy, university students are much less likely to have self-efficacy when compared to Indonesians with senior secondary or junior secondary education (22). One of the clear successes of applied entrepreneurship courses was its ability to fill this gap by building self-efficacy and motivation among university students. The applied nature of the curriculum and extra-curricular activities was the driving force behind creating this self-efficacy.

The courses were not the only source of motivation. Multiple factors combine with applied course learning to motivate students to start a business. Interestingly, making money was infrequently

raised as a motivating factor. Respondents more often pointed to creating employment opportunities and bettering the situation of their families and communities as motivations. Respondents also frequently described their own personality as a motivational force for starting their business. They outlined how their personality traits like assertiveness, independence and comfort with risks was further stimulated by the applied entrepreneurship course content. Starting a business, in their opinion, was a natural thing to do once they developed the needed skills. What is notable is that the respondents who stated their own personality was a motivational force were very likely to further state that the project was also a source of motivation. This suggests the ability of the courses to foster self-efficacy and motivation to start a business is often linked to students whose personalities are already pre-disposed to it. Research in other contexts illustrates a similar situation. Personality traits like stress tolerance, risk taking, a proactive nature and the need for achievement are characteristic of those who choose to become entrepreneurs (23).

In the implementation of applied entrepreneurship education in Manado State University needs the support of many parties. Internally ranging from lecturers who teach courses, faculty leaders who allow entrepreneurship curriculum changes, and university leaders who provide business center facilities to support applied entrepreneurship, and funding for start-up student entrepreneurs become an important pillar in implementing applied entrepreneurship education program in Unima. In addition, the presence of faculty and university leaders in entrepreneurial events becomes morale support for entrepreneurial lecturers and students. Undeniably, without the support of Unima lecturers and leaders, applied entrepreneurship education program will not run as expected.

Externally, entrepreneurs who volunteer to give time to share entrepreneurship experiences with students become an important factor in increasing student motivation to become entrepreneurs. Banking staff who are willing to teach students how to get credit, and private companies leaders who are willing to sponsor the expo, as well as other entrepreneurial activities are also factors supporting the success of applied entrepreneurship education program in Unima. It is recognized by lecturers as well as entrepreneurial students who become respondents. They claimed that the experiences of entrepreneurs become a motivation for them to start doing business. Students also stated, the advice of banking staff to record each income and expenditure from their business helps them know the financial condition of their business. On the other hand, funding from banking and corporate that support entrepreneurial activities, such as marketplace or expo, coaching and seminars enable students to attend these activities at a more affordable cost.

## 5. Conclusion

The conclusion is the entrepreneurship course at Unima before 2015 just focused on the theory, that is the reason why there was not start-up student entrepreneur. However, since the curriculum has been improving and more focus on applied entrepreneurship education, some students have successfully started their business. The factors that encourage entrepreneurship development at University of Manado is the support of various parties, both internal and external campus.

## Acknowledgement

This research work is supported by the Entrepreneurship Development Program 2017 (PPK) Directorate Research and Community Development, Ministry of Research Technology and Higher Education Republic of Indonesia.

## References

- [1] Fitzsimmons JR, Douglas EJ, Antoncic B, Hisrich RD. Intrapreneurship in Australian firms. *J Manag Organ.* 2005;11(1):17–27.
- [2] Heinonen J, Poikkijoki S. An entrepreneurial-directed approach to entrepreneurship education: mission impossible? *J Manag Dev.* 2006;25(1):80–94.
- [3] Bechard J-P, Toulouse J-M. Validation of a didactic model for the analysis of training objectives in entrepreneurship. *J Bus Ventur.* 1998;13(4):317–32.
- [4] Jones C, English J. A contemporary approach to entrepreneurship education. *Educ + Train.* 2004;46(8/9):416–23.
- [5] Yu Cheng M, Sei Chan W, Mahmood A. The effectiveness of entrepreneurship education in Malaysia. *Educ + Train.* 2009;51(7):555–66.
- [6] McKeown J, Millman C, Reddy Sursani S, Smith K, Martin LM. Graduate entrepreneurship education in the United Kingdom. *Educ + Train.* 2006;48(8/9):597–613.
- [7] Hegarty C. It's not an exact science: teaching entrepreneurship in Northern Ireland. *Educ + Train.* 2006;48(5):322–35.
- [8] Kolvereid L, Moen Ø. Entrepreneurship among business graduates: does a major in entrepreneurship make a difference? *J Eur Ind Train.* 1997;21(4):154–60.
- [9] Jones C. Entrepreneurship education: revisiting our role and its purpose. *J Small Bus Enterp Dev.* 2010;17(4):500–13.
- [10] Piperopoulos PG. *Entrepreneurship, Innovation and Business Clusters.* Gower Publishing, Ltd; 2012. 217 p.
- [11] Lourenço F, Taylor TG, Taylor DW. Integrating “education for entrepreneurship” in multiple faculties in “half-the-time” to enhance graduate entrepreneurship. *J Small Bus Enterp Dev.* 2013;20(3):503–25.
- [12] Draycott M, Rae D. Enterprise education in schools and the role of competency frameworks. *Int J Entrep Behav Res.* 2011;17(2):127–45.
- [13] Lourenço F, Jayawarna D. Enterprise education: The effect of creativity on training outcomes. *Int J Entrep Behav Res.* 2011;17(3):224–44.
- [14] Shahverdi M, Ismail K, Qureshi MI. The effect of perceived barriers on social entrepreneurship intention in Malaysian universities: The moderating role of education. *Manag Sci Lett [Internet].* 2018;8:341–52. Available from: [http://www.growing-science.com/msl/Vol8/msl\\_2018\\_27.pdf](http://www.growing-science.com/msl/Vol8/msl_2018_27.pdf)
- [15] Liñán F, Fayolle A. A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *Int Entrep Manag J.* 2015;11(4):907–33.
- [16] Nabi G, Walmsley A, Liñán F, Akhtar I, Neame C. Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education.* 2016;1–16.
- [17] Setiawan JL. Examining Entrepreneurial Self-efficacy among Students. *Procedia - Soc Behav Sci.* 2014;115:235–42.
- [18] Chen CC, Greene PG, Crick A. Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *J Bus Ventur.* 1998;13(4):295–316.
- [19] Indarti N, Rostiani R, Nastiti T. Underlying factors of entrepreneurial intentions among Asian students. *South East Asian J Manag.* 2010;4(2):143–60.
- [20] Brian J, Iredale N. Enterprise and entrepreneurship education: towards a comparative analysis. *J Enterprising Communities People Places Glob Econ.* 2014;8(1):34–50.
- [21] Tambunan T. Entrepreneurship Development: Smes in Indonesia. *J Dev Entrep.* 2007;12(1):95–118.
- [22] Nawangpalupi C, Pawitan G, Gunawan A, Widyarini M, Putri F, Iskandarsjah T. *Entrepreneurship in Indonesia: Conditions and Opportunity for Growth and Sustainability.* 2016.
- [23] Brandstätter H. Personality aspects of entrepreneurship: A look at five meta-analyses. *Pers Individ Dif.* 2011;51(3):222–30.