International Education Studies; Vol. 7, No. 12; 2014
ISSN 1913-9020 E-ISSN 1913-9039
Published by Canadian Center of Science and Education

A Systematic Framework for Entrepreneurship Education within a University Context

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Received: July 2, 2014 Accepted: October 9, 2014 Online Published: November 26, 2014

doi:10.5539/ies.v7n12p1 URL: http://dx.doi.org/10.5539/ies.v7n12p1

Abstract

The importance of entrepreneurship education that positively impact on the creation of new ventures has been widely recognized. Although numerous studies of entrepreneurship education have been conducted within a university setting, the results are mostly fragmented. Therefore, by using a systematic framework, this research is focused on examining relevant learning and institutional supports within a university context for those who want to become successful entrepreneurs. This descriptive study is based on in-depth interviews with respondents at a private university. The gathered data are coded, and they result in a mapping of entrepreneurship education. There are some important findings from this research. One is that the university already has facilities to support learning within the institution, although it lacks in the management to optimize their utilization. The other is that the assurance of the students' learning effectiveness is not well managed.

Keywords: entrepreneurship, entrepreneurship education, framework of entrepreneurship education, successful entrepreneur, management in education

1. Introduction

The role of entrepreneurs has well been respected as a greater contributor in economic development of most nations (Ogbo, 2012). Nations will develop faster if they have high quality, creative, and innovative entrepreneurs that implement new ideas into practical actions in every business. Developing countries have some important issues of entrepreneurs. For examples, India has new business ownership rate of 4.9%, Malaysia has 5.2%, Philippines has 6.7%, Thailand has 10.4%, and Indonesia has 20.4%. Also, there have been low intentions to become entrepreneurs for the last 3 years. Malaysia has 11.8% of entrepreneurial intention, Thailand has 18.5%, India has 22.8%, Indonesia has 35.1%, and Philippine has 44.1% (Global Entrepreneurship Monitor, 2013).

Entrepreneurship education has a vital role in guiding all learners to become more entrepreneurial-minded (Hegarty, 2006). The implementation of entrepreneurship education within universities is aimed to infuse the entrepreneurial culture and spirit into the students as well as to create new educated entrepreneurs and new businesses (US Department of Commerce, 2013). In other words, the expected outcome is to produce well-educated entrepreneurs to create jobs. According to 46 case interviews at European Universities, there are several barriers to Entrepreneurship Education (EE): EE depends on the efforts of just few people, academic staffs members do not have enough time to engage in EE, inadequate of educators' competence, lack of funding to support EE, some academic staff members oppose the introduction of EE, lack of support for EE from government, lack of good quality of materials, lack of academic credibility, lack of recognition for excellent EE, and lack of support from top management (FORA, ECON and NIRAS Consultant, 2008). Meanwhile, according to a survey result on 549 company founders in Unites State, 70% of them said that university education was important to support students to become successful entrepreneurs (Wadhwa, Aggarwal, Holly, & Salkever, 2009).

Several studies of entrepreneurship education were conducted in order to support students to become successful entrepreneurs. However, the tangible results were often difficult to observe due to low intentions to become entrepreneurs in developing countries. Co and Mitchell (2006) conducted the mapping of existing popular courses offered and observed the existing classroom delivery techniques. Other studies conducted the mapping

of entrepreneurship education within a higher education institution (Solomon, 2007; Varblane & Mets, 2010). Some studies only focused on teaching methods such as entrepreneurial-directed approach (Heinonen & Poikkijoki, 2006) and problem-based learning approach (Tan & Ng, 2006). There are also some other studies focusing on students such as their psychological aspects (Ibrahim & Soufani, 2002; Gelderen, 2010) and the importance of selection process of students (Dhliwayo, 2008). It can be concluded that most of these current research are unsystematic and tend to focus on students and all facilities from institutions. Very little do they describe about the assurance of learning, staff members' competence, and ways to improve the entrepreneurship education.

A systematic framework of entrepreneurship education is needed as a structured guideline to conduct the mapping of existing learning and institutional supports. The framework covers all stakeholders, such as students, staff members, and the institution, in managing entrepreneurship education effectively (Piper, 1993). It needs to involve all important aspects that support the students to become entrepreneurs, either supports from staff members or supports from the institution (Herrmann, Hannon, Cox, Ternouth, & Crowley, 2008). Thus, the following research question is formulated: "How relevant are learning and institutional supports within a university context in promoting successful entrepreneurial education based on a systematic framework?" The objectives of this study is to examine whether a systematic framework can provide a better understanding of the existing learning and institutional supports within a university setting that promote successful entrepreneurs.

According to the Regulation of the Minister of Education and Culture Republic of Indonesia Number 49, Year 2014 concerning the National Education Standards of Higher Education, in chapter 2, section 4, The National Education Standards consists of: competency standard, learning content standard, learning standard, learning assessment standard, standard faculty and staff, learning infrastructure standard, standard learning management; and financing standard of learning. A systematic framework proposed in this study can be used as a guideline for mapping and evaluating the learning process to achieve the institution's learning outcomes in accordance with the national standard of higher education in Indonesia.

The structure of this paper is introduction, literature review, conceptual model, research methods, findings, discussion and conclusion. Introduction contains problem statements that lead to the research questions of this study. Literature review discusses the findings and filling the gaps of this area of study, which leads to propose the conceptual model of this study. Then, it is followed by the explanation of how to conduct this study. In the findings section, a mapping of the results of this research is shown in tables and in descriptive explanations before it is discussed in the section that follows. Finally, the summary of this research is shown in the section of conclusion.

2. Literature Review

Entrepreneurship education is assuming extraordinary pertinence within a scholarly scheme all over the world (Alberti, Sciascia, & Poli, 2004). There seem to be world-wide recognition that states entrepreneurship can contribute to economic development (Szirmai, Naude, & Goedhuys, 2011). As a matter of fact, the number and variety of courses offered in entrepreneurship education have increased over the past two decades (Solomon, 2007). It means that more and better entrepreneurship education would affect more and more entrepreneurs (Matlay, 2008).

The project partners organized by Herrmann et al. (2008) have addressed the effective learning and institutional supports for entrepreneurship education within a university context. They are proposing a framework for entrepreneurship education strategy based on a set of guiding principles informed by international expert panel members. The framework contains the institutional environment, the engagement of key stakeholders, and the development of entrepreneurial practices. Institutional environment means that universities can provide the right environments which inspire and motivate individuals to find opportunities, acquire resources, and take actions in a variety of contexts that have relevance to their lives and aspirations. In such environments, there should be clarity about the entrepreneurial outcomes, the alignment between the entrepreneurial outcomes and the appropriate ways of learning, and the kind of learning that needs to take place.

The engagement of key stakeholders means that entrepreneurship does not take place in isolation from its broader environment, which means that continuous learning is sustained through relationships with stakeholders and others. Indeed, successful entrepreneurship is more likely to happen in a situation where the stakeholders provide learning opportunities and facilitate the creation and exchange of tacit knowledge. Development of entrepreneurial practices means that the delivery of the desired entrepreneurial outcomes challenges institutions and educators to review and reflect on what needs to be taught and learnt and how the appropriate learning environments and approaches can be created. Such practices should be clearly aligned with the existing goals,

outcomes, and assessment processes.

The study conducted by Varblane and Mets (2010) was focused on the mapping of entrepreneurship education in 774 higher education institutions in 22 European transition countries. The analysis of information obtained from the web-based sources and a questionnaire showed there were 332 institutions in the region offering entrepreneurship-oriented courses, modules, or curricula. They explored the curricula of entrepreneurship, entrepreneurship courses and centers, and teaching methods. They also provided the analysis results of their exploration data with descriptive statistics.

Similarly, the study done by Solomon (2007) was to conduct the mapping of courses offered, teaching methods, periodicals used in class, and technology supports from institutions. This study, the sixth survey conducted by the author since 1979, provided an analytical overview of entrepreneurship education in the USA from the year of 2004 to 2005 in 270 institutions. They also provided the results along with their descriptive statistics. According to Co and Mitchell (2006), the most popular courses were focused on Entrepreneurship and Small Business Management as one of the basic knowledge and skills needed for the identification, evaluation, and exploitation of opportunities. The findings showed that the teaching of entrepreneurship was conducted in traditional classroom delivery, such as lectures.

The teaching and assessment methods used in entrepreneurship education are varied. Very little is known about the effective teaching techniques and assessment methods for entrepreneurship. Heinonen and Poikkijoki (2006) conducted an experimental study with the entrepreneurial-directed approach, whose result showed that the approach could seemingly encourage students to broaden their perspectives and develop their entrepreneurial skills and behavior. Similarly, Fayolle, Gailly, and Clerc (2006) conducted experimental research which was focused only on the evaluation of certain programs by using the entrepreneurial intention (Theory of Planned Behavior) as a tool to measure the effectiveness of entrepreneurship education. They used this statistical tool to examine the relationship between variables in the study. Another study also proved that a problem-based learning approach could improve students' appreciation and capacity for entrepreneurship (Tan & Ng, 2006). Solomon (2007) noted that although educational institutions were shifting toward a more knowledge sharing environment, where class discussions and guest speakers were becoming popular, the traditional teaching method of creating business plans still existed as a foundation for teaching entrepreneurship and small business management.

The viewpoint made by Gelderen (2010) states the importance of autonomy as the guiding aim for entrepreneurship education. The primary aim is to encourage students to work based on their own internal motivation. The research conducted by Dhliwayo (2008) focused on the important of a student selection process. They stated that "only the students with the right entrepreneurial attitude that will be successfully processed or graduate into an entrepreneur". Another research conducted by Ibrahim and Soufani (2002) focused on a model of entrepreneurship training. They argued the importance of entrepreneurial traits, competence, and managerial skills to promote successful entrepreneurs. Henry, Hill, and Leitch (2005) conducted research on learning process in different situations, which were the classroom and the real world. They mentioned about the criteria of success for both situations. An important research conducted by Mwasalwiba (2010) assessed the alignment among generic objectives, target audience, teaching methods used, and impact indicators used to measure the effective learning in entrepreneurship education.

Blenker, Dreisler, Faergemann, and Kjeldsen (2008) claimed that the educational system at the university level was not capable of developing students' motivation, competence, and skills for innovations and entrepreneurship, and the entrepreneurship education required learning methods, pedagogical processes, and frames for education. Kyro (2008) studied a general framework that combined learning and teaching aspects for fostering individual meta-competence in planning, performing, and evaluating teaching interventions. It applied that the taxonomy of individual differences contributes to the risk of learning process and suggested that, besides cognition, affection and conation in both enterprising and entrepreneurial learning also be included.

The study on entrepreneurship education is still at an early stage, and a little fragmented research has been done by various authors (Salamzadeh, 2011). Based on the articles of this literature review, the study on entrepreneurship education can be analyzed by a set of guiding principles from Herrmann et al. (2008) to find out the gap between the theoretical framework and the real world. The results of the analysis that uses a set of guiding principles from Herrmann et al. can be seen in the following table.

Table 1. Mapping of articles for entrepreneurship education framework

Author/Year	Guiding Principles for Entrepreneurship Education Strategy		
	Institutional environment	The engagement of key stakeholders	Development of entrepreneurial practices
Ibrahim & Soufani (2002)	-	-	√
Co & Mitchell (2006)	√	-	√
Tan & Ng (2006)	-	-	√
Solomon (2007)	√	-	√
Dhliwayo (2008)	√	-	-
Gelderen (2010)	-	-	√
Mwasalwiba (2010)	√	-	√
Varblane & Mets (2010)	√	-	√

According to the above-mentioned mapping, the previous research was fragmented. Most of the research was descriptive study (Alberti et al., 2004), few studies presented developed hypotheses, and moreover, they lack a systematic framework of entrepreneurship education (Gorman & Hanlon, 1997 in Alberti et al., 2004).

A study conducted by Piper (1993) applied a general framework of management in education within a university context. The framework involves key stakeholders that support for management in education such as the students, staff members, and institution. Each of those aspects has important variables, namely: ability, opportunity, and incentive to learn and to teach. The framework by Piper (1993) can meet all of the sets of guiding principles informed by Herrmann et al. (2008). Therefore, this framework is used as a systematic guideline to explore the existing entrepreneurship education practices within a university context. A systematic framework means a structure of concept that is arranged according to a system that functions as a guideline to view reality.

It is recommended that the future studies focus on the mapping of entrepreneurship education within a university context based on a systematic framework. However, although his research relates to the mapping of entrepreneurship education practices, it is specifically focused on relevant learning and all supports to promote students to become successful entrepreneurs. It is also a challenge to conduct the mapping based on internal and external perspectives. By applying a systematic framework for entrepreneurship education within a university context, this study is expected to fill the theoretical gap.

3. Conceptual Model

The project partners' model made by Herrmann et al. (2008) addressed the entrepreneurship education in their earlier work. In "Towards the Entrepreneurial University", they develop an "Entrepreneurial Learning Outcomes Framework", which clarifies what students should learn from entrepreneurial educational experiences and aims so as to influence curriculum designs and classroom delivery techniques in UK Higher Education Institutions (HEIs). The Implementation Framework should help to configure a more detailed campus-wide strategy for entrepreneurship education. It is underpinned by a set of guiding principles informed by the experiences and views of the international expert panel members (Herrmann et al., 2008). The guiding principles are as follows:

a. The need for an enabling institutional environment;

b. The engagement of key stakeholders within and outside the institution; and

c. The development of entrepreneurial practices: pedagogic approaches in teaching, learning and support practices.

Concerning the framework for mapping of articles of entrepreneurship education, this study uses framework adapted from Piper (1993), and it is also used as a guideline to explore the existing learning and institutional supports within a university context. There are three key issues in the management of education, namely students, staff members, and the institution. The model illustrates the main issues, such as ability, opportunity, and incentive to learn or teach. This framework gives a valuable insight for answering "Research Question". In

order to conduct the mapping of entrepreneurship learning and institutional supports, this study proposes a theoretical framework for Entrepreneurship Education (see Figure 1).

There are three conditions that are necessary for students to perform satisfactorily: they must have the ability to learn in order to undertake their study involved; they must have the opportunity to learn to conduct the study satisfactorily; and they must have an incentive to learn in order to encourage their willingness to study. The ability to learn is knowledge and skills that the students undertake to do their study. The mechanisms are focused on the students, for examples: recruitment and selection of the students. The opportunity to learn is a learning environment and its context which is provided by institutions that support the students to do their study satisfactorily, for examples: educational aspects, such as curriculum and equipment (as learning supports) that are provided by institutions. The incentive to learn is something that will be received by the students as the motivator to conduct their study, for examples: grant and grading scheme (Piper, 1993).

The important aspects for staff members to teach effectively are that they can improve the ability of their students to learn, the opportunity to learn of their students to conduct their study satisfactorily, and the incentive to learn of their students to encourage their willingness to study. Improving ability to learn is defined as a progress review such as the learning evaluation. Improving opportunity to learn is defined as equipment such as the teaching methods and teaching aids as well as social environment such as lecturers and administration staff members. Improving Incentive to learn is defined as rewards, as a part of grading the students' performance, for the students' participation (Piper, 1993).

The environment is necessary for an educational institution to make a teaching organization effective, improve the ability to teach its staff members, improve the opportunity to teach its staff members to perform their work satisfactorily, improve the incentive so that its staff members are encouraged to do their work satisfactorily. Improving ability to teach includes as recruitment and selection of the lecturers, staff development (training), and performance appraisal. Improving opportunity to teach includes a workload, a social environment (such as knowledge sharing), a freedom in teaching, learning material supports, and a fund allocation for entrepreneurship. Improving Incentive to teach is defined as rewards for innovative teachings, their payment, incentive scheme, and life and health insurance (Piper, 1993).

Assurance of learning refers to the process of maintaining standards of learning reliably and consistently by applying criteria of success in a programme (Mishra, 2007). The approach to achieve students' learning outcomes is using continuous improvement cycle, akin to a Plan-Do-Check-Action cycle (see Figure 2).

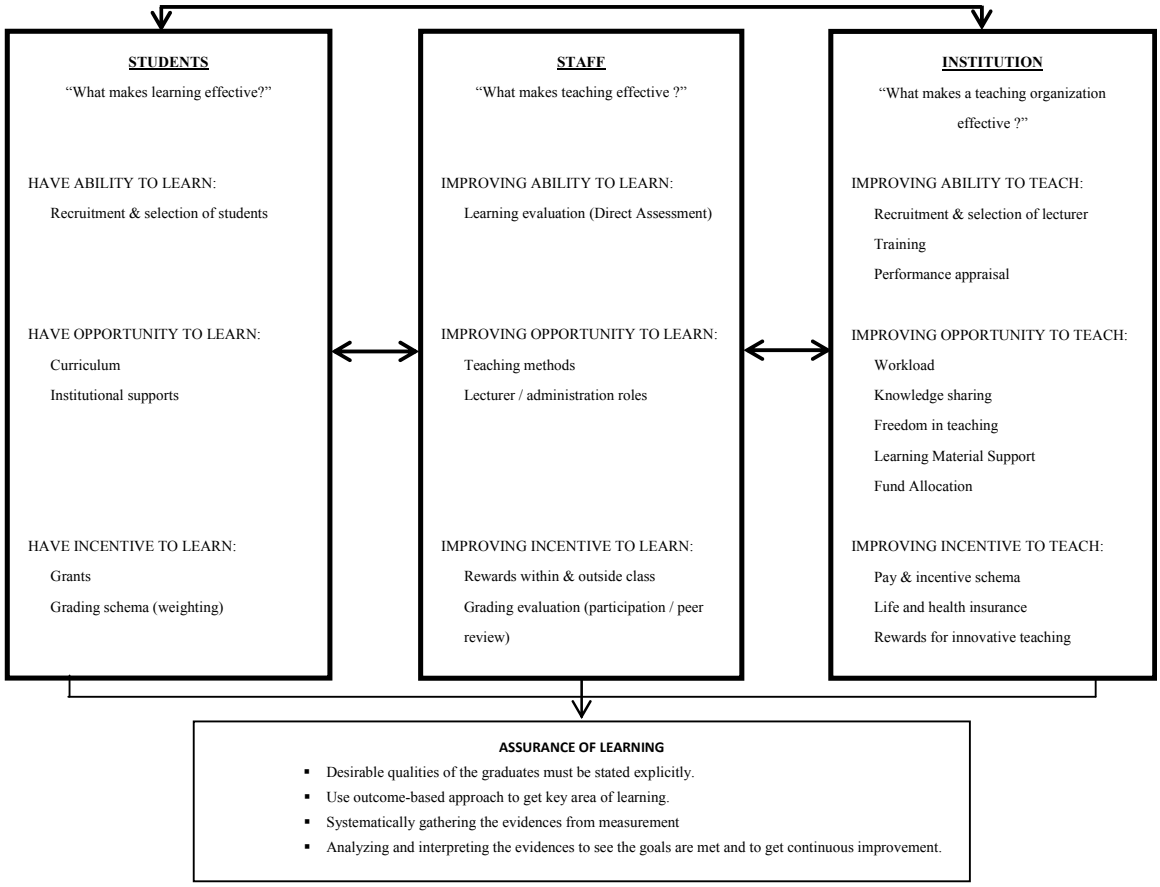

Figure 1. A systematic framework for entrepreneurship education

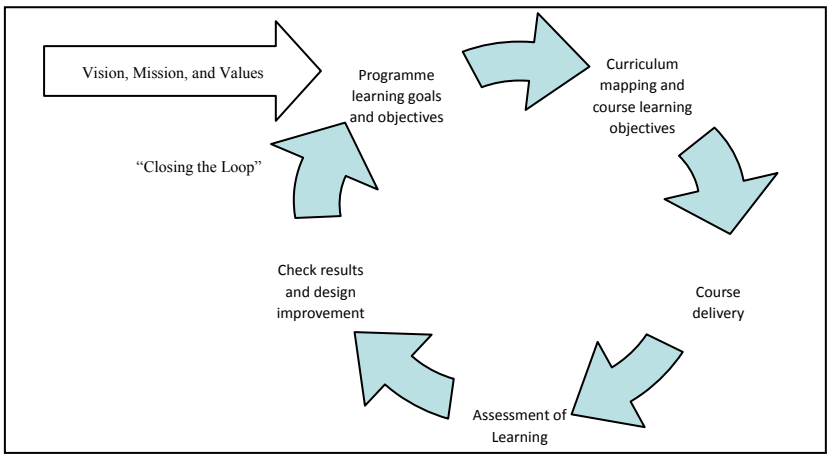

Figure 2. Assurance of learning

The first loop is about students' competences after completing the programme, it is guided by vision, mission and values of institution, which in turn inform the learning goals and learning objectives of the programme. The second loop is the opportunities that provided by institution, it is considered through curriculum design, mappings to course learning objectives, and subsequent delivery of courses, to provide students opportunities to learn the knowledge, skills and values that laid out in programme learning goals, programme learning objectives, and course learning objectives. The next loop is assessment to see whether the students have learnt the desired learning objectives, collect the evidences and check whether there are gaps. The closing loop is involve

analyzing and interpreting the evidences and also involves adjustments to programme elements or teaching methods in order to improve student learning outcomes where most needed (Mabin & Marshall, 2011).

4. Method

The method used in this study is a case study, in which a qualitative approach is employed. Hopefully, this research can give better explanations on the phenomena being studied. The research methods of this study can be seen in the following figure:

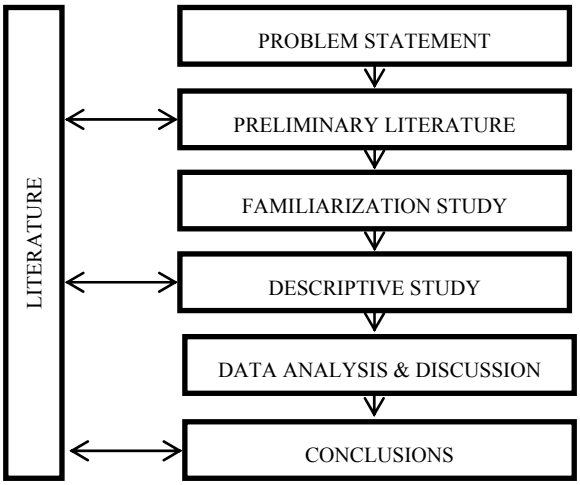

Figure 3. Research Methods

This study starts from the problem statement of "How relevant are learning and institutional supports within a university context in promoting successful entrepreneurial education based on a systematic framework?". Secondly, a preliminary literature study is conducted to find and address the gaps in the currently available research. Third, the descriptive study is conducted to map of learning and institutional supports within a university context in promoting successful entrepreneurial education based on a systematic framework. This stage includes object selection and respondents' selection. Fourth, this study begins with specific observations and measures, and then continues with the identification of patterns, regularities and the formulation of some general conclusions. The findings of this study are analyzed and discussed supported by several literature reviews. Fifth, the final stage is to conclude main findings of this study and to suggest the future research.

4.1 Object Selection

This case study concerns Telkom Business School of Telkom University located in West Java Province, Indonesia. The reason to conduct this case study is that Indonesia has Power Distance (PDI) whose Hofstede Dimension rank is 78. This high Power Distance (PDI) is an indication of a high level of inequality between power and wealth within the society. This condition is not necessarily forced upon the society, but rather accepted by the society as part of their cultural heritage. Meanwhile, its average Power Distance among the greater Asian countries is 71. Another reason is that Indonesia has the second highest Hofstede rank for its Uncertainty Avoidance (UAI), which is at 48, compared with the average UAI of greater Asian countries, which is 58, and the world's average UAI, which is 64. This reflects a more moderated influence of this Dimension on the Indonesian society. Generally, a high Uncertainty Avoidance (UAI) indicates the society's low level of tolerance for uncertainty (G. Hofstede, G. J. Hofstede, & Minkov, 2010). The combination of these two high scores, PDI and UAI score, indicates that the Indonesian society is not only highly rule-oriented, which must be controlled by laws, rules, and regulations in order to reduce the amount of uncertainty but this society also allows inequalities of power and wealth to grow among its members. This leads to low intentions among its members to become entrepreneurs in Indonesia.

4.2 Respondents Selection

A key approach to select the respondents from each case studied is by using numerous and highly knowledgeable informants who view the focal phenomena from diverse perspectives (Yin, 2003). There are six data sources: (1) initial interviews with key actors of the institution such as the founders or the owners, (2) semi-structured

interviews with the top management of the program studies such as Dean, Vice Dean, and Head of Study Program, (3) semi-structured interviews with the lecturers or tutors, (4) open and close-ended questionnaires completed by each level of management, (5) observations, and (6) secondary sources (e.g., website, newspaper articles, letters and e-mails, and reports).

These data sources also include organizational actors from different hierarchical levels, functional areas, and groups. The study also employs an embedded design, that is, multiple levels of analysis, which is focused on each case at three levels: (1) top management of program study such as Dean, Vice Dean, Head of Study Program (3 respondents), (2) Staff members such as lecturers (4 respondents), and (3) Students (4 respondents), (4) alumni (3 respondents). The total number of the respondents is 14.

The interviews were conducted from 60 to 90 minutes, and for some respondents, the interviews were divided into two sessions. The interview questions contain three key issues in management of education, namely students, staff members, and institution. The questions for the students/staff members are focused on such things as what abilities that the students/staff members have and how they improve their abilities for recruitment and selection, learning evaluation, training, and performance appraisal. The questions concerning the institution are focused on what opportunities are provided by the institution such as in the curriculum development, facilities provisions, teaching method development, workload allotment, knowledge sharing, freedom in teaching, learning material supports, fund allocations, and incentive for the students and staff members such as grants, grading schema, rewards, payment, and incentive schema.

4.3 Data Analysis

The key step is within the case analysis stage. The qualitative analysis is focused on the non-text data such as audio recording (interview results) and the audio parts of video recording. They have been transcribed so they can also be analyzed as text data. The steps are described below:

a. Include details of the date, time, and place where the data were collected;
b. Anonymize both the organization's and the respondents' names using the alternatives consistently;
c. Consistently use italics to signify questions asked;
d. Consistently use capitals to highlight the names of the interviewers and the respondents;
e. Consistently use (...) to show a pause in speech; the number of dots shows the relative length of the pause;
f. Consistently use CAPITALS within the transcript to show the words that were spoken more loudly than others;
g. Consistently use ( ) to enclose the description of what is happening such as the participant's tone of voice, facial expressions, or other visual cues;
h. Make sure there are no typographical errors and the words are spelt consistently throughout;
i. Save each interview transcripts as a separate file;
j. Develop meaningful categories or codes to describe the data;
k. Decide on the unit of data (sub-categories), which is appropriate for the analysis, to which we will attach relevant categories; and
l. Attach relevant categories to units (pieces) of the data.

This process allows the unique patterns of each case to emerge before the interviewers generalize the patterns across the cases. The ways to judge the quality of this study are discussed as follows. First, using a triangulation method, the data of informants with different statuses (students, staff members, and alumni) are collected by following the analyzing steps below:

a. Analyzing the semi-structure interview from each informant,
b. Analyzing the data mapping from each informant, and
c. Analyzing the unique pattern which is revealed consistently from all informants.

This study also uses multiple data sources, such as websites, books of academic guidelines, and direct observations, to support the primary data from the interview. The above-mentioned methods are conducted to gather multiple perspectives on the same issues so as to gain a more complete understanding of the phenomena. Second, the senior lecturers/staff members are selected to engage in some interactive interviews to evaluate or

validate the research findings. The steps are below:

a. conducting in-depth interviews with the experts regarding the concepts,
b. cross-checking about the interview findings from all informants,
c. analyzing and discussing the interview findings, and
d. making the final validation based on the interview findings.

5. Results

5.1 Institution Overview

Telkom Institute of Management (IM Telkom) is a university run by Telkom Education Foundation (YPT). YPT's Board of Trustees is the ex-officio Directors of PT Telekomunikasi Indonesia, Tbk. (PT Telkom). IM Telkom was established as a form of responsibility of PT Telkom to be a Good Corporate Citizen who wants to contribute to the intellectual life of Indonesia.

IM Telkom is currently running one graduate program, five undergraduate programs, and one diploma-3 program. IM Telkom has two campuses. One is located in Gegerkalong and the other one is located in Dayeuh Kolot. These two campuses are located in Bandung, West Java, Indonesia.

IM Telkom was established in 1990 with the name of the Magister Business Administration Bandung (MBA-Bandung), which is then changed into the College of Management Bandung (STMB) in 1994. Later, in 2004, it was named the College of Business Management Telkom (Telkom STMB) before eventually it was named IM Telkom in 2008. The first campus MBA-Bandung is located in the Building H & I of Telkom Training Center Complex in Jalan Gegerkalong Bawah 47 Bandung. MBA-Bandung is the first master program in Business Administration in West Java, predating later similar programs organized by other public universities in Bandung. At the beginning of its establishment, MBA-Bandung adopted the schooling system of the Asian Institute of Management (AIM) Philipines, which was then known as the Harvard Business School Asia. When established, the Professors of AIM were teaching and guiding the implementation of MBA-Bandung program until 1995. MBA-Bandung successfully ranks as the 7th top business school by SWA magazine in 1992.

Because of the government regulations and coupled with the desire of the Board of Directors of PT Telkom, STMB held undergraduate programs in 1997. The courses offered by STMB at that time were Business Management of Telecommunications and Informatics (MBTI). The growth led STMB Telkom to transform itself into Telkom Institute of Management (IM Telkom) in 2008. New courses offered in the Undergraduate Programs, since the STMB Telkom was transformed into IM Telkom, are Communication Sciences, Visual Communication Design, Accounting, Business Administration, and Diploma of Marketing.

Because IM Telkom, Telkom Institute of Technology, Telkom Polytechnic and High School of Art and Design Indonesia were merged into Telkom University, IM Telkom was transformed into Telkom Business School (TEBS) in August 2013. Telkom Business School has several majors, namely: Magister of Management, Undergraduate program of Business Management Telecommunications & Informatics (MBTI), and Accounting. The undergraduate program of MBTI has an international class that is located in Gegerkalong campus.

5.2 Mapping of Learning and Institutional Supports

The findings of this study are divided into three mains actors, namely: the students, the staff members, and the institution. Each of these actors will be discussed based on three important variables, namely: ability, opportunity, and incentive. Those actors and variables are outlined in the following sections.

5.2.1 The Students

The students will be explained based on their ability to learn, their opportunity to learn, and their incentive to learn. These findings concern institutional supports for the students to enable them to learn satisfactorily. The findings can be seen in the Table 2.

Table 2. Research findings of the students as key stakeholders

Key Stakeholders	Constructs	Sub-Constructs		Current Situation	Source of Information
Students	Ability to Learn	Recruitment and Selection		Academic Potential Test	Secondary Data
	Opportunity to Learn	Curriculum	Common Course Offered	Entrepreneurship, New Venture Management, Small Business Management, Business Development, Business Management, Marketing Management, Creative Thinking in Business, Business Ethic & Good Corporate Governance, Financial Management, Human Resources Management	Students, Lecturers, Alumni, Secondary Data
			Programs	Business Plan Competition, Business Capital from Telkom Education Foundation (Move Program), and Student Creativity Program from Directorate General of Higher Education Indonesia	Students, Lecturers, Alumni
		Institutional Supports	Periodicals	Gemari, Kompetisi, Bloomberg BusinessWeek, Warta Pegadaian, Tempo, Eksekutif, SWA, Kompetisia, M-Bizz, Cyber, National Geographic, Jakarta Post Review, The Economist, Marketing, Time, Jakarta Post Magazine, Marketeers, Pengusaha Indonesia, Warta Ekonomi, Trubus, Properti, Konsumen, Manajemen Usahawan Indonesia, Far Eastern Economy Review, Harvard Business Review, Entrepreneur International, Cakram, Fortune Telecommunications, Majalah Bulanan HRD, The Economist	Secondary Data
			Role to Community and Outreach Activities	Business centers & clubs with local entrepreneurs, Dissemination of research results to community, Student consulting projects, Seminars,	Students, Alumni, Lecturers

		Training for potential entrepreneurs, Technical & management assistance to entrepreneur	
Incentive to Learn	Grading Evaluation	Weight rating is greater in assignment	Lecturers, Secondary Data
	Grants	Improving Academic Achievement Scholarship Tuition Assistance Scholarship	Secondary Data

Ability to Learn

According to secondary data, TEBS always conducts recruitment and selection of their student candidates through an academic potential test as the starting point to enter the school. The institution has a passing grade standard to select the number of student candidates that will be accepted. After being accepted as TEBS's students, they perform a psychological test in the first semester. The purpose of this test is to know their soft skills.

Opportunity to Learn

The institution provides learning programs and institutional supports to give the opportunity for their new students to learn. Several common courses offered by the institution are Entrepreneurship, New Venture Management, Small Business Management, Business Development, Business Management, Marketing Management, Creative Thinking in Business, Business Ethic & Good Corporate Governance, Financial Management, and Human Resources Management. The New Venture Management and Small Business Management are elective courses which are designed for those who choose entrepreneurship as their study focus.

The institution provides their students with several programs to encourage entrepreneurial activities such as Business Plan Competition, Business Capital from Telkom Education Foundation (Move Program), and Student Creativity Program from Directorate General of Higher Education Indonesia. The institution also provides them with periodicals to support their learning such as Gemari, Kompetisi, Bloomberg Businessweek, Warta Pegadaian, Tempo, Eksekutif, SWA, Kompetisia, M-Bizz, Cyber, National Geographic, Jakarta Post Review, The Economist, Marketing, Time, Jakarta Post Magazine, Marketeers, Pengusaha Indonesia, Warta Ekonomi, Trubus, Properti, Konsumen, Manajemen Usahawan Indonesia, Far Eastern Economy Review, Harvard Business Review, Entrepreneur International, Cakram, Fortune Telecommunications, Majalah Bulanan HRD, and The Economist. The institution also has several programs to support entrepreneurial activities within and outside the institution, such as business centers and clubs with local entrepreneurs, dissemination of research results to the community, student consulting projects, seminars, training for potential entrepreneurs, technical & management assistance for entrepreneurs.

Incentive to Learn

As a business school, the institution has the goals and objectives to create entrepreneurial graduates or entrepreneurs as their output. One of the consequences is that the institution has to design the learning programs that fully support all entrepreneurial activities. Another consequence is that the load of learning for several courses offered is more on the assignment. Therefore, the weight rating of assignment is greater than the other components in the grading. In addition, the school provides grants to support their new students to improve their learning. The grants are allocated for two different targets of students: those with good achievement (Improving Academic Achievement Scholarship) and those with lack of money to pay their tuition fee (Tuition Assistance Scholarship).

5.2.2 The Staff

The staff members will be explained based on the ability to improve learning, improve opportunity to learn, and improve incentive to learn. These findings are focused on lecturers' supports to enable their students to learn satisfactorily. The findings can be seen in Table 3.

Table 3. Research findings of staff as key stakeholders

Key Stakeholders	Constructs	Sub-Constructs		Current Situation	Source of Information
Staff	Improving Ability to Learn	Learning Evaluation	Indicators	Business performance, Entrepreneurial intention, Start-ups by graduates, Academic standard of students (Grade Point Average), Students / alumni's satisfaction, Resulting innovation, Contribution to society	Students, Alumni, Lecturers
			Methods	Test / Examination, Business Plan, Final project presentation, Measuring business profit	
	Improving Opportunity to Learn	Teaching Methods	Inside Class	Making Business Plan, Presentation by students, Business Simulation, Role Play, Presentation by lecturer, Discussion, Guess Lecture, Video	Students, Alumni, Lecturers
			Outside Class	Internship, Company Visit, Workshop, Feasibility Studies, Business Plan Competition	
			Technology Pedagogy	Complete web-based assignment, Offer information to the students	
		Lecturer's Role		Consultation after class	Students, Alumni, Lecturers
		Administration's Role		Administration supports	Students, Alumni, Lecturers
	Improving Incentive to Learn	Rewards		Best performance recognition	Lecturers
		Grading Evaluation		Participation as a part of grading evaluation	Lecturers

Improving Ability to Learn

The indicators of successful learning in this school are the business performance, entrepreneurial intention, start-ups by graduates, and academic standard of students (Grade Point Average), students/alumni's satisfaction, innovations, and contribution to society. However, the dominant indicators are business performance and Grade Point Average.

The learning outcomes of this institution are described below:

a. students are capable of planning, organizing, staffing, leading and directing others, and exercising control in order to manage a business and non-business organizations;

b. students are able to perform the duties of the functional manager and to act as an entrepreneur at business and non-business organizations;

c. students are able to solve operational and managerial problems and choose the best solutions, decision making recommendations, and action plans by leveraging information and communication technologies;

d. students are able to understand the theories, concepts, methods, and tools associated with the analysis of managerial skills in the areas of Marketing, Human Resource, Operations, and Finance;

e. students are able to apply the concept of marketing management covering aspects of management and marketing as well as the concept of developing strategies to plan the marketing program at a company;

f. students are able to demonstrate a system for recording and providing analysis on the company's financial statements as a basis for financial decision making and analysis of the funding sources based on the theory of capital structure which can be implemented in a company;

g. students have an entrepreneurial spirit so that they can contribute significantly to improve the welfare of society;

h. students are able to apply concepts of operational management which includes the design, operation of quality management, and project management analysis in a company; and

i. students are able to manage human resources.

According to the informants, in order to know whether or not the learning outcomes have been achieved, it is done through making business plans, doing real businesses, and doing internships in an established company at seventh semester. The common methods of evaluation are the examination, final project presentation, and measuring business profit. The institution also conducts a carrier path program for their graduates. These are scattered findings that need to be explored in depth to know the assurance of learning within this institution.

Improving Opportunity to Learn

The lecturers must deliver all materials to their students in effective ways. There are several teaching methods that are used to deliver teaching material inside the classrooms. These teaching methods are lecturer's presentation, student's presentation, business plan making, role play, discussion, guess lecture, and video showing. The students not only have some inside classroom pedagogy but also have some outside classroom pedagogy, namely internship, company visit, workshop, feasibility studies, and business plan competition. Besides having these two pedagogies, the students have some technology pedagogy such as completing on-line assignments and offering information to other students. The role of lecturers is not only as a facilitator to deliver teaching materials within the classroom but they also provide their spare time outside the classroom to conduct discussions or consultations for their students regarding academic issues. The learning process in this institution is also supported by the staff members of administration, whose main function is to promote all academic activities of the entire academic members.

Improving Incentive to Learn

The lecturer gives some non-financial rewards to encourage their students' motivation to improve their learning. They note students with the best performance, for example those who are active to answer the lecturer's questions or give opinions in discussions, perform well based on peer evaluations, and perform well in making profit for their business team. Such activities will be included as part of grading for the final scores of the subjects they take. These kinds of incentive will encourage the students to compete with one another in order to get the best performance.

5.2.3 The Institution

The institution will be explained based on improving ability to teach, improving opportunity to teach, and improving incentive to teach. These findings include the institutional supports to enable the staff member to work satisfactorily. The research findings can be seen in the Table 4.

Table 4. Research findings of institution as key stakeholders

Key Stakeholders	Constructs	Sub-Constructs	Current Situation	Source of Information
Institution	Improving Ability to Teach	Recruitment and Selection	Academic Potential Test TOEFL, Interview, Micro Teaching	Human Resource Management
		Training	Basic Technical Appraisal Skill, How to write an article for international journal, Community Service, Statistics, Web Training, Research Methodology	Lecturers
		Performance Appraisal	Individual Performance Appraisal System	Top Management
	Improving Opportunity to Teach	Workload	12 of Semester Credit System for teaching, research, and community service.	Lecturers
		Knowledge Sharing	None	Lecturers

	Freedom in Teaching	Improvisation in teaching	Lecturers
	Learning Material Supports	Syllabus, Handbook from library	Lecturers
	Fund Allocation	Fund for research and community service	Lecturers
Improving Incentive to Teach	Reward for Innovative Teaching	None	Lecturers
	Pay	Basic Salary, Structural Support, Tax Support	Secondary Data
	Incentive Schema	Uniform Support, Furlough Support, Education Support, Bonus for Idul Fitri celebration, Share of Institution's Net Income	Secondary Data
	Safety Needs	Life and Health Insurance	Secondary Data

Improving Ability to Teach

To be a good place for working, the institution has to recruit and select the candidates of their staff members, both lecturers and administration staff members, who are potentially able to support the students to do their learning satisfactorily. The requirements for this recruitment process include passing several tests, namely the academic potential test, Test of English as a Foreign Language (TOEFL), and interviews. In addition, there is a micro-teaching test, especially for the candidates of lecturers, in which they have to show their ability to teach.

To be a good employer, the institution must improve their lecturers' ability to teach. There are some programs to improve their lecturers that are already conducted there. One of them is called "Basic Technical Instructional Skill". This program guides the lecturers to make a syllabus for their teaching materials so that the teaching materials not only can be delivered in a systematic and effective way but also appropriate with the institutional context. The other programs include trainings in writing articles for international journals, in community service-related matters, in understanding and applying statistics, web-related matters, and in understanding and applying research methodologies. In order to manage their lecturer's performance, the institution also has a program called "Individual Performance Appraisal System". It is an evaluation form that must be filled in by both lecturers and other staff members every month. Their direct supervisor, the head of study program, will monitor their performance and give some feedbacks to their performance for improvement.

Improving Opportunity to Teach

According to the interview results with lecturers, the institution provides the workload to teach as many as 12 semester credit system, and it is supported by learning materials such as syllabus and handbooks available in the library. In order to improve the opportunity to teach, the institution gives the lecturers the freedom in teaching. In other words, the lecturers are free to improvise in deliver the materials as long as it does not go beyond the scope of the syllabus. They also provide some funds for the lecturers to do research and community services so the lecturers have the opportunity to develop their knowledge. However, based on the respondents' answers, the institution seldom provides knowledge sharing session among the academics regarding the results of research or community service activities.

Improving Incentive to Teach

Although the institution does not provide their staff members with certain rewards for doing innovative teachings, they pay them on the basis of a satisfactory payment scheme, which has such components as basic salary, structural support, and tax support. Besides, they have a good incentive scheme which includes such components as a uniform support, furlough support, education support, bonus for Idul Fitri celebration, and a share of the institution's net income. The institution also pays the life and health insurance of all its staff members.

6. Discussion

One of the findings from this study is a systematic framework to portray an entrepreneurial learning within a university context. It is valuable because we can get a better understanding on the factors that contribute to manage entrepreneurship education successfully. The research implications to the practitioners are that they have to monitor the wholly integrated system proposed in the framework to manage entrepreneurship education in

order to reach the institutional goals effectively. The institution has to focus not only on the students but also on the staff members. The institution must also fulfill all needs of both the students and the lecturers either for learning or for teaching. It is expected that by meeting all of their needs, the students can learn satisfactorily and the lecturers can give their best performance as the learning facilitator to enhance their students' ability, opportunity, and incentive to learn.

The previous studies only studied learning within an institution as the whole system. The findings in the previous studies were partial and tended to focus on students and institution only. There are several studies which focused on such inputs as the importance of students' selection (Dhliwayo, 2008); the importance of entrepreneurial traits, competence, and managerial skills to promote successful entrepreneurs (Ibrahim & Soufani, 2002); and the importance of internal motivation of the students (Gelderen, 2010). Most studies are conducted on mapping entrepreneurship education. The mapping included such things as popular courses, existing teaching focus, curriculum of entrepreneurship, entrepreneurship centers, teaching methods, periodicals used in the classroom, technology supports from an institution (Co & Mitchell, 2006; Solomon, 2007; Varblane & Mets, 2010). Two other similar studies were also conducted. One focused on teaching methods (Tan & Ng, 2006) and the other one focused on learning process in both the classroom and the real world (Henry et al., 2005).

An experimental study on entrepreneurial education within a university level that was based on entrepreneurial-directed approach was conducted by Heinonen and Poikkijoki (2006). They used a qualitative method combined with an observation to evaluate the approach feasibility and applicability to the entrepreneurial education. They also focused their study on discovering, evaluating, and exploiting the core role of opportunity to learn. There were other similar studies, but they only focused on the impacts of entrepreneurial education on the students such as participants' satisfaction (Abduh, Maritz, & Rushworth, 2012; Millman, Matlay, & Liu, 2008) and entrepreneurial intention (Fayolle, 2006). Very little did previous studies research or explore about the supports from the institution to enhance staff members' performance. Therefore, this study tries to offers a fully systematic approach to explore an existing learning, concerning the opportunity, ability, and incentive either to learn or to teach. This systematic framework is expected to review the students' the staff members', and the institution's roles in creating learning satisfactory.

The scientific contribution of this study is the use of a systematic framework as a guideline to describe successful learning practices in managing entrepreneurship education within a university. This approach is expected to enable the exploration of all aspects, instead of some aspects, which are necessary for an effective learning to happen within an institution. In this framework, three key stakeholders are involved, namely students, staff members, and the institution. Each stakeholder has its own important issues in managing entrepreneurship education within a university context. Those issues are ability, opportunity, and incentive either to learn or to teach. This systematic framework based on Input-Process-Output-Outcome Model will be illustrated in Figure 4.

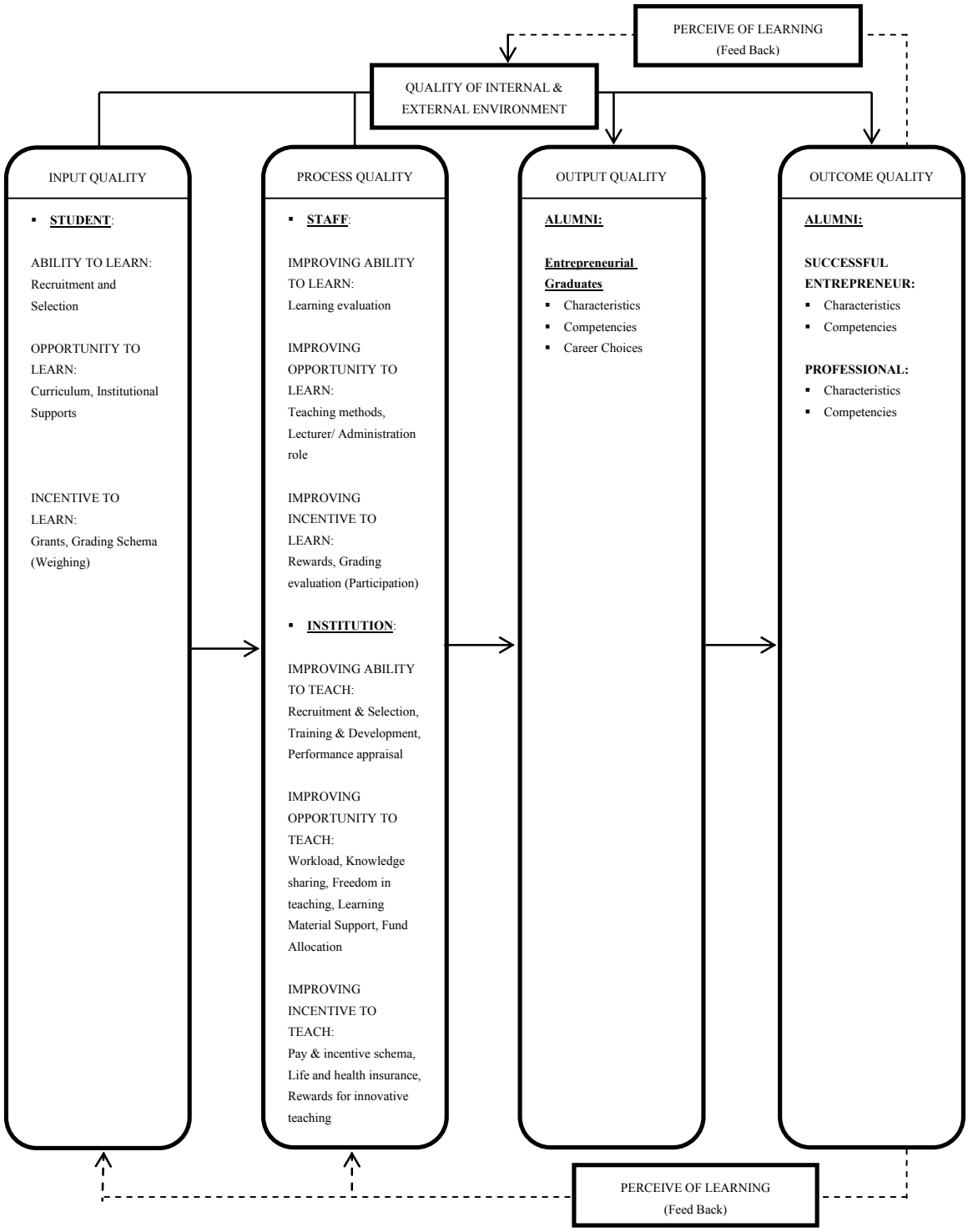

Figure 4. The entrepreneurship education framework based on input-process-output-outcomes model

This framework explains the relation between key stakeholders such as students, staff members, and the institution along with their other important aspects such as ability, opportunity, and incentive. The achievement of learning outcomes (output and outcome quality) depends on input quality and process quality. The input quality covers student aspects which consist of ability, opportunity and incentive to learn. The process quality covers staff aspects which consist of improving ability, opportunity and incentive to learn; besides it also covers institution aspects which consist of improving ability, opportunity and incentive to teach. The learning perceived by internal (students and staff members) and external institution (alumni) can be used as evaluation to make

continuous improvement (Assurance of Learning). High quality of output and outcome occurs when the characteristics, competencies, and carrier choice of the alumni match with institutional goals and objectives. This systematic framework is used as a guideline to explore empirical evidence of relevant learning and institutional supports for developing successful entrepreneurs within a university setting.

Telkom Business School is the institution whose one of its goals is to create entrepreneurial graduates or entrepreneurs. There are three important key actors to manage successful entrepreneurial education, namely students, staff members, and the institution. In order to achieve the above-mentioned goal, the institution must provide many things to support learning within a school. It includes the recruitment and selection process of its student and staff member candidates where they have to undergo several tests to fulfill certain requirements.

This institution has already provided their own students and staff members with the opportunity both for learning and for teaching such as curriculum, learning materials, and entrepreneurial supports from the institution. The entrepreneurial supports provided by the institution include such things as Business Plan Competition, Business Capital from Telkom Education Foundation (Move Program), and Student Creativity Program from Directorate General of Higher Education Indonesia Business centers & clubs with local entrepreneurs, Dissemination of research results to community, Student consulting projects, Seminars, Training for potential entrepreneurs, Technical & management assistance to entrepreneur, and Fund allocation for doing entrepreneurial activities such as research and community service.

The students can learn satisfactorily because there are several non-financial incentives for their performance such as grants, which is allocated for two different targets of students. One is for those with a good achievement, and the other one is for those with lack of money to pay their tuition fee. The institution also gives them with an appropriate evaluation scheme in which the students' participation is included in their academic grading, so it can encourage them to reach their best performance. Unfortunately, there is no reward for the students who manage to become entrepreneurs while they are still in college.

The staff members, particularly the lecturers, can work satisfactorily because the institution provides them with an appropriate workload and the freedom in teaching. They can make improvisation in their teaching as long as it does not go beyond the scope of syllabus. In addition, they also get a good salary, incentives, and health and life assurance from the institution. Unfortunately, there is no incentive, for example a reward, for the lecturers who manage to do innovative teachings.

7. Conclusion

There are several important findings from this research. One is that the institution has already had facilities to support learning within the institution itself although lacking in the management to optimize the utilization of the facilities. The assurance of learning to guarantee the students' learning effectiveness is also not well managed. The previous studies mostly researched about the learning and institutional supports partially. They mostly focused their research on the opportunity to learn, such as programs, teaching methods, and facility supports. Very little did they explore about staff members' competence and how to improve it

The future research should conduct an evaluation for this current mapping to get a better understanding on the effectiveness of the learning and institutional supports. This mapping should be applied in other business schools to get some insights about the best learning practices. Then, we can do cross-case analysis to get some patterns that can be used to build a learning theory of entrepreneurship education in developing successful entrepreneurs.

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