The Research for Current Status of the Entrepreneurship Education's Implementation in Japanese Higher Education

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Abstract—The advent of twenty-first century, the important issues of the world such as the political, economic, climate and so on, which just like a color palette and efforts to sway in the canvas of the history. Taiwan, of course, as a part of this century, is tried to in an effort to have enhancement in various aspects. However, the economic is one of the major items. Furthermore, it is a very important issue for us. Taiwan has entered the stage of economic development of technological innovation, and at the same time, to continue the innovation for the future industries depends on a new kinetic energy and new venture development.

According to the United Nations' 2008 Creative Economy Report "(2010 World Competitiveness Yearbook): To startup companies is an important channel to cascade the investment, technology and trade. And also plays different roles in an different stages for economic development. Overall, not only can significantly improve productivity, better open up new markets and new customers. Therefore, is very important to cultivate new enterprises and to promote the healthy development of the economy actively.

In recent years, new enterprises are considered as an important key to solve the problem in today's economy in such a tumultuous world. In addition, it is also called the best solution of the unemployment problems. The entrepreneurship education becomes a wave in Taiwan higher educations, thus, the entrepreneurship curriculum is set up. Though a lot of schools have been performed many entrepreneurship education curriculum plantings for years. But the current planning are really can aptly meet the needs for entrepreneurs? How many courses among these curriculums are actually needed? And how is the foreign entrepreneurship education be taught overseas?

How about the existing entrepreneurship education be performed in Japan? Which of the countries' cultural background are completely different from Taiwan? In this study, we research the differences between Japanese and Taiwanese local entrepreneurship education by analytic methods. And to understand in-depth what differences will arising if under the different cultures, people's logic thinking's, social resources, policies, system, etc. Finally through the analysis of entrepreneurship education in advanced countries, which based on a

different cultural background, by using the commonality needs and different perspective of different entrepreneurs to explore the status of entrepreneurship education in Japan, so that can provide suggestion to Taiwan for the existing methods of entrepreneurship education in

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higher education. In addition, we can learn from the collecting of relevant documents and reference materials.

Keywords—Entrepreneurship Education, New Enterprises, New Venture, Higher Education

I. INTRODUCTION

N ew enterprise is not only the base also an advantage for Taiwan to expand on global. Also, the promotion of the economic growth, wealth accumulation, and the important source of energy to improve the employment are important. According to Swiss IMD (International Institute for Management Development, referred IMD) pointed out that the "2010 World Competitiveness Yearbook" project on entrepreneurship questionnaire survey report pointed out that Taiwan is ranked third in the world behind Israel and Malaysia [1]. In the studies of National Foundation for Science and Technology Policy Research Laboratories Research and Information Center, were observed Taiwan's entrepreneurship in the IMD world competitiveness rankings from 2004 to 2010, with the same period the rate of change in domestic investment trends, the relationships both are generally positive. This showed enhanced new venture is advantageous which will increase the investment and also promote the growth of economic. Of course among the new enterprises, the entrepreneurship connotation is quite variety and complex, and quite a lot of factors. But the international community is generally to reflect the national entrepreneurial vitality by the founding of new businesses and innovation activities [2].

New Enterprises is an international competitive advantage indicator. New Enterprises' setting conducive to creative energy and competence niche for industries. In recent years, because the effect of the United States financial crisis and the after period of the ECFA (Economic Cooperation Framework Agreement, cross-strait economic cooperation framework agreement), the Taiwan government is positive to develop the ten key services, six emerging industries and four emerging smart industries, struggling for economic restructuring. On the other hand, are also actively promoting global investment, preparing to improve the quality of investment environment and promoting to increase new enterprises in order to continue to strengthen the economic growth momentum.

Currently, people on the planet, is facing the worst ever compound economic problems. In September 15, 2008 Wall Street an unforgettable Monday, a 158-year-old fourth-largest

U.S. investment bank Lehman Brothers (Lehman Brothers Holdings Inc.) declared bankruptcy Because of investment in subordinated bonds on and the huge real estate losses. On the other hand Merrill Lynch acquired by Bank of America. The two news of the Wall Street caused the financial crisis and swept through the globe. Immediately, the international oil prices rocketed, and resulting in the non-energy consumer expenditure of advanced countries has being squeezed.

Emerging markets and the Euro zone take tighten monetary policy to cool down the boom due to the raised significantly inflation. Japan Tohoku earthquake and tsunami inflict heavy losses on Japan's economy, and caused chain scission crisis. And then followed the political battles of Senate and House of Representatives of United States due to the debt ceiling issue and this caused consumer confidence fallen sharply. Then the worsening European debt crisis led the economic fall into recession and become to a dark period among many European countries, and the adversely affect was transfer to the other countries through the trade and financial channel.

Above the numerous of problems are eagerly looking forward to the solutions but at the same time the issues for entrepreneurship education's improvement and the entrepreneurs assistant will be related closely to the country's economy, and also are indispensable and positive importance.

II. LITERATURE REVIEW

Definitions

Entrepreneurs and entrepreneurship The Entrepreneur is a type economical agent specific to the market economy which has an entrepreneurial, active and innovative behavior, risks and has private initiative specific to the economical competitive systems. Entrepreneurs are those individuals with an inventive and creative spirit, an original thinking, capable of finding ideas and solutions being oriented towards improvisation and new ideas as well as towards the identification of efficient solutions to solve different problems. The definitions of entrepreneurship and entrepreneurs refer to the role of entrepreneurs and include: risk, coordination, innovation, uncertainty, capital, decisions and resource allocation. [3]

Entrepreneurship has a variety of novelties. It has been identified as one of the main factors contributing to the advancement of economic prosperity of communities in a country. Development and the importance towards entrepreneurship has been give some importance by the government through the implementation of various programmers related to entrepreneurship which are actively planned for producing many of the entrepreneurs. [4]

An entrepreneurial university is consciously introducing new practices. It is innovational from the organizational, technological and financial point of view.

The mission of the innovative entrepreneurial university is that of preserving and enriching national and universal culture, its target is training and forming specialists and its objectives are correct and clear reactions to the requirements of the society they are part of. Away from dirty business, the entrepreneurial university is the place where people innovate on the educational and research level in order to exist and develop. Entrepreneur is

not only an economist. Say, invented this term with almost the 200 years ago, creating a total confusion on entrepreneurial definition and on entrepreneurial system. Now the term entrepreneurial is extended in all activity domains, in our case in academic domain, in university area. [5]

Academic entrepreneurship can be defined as the leadership process of creating value through acts of organizational creation, renewal or innovation that occurs within or outside the university that results in research and technology commercialization. It occurs at the level of individuals or groups of individuals acting independently or as part of faculty or university systems, who create new organizations, or instigate renewal or innovation within or outside the university. These individuals can be referred to as academic entrepreneurs or entrepreneurial academics (academic entrepreneurs).

Value from academic entrepreneurship is achieved through the integration of scientific activities, academic activities and commercialization activities (Chrisman et. al., 1995; Clark, 1998; Etzkowitz et. al., 2000; Sporn, 2001; Etzkowitz, 2004; Brennan and McGowan, 2006; Kirby, 2006; Phan and Siegel, 2006; Rothaermel et. al., 2007). [6]

The definition of entrepreneurship education UNESCO Education for entrepreneurship is defined as: entrepreneurship education, broadly speaking is a groundbreaking personal training, it is equally important as salaried people. Because in most of the business organizations, more and more enterprises are focusing in employer's invention, innovation, risk-taking, entrepreneurship and ability to work independently as well as technical.

Entrepreneurship education is to make the educated people which are able to innovate within the territory of the socio-economic, cultural, political behaviors, and to open or expand a new space for developments, and also be the education activities to provide the community and opportunities the exploratory. Just like the World Economic Forum Klaus Schwab, Founder and Executive Chairman considered: Entrepreneurship is the engine driving for innovation, job opportunity creation and economic growth." He also said, "In the future, while leaders ready to solve more complex, interconnected, and ever-changing problems, is generating the entrepreneurial attitude, energy development skills education. So clearly visible, entrepreneurship education is important.

First, the entrepreneurship education is divided into two sections to describe, entrepreneurship and education. What is called "entrepreneurial" and "employment" are mutually contrasting two words. The former is self-employed or an employer. The latter is a employee or employment. The words in English of Starting, a new business, new venture, entrepreneur, are all meant "entrepreneurship" in Chinese [7]. While Professor Jeffry A. Timmons with the reputation "Father of entrepreneurship education" was vising China in 2006, he said the entrepreneurship is a subject which concern about seeking an opportunity.

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employees' invention, innovation, spirit of adventure, entrepreneurship and independently work ability as well as technical.

Entrepreneurship education is to make educates be able to advance the behavior innovation, opening up or expansion a new development space in a socio-economic, cultural and political territory. And also provide exploratory opportunity education activities for others and society. Just like the Founder and Executive Chairman of the World Economic Forum Klaus Schwab considered [8], the World Economic Forum advocacy is a global citizenship, their duty is not only to promote global economic growth, but to assure our entrepreneurship can be advantaged and managed well, and to mold the new economy, create employment opportunity for 21st century. From above we can see clearly the importance of the entrepreneurship education.

III. RESEARCH METHODS AND THE RESEARCH PROCESS

This study will be analyzed from the secondary data.

- A. Secondary data's collection and using.
 - The significance of secondary data
 - 1. The secondary data is the information which collected and recorded from previous studies or agency.
 - 2. It is usually the historic data, be well collected data, and not necessary to have subject's response.
 - •The type of secondary data.
 - 1. written information: announcements, letters, minutes of meetings, stocks reports, diaries, speeches, books, journals, magazines, newspapers.
 - 2. non-written information: audio, video, images, graphics, movies, TV shows, DVD, CD, database.

B. Secondary data sources

- •Periodical: Maybe monthly or quarterly issued.
- •Newspaper: The information and content are much rich than periodicals, newspapers usually is an instant, low-cost source for information.
- •reference: publications issued by the Government, civil society and other institutions.
- books: The books published by publishers each year is an important source for the secondary data, the can be used as the basis for exploratory research.
- •The public issue innformation of the company: The annual reports of listed companies, and the replenishment of the prospectus.
- •Electronic databases: Free electronic databases, fee-based electronic database.

C. Secondary data collection

- •1. Confirm the subject what you want to understand.
- •2. Establish the searching keyword of the topic.
- •3.Through the search system to find out the related articles or reports: Periodical Articles Index, Dissertations and Theses Network, Government Gazette, National Library, Government Gazette, International conference abstracts, The University Library Index System
- •4. Collect key articles on the field, and find other keyword from the articles.

D. Secondary Data Method:

Data includes different sources and collected data by other

researchers or different forms of files. These data sources include government reports, business and industry's research, documentation databases, organizations data and books and periodicals from library. Secondary data can provide a very convenient and economical path to answer different questions. Secondary data comprises a more important meaning, that is, to make a new direction of analysis for the raw data original collected.

Secondary Data Analysis is to use the existing data (eg. census) or large academic database to study, which is directed against the theme of the research methods.

The main superiority of using secondary data is that:

- •The researchers do not need to spend a lot of money, it means the research funding can be saved more efficient.
- •The researchers can save a lot of time, so that they can aim to analyze the data provided by large samples.
- •Have the effect of stacking knowledge; keep continuing the research of others therefore with the function to stack of research results
- •Databases usually contain few phases of researches which can search and survey the changes of research topics by crossed times. With the improvement of statistics software and the developed internet interface, it becomes more convenient to publish the application of secondary database [9].

When using secondary data in an analysis, there are some important things that must be done beforehand. Since the researcher did not collect the data, he or she is usually not familiar with the data. [10]. It is important for the researcher to become familiar with the data set, including how the data was collected, what the response categories are for each question, whether or not weights need to be applied during the analysis, whether or not clusters or stratification needs to be accounted for, who the population of study was, etc. Basically, the researcher needs to become as familiar as possible with the data set and the data collection process used.

There are a great deal of secondary data resources and data sets available for sociological research, many of which are public and easily accessible. Read more about commonly used secondary data sets. [10].

E. Disadvantages of Secondary Data Analysis

A major disadvantage of using secondary data is that it may not answer the researcher's specific research questions or contain specific information that the researcher would like to have. Or it may not have been collected in the geographic region desired, in the years desired, or the specific population that the researcher is interested in studying. Since the researcher did not collect the data, he or she has no control over what is contained in the data set. Often times this can limit the analysis or alter the original questions the researcher sought out to answer. [10].

F. Research Process

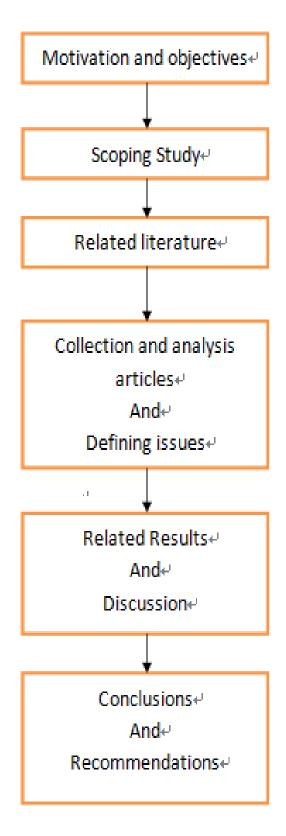


Fig.1 Research Flowchart Graphics manufacturer: Author

IV. THE STATUS OF ENTREPRENEURSHIP EDUCATION IN JAPAN

After the economic collapsed due to the bubble, Japan a economic power was woken by the long-term economic depression and forced Japan have to change from seeking adjustment of industrial structure. This country based on the science and technology pointed out the most important condition is to promote scientific and technological progress and entrepreneurial activity, to form and develop new industries. Besides, the entirely investment is to the national, public universities and research institutes. The Japanese government also is an important role-playing at integrating social resources, promoting the technology transfer, developing high-potential emerging industries. At present, after years of effort, Japan finally is forming a country as an innovation system of "joint industry-government-education" model. The policy orientation of Japanese government is the statehood by science and technology, which greatly stimulated a large number of university venture to emerged and developed. The relationships between universities' Entrepreneurship education and enterprises in Japan are linked very closely.

Many studies point out the entrepreneurial activities has positive effects for the country's overall economic growth. Such as: reducing unemployment, active social economic activities, and also contribute the generation of innovative technologies. Japan Daiwa Institute of Research Ltd. verified the pubic data of 43 countries including Korea and the United States, once again confirmed the view above [11].

In addition, Japan has long-time been committed to create a great environment for industry-education cooperation, to untie the regulation, to roots downward. Since 1999, in order to cultivate the entrepreneurial spirit of young, the long-term goals be made to insert inspired courses of entrepreneurship into elementary, junior high and high school curriculum. In Hiranuma Plan 2001(i.e. "Towards new markets and create employment key Plan"), the project target be set to "10 years later in colleges and universities, the number of patents obtained will increased to 10 times, and reach to 1000 schools with venture investment enterprises be established. And has been added "entrepreneurial education" curriculum into each college, hoping by such convergence education, the achievement of entrepreneurship can be showed smoothly and effectively by long-term investment into education system [11].

In order to investigate the case of entrepreneurship education, Japan METI in 2008 survey and produced "Entrepreneur Education Actual State Survey" In Japan, the country's universities and graduate schools to investigate ,Total universities and graduate schools, 734 schools, conducted research and published "Entrepreneurship education in universities and graduate schools Actual state survey results "Of sample for Japan's entire university and graduate school (total of 734 schools) survey periods: the summer of 2008, response rate 73% (total of 536 schools).

Currently the universities in Japan, there is 46.1% proportion, which is 247 schools has the entrepreneurship curriculum [11].

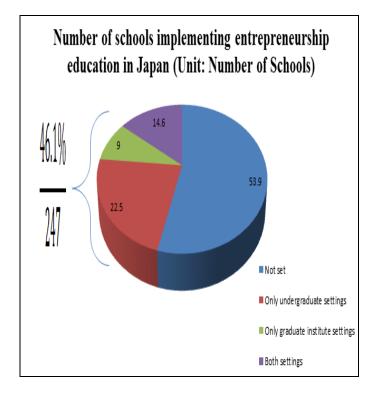


Fig.2 Graphics manufacturer: Author

At present the numbers of school with implementation of Entrepreneurship curriculum is significantly increased and very rapidly compared with the previous times.

In Japan, the Graduate School of University with the curriculum which the purpose is entrepreneurship education is account for approximately 10 percent, total 55 schools.

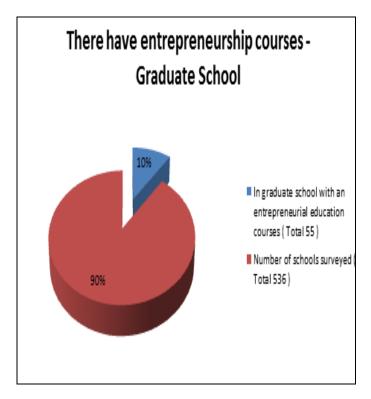


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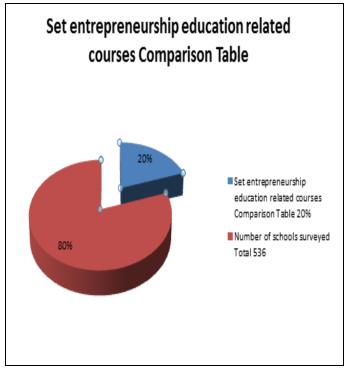


Fig.4 Graphics manufacturer: Author

Except the formal teaching courses, set up related programs and activities have reached 20 percent. The course design and activities out of the curriculum are showed active within both of the College and Graduate School in the University [11].

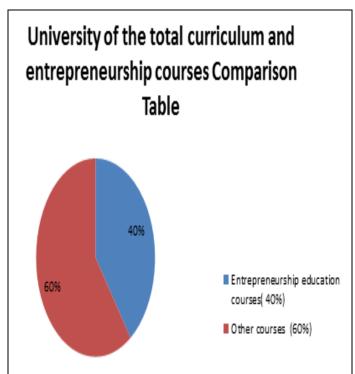


Fig.5 Graphics manufacturer: Author

In college, there are about 40 percent of total courses which set up related courses of entrepreneurship education which can be able to select to read And about 30 percent can be select to read in Graduate school. According to the distribution of the courses numbers,the answer-finding mission shows approximately 40% in all College and Graduate School have set up the entrepreneurial education [11]

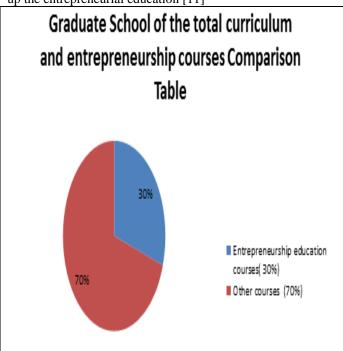


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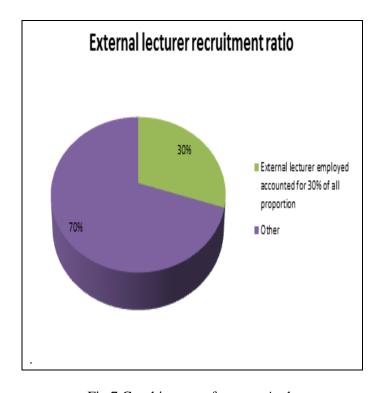


Fig.7 Graphics manufacturer: Author

However, the more courses be set up in Graduate school much more than College. College is accounted for approximately 20%, and Graduate School is accounted for approximately 30% [11].

However, there is a particularly feature in this study, that is in Japanese College, the lecturer for entrepreneurship education curriculum are not all from intramural lecturer but 30 percent of College hire the external lecturer. And this phenomenon is widespread in Japan.

In addition, according to the content of courses, it cannot been seen much difference between the College and the Graduate School. But the demands of them are different. And therefore, the course's plan should be aimed at different needs, and this issue will became a very important in the near future

V. CONCLUSION

The education has often been think by a one-way logic and over time, a lot of thinking have been taken for granted. For example, it is surely right the study be taught from school, the student only need to follow the journey of schools plans, go to school every-day, and when time past, we think ourselves have complete the studies. Kind of these views are often appeared in our mind, and depending it on normal. Most of my friends get together after graduation, every time when they handed out the business cards, It suppressed me sometimes due to the career of them are completely different from their studies. Of course this is only my personal sigh and subjective narrative for the current strange phenomenon, but the motive of this study is just

occurred under such a kind of contradictory. Let's go back to the key point of the study. In this study, we can see clearly from Japanese database, and compared with the foreign entrepreneurship education, the experience of lecturer is emphasized. Of course we cannot say the lecturer cannot teach well without the experience. But in the actual, the entrepreneurial process should not have only theory. but should emphasize both theory and experience.

On the other hand, in the process of the entrepreneurial, often need some funds scheduling, the entrepreneur should understanding the practical curriculum such as the bank financing methods, and even how to communicate in a public relationship. But, at present, the kind of entrepreneurship education is not launched and educated.

In Taiwan, the Entrepreneurship education was be strongly promoted by the government, the resource and operation procedures are very much. It is very hard only at the data's collection, not to mention to use these resources. But in contrast, on the entrepreneur side, the need for using resources for entrepreneurs is quite urgent.

Entrepreneurship is an animated lesson to be the application and teaching, both should be applied in actuality. The entrepreneurship education in Japan paid much attention on this point. Entrepreneurship education in Japan will arrange the people with practical experience to collocate with the schools professors. So that can coordinate with practice and theory. Teaching averagely and let the entrepreneurship education is closer to the practical structure.

In this study, to think outside the box, hypothetically think by the other way to arrange the curriculum plan and arrangements. By trying to put the concept of the entrepreneur's view into the curriculum, use a different point, let the entrepreneurship denudation lecturers cooperate with the entrepreneurial experience to teach those entrepreneurs' students.

In this study were summarized in a few points:

A. Time:

From a very basic truth of view, all of the courses you need to use a semester? Because the relationship between the Japanese educational system, should it must be designed as a semester? In this study found that among the proposed learning should not have too many restrictions. Primary focus is when finish this Program, whether there is sufficient capacity to face the problems arising entrepreneurship, and is have no relationship about that enough credits and time's longer.

B. Specialization:

If you want to run a business in a cafe store, then, if even their own store's business cards, trinkets and ornaments, etc., and just learning how to design business cards, forget main coffe technology, I think it is cart before the horse, when you are continue learning different item some extent, may have blurred the focus, finally ,quit do the coffee store, do business card design.

C. Information:

School curriculum, should have a lot of learning and finding information about entrepreneurship, and organize information, and provide information and entrepreneurship learners very simple to see information

In which information is obtained entrepreneurship is quite important.

VI. SUGGESTION

After analyzed the status of entrepreneurship education in Japan, the suggestion below has to be summed up:

- •Divide the entrepreneurship courses into must show up learning and off-site learning. And both learning can be learned through internet so that can reduce the cost of learning.
- •Set up a specialized institutions (specialist) to provide the professional assistance. This might be able to cooperate with schools, applying school's resources and education to provide a exactly assistance while student's really needs.
- •To create the curriculum for entrepreneurial resource utilization:

While starting an enterprise, the problems usually be faced such as bank financing issues, legal issues, administrative processes in variety of application, etc. All of these can be taught in teaching. And post all the solution in to website so that the students can inquiries in internet.

•Higher education in Taiwan should use as reference from foreign experiences in entrepreneurship education. Changing the thinking and build a management system for entrepreneurship education, in order to integrate sufficiently the government, enterprises, financial institutions and local communities and other social forces to participate in promoting the innovation for entrepreneurship education.

References

- [1] IMD, 2010 World Competitiveness Yearbook, Lausanne, Switzerland, International Institute for Management, 2010
- [2] National Foundation for Science and Technology Policy Research Laboratories and Information Center. http://cdnet.stpi.org.tw/techroom/market/macro/2010/macro_10_021.htm
- [3] EMIL POP, ROXANA BUBATU, NTREPRENEURIAL EDUCATION AND E-LEARNING RELATIONSHIP
- [4] NORASMAH OTHMAN, MOHD HASRIL AMIRUDDIN & HALIZA HUSSEIN, Entrepreneurial Behaviour and Non-Cognitive Entrepreneurship Knowledge Among the Orang Asli Youths from the South Zone of Peninsular Malaysia
- [5] MIRELA MIHALACHE, The future of entrepreneurial university in Romania, Recent Researches in Applied Economics and Management Volume I
- [6] 1MOHAR YUSOF, 2ZULKIFLEE ABDUL-SAMAD, 3FADZIL HASSAN, 4ZUHAIRUSE MD. DARUS, 5MOHAMMAD FADHIL MOHAMMAD AND 6AZAMI ZAHARIM, Academic Entrepreneurship and Innovation in Higher Education: An Integrated Framework for Malaysian Universities.
- [7] HUANG TUNG CHUN, Success Factors affecting youth entrepreneurship research, National Youth Commission commissioned research, Taipei National Youth Commission, 1995.
- [8] Klaus Schwab, Shaping the Future Economy, World Economic Forum, 2012.
- [9] TUNG-HAI, Secondary data analysis and application, University Department of Sociology courses, 2009.
- [10] Secondary Data Analysis
 http://sociology.about.com/od/Research-Methods/a/Secondary-Data-Analysis.htm
- [11] 2009 Press Releases, University Graduate School Entrepreneurial education database, Japanese Ministry of Economy, Trade and Industry ,2009.
- [12] LI,JIA-HUA, Taiwan Economic Research Monthly, Link to corporate resources to enhance the effectiveness of entrepreneurships education, 2009.
- [13] ZHEN,AI-ZHU, Government policy and youth entrepreneurship education Relationship of entrepreneurship, 2009.
- [14] MAHMOUD ABDULWAHED, JEHAN ABU HAMAD, MARAM HASANAIN, AND MAZEN O. HASNA, Entrepreneurship Education in Engineering: A Literature Review, and an Integrated Embedment Proposal.
- [15] Brennan, M.C., and McGowan, P. 2006. Academic entrepreneurship: An exploratory case study. International Journal of Entrepreneurial Behavior and Research.
- [16] Cargill, B.J. 2006. The entrepreneurial university Is it 'All about the money' or does 'Being entrepreneurial' mean something different for a university? Annual Conference of the British Academy of Management, Belfast, 12-14 September.

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- [17] Chrisman, J.J., Hynes, T., and Fraser, S. 1995. Faculty entrepreneurship and economic development: The case of the University of Calgary. Journal Business Venturing.
- [18] Clark, B.R. 1998. Creating entrepreneurial universities: Organizational pathways of transformation, New York: Pergamon Press.
- [19] Cosh, A., Hughes, A., and Lester, R. 2004. International innovation bench-marking and the business-university linkage. Presentation at The Cambridge-MIT Institute National Competitiveness Summit. Retrieved January 7, 2008, from Centre of Business Research, University of Cambridge.
- [20] Etzkowitz, H. 2004. The evolution of the entrepreneurial university. International Journal of Technology and Globalization,
- [21] Bashar S. El-Khasawneh, Entrepreneurship Promotion at Educational Institutions: A Model Suitable for Emerging Economies, WSEAS Transactions on Business and Economics.
- [22] Wang R., Tearle P., Cultural disconnection in virtual education: a small-scale study of a higher degree level course in educational research, Proceedings of the 5th WSEAS International Conference on Distance Learning and Web Engineering.
- [23] Bubatu R., Barbu C., The e-Learning education impact in human resource training, 5th International Symposium Occupational Health and Safety SESAM 2011.

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