

## Entrepreneurship Education: Training Technopreneurs in Singapore

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### Principal Topic

In the Knowledge Economy that characterizes the 21st century, Governments around the world are attempting to stimulate the creation of technical entrepreneurs or technopreneurs. Singapore is no different. The Global Entrepreneurship Monitor (GEM) of Singapore (Wong et al 2005) highlights that high tech entrepreneurship is a catalyst for economic growth, and since 1999, the Singapore Government has been pushing for increased levels of Technopreneurship. As elsewhere the Singapore Education system has been charged with initiating a more entrepreneurial culture, and it has responded by introducing innovation into its teaching. Using Singapore as the base case, the first author is undertaking a doctoral study to research on the training programmes for technopreneurs, and hopes that the research findings could contribute knowledge to entrepreneurship education research, thereby assisting educators and policy makers to further improve the quality and performance of the training programmes globally. This paper therefore gives a report on the status of this on-going research project, and shares the research findings.

### Methodology/Key Propositions

There are two key research questions in this study. They are:

- 1) What is the current status of entrepreneurship education?
- 2) What is the optimum entrepreneurship development programme to nurturing technopreneurs?

To answer the first research question, a longitudinal study is being carried out to understand the status quo of entrepreneurship education environment in Singapore. A Singapore Institutional Technopreneurship / Entrepreneurship Education (SITEE) Survey is designed and sent to Singapore institutions to collect information (such as courses and subjects details of entrepreneurship provisions) in both 2001 and 2006. The subjects of this SITEE Survey are both public and private institutions registered with the Ministry of Education in Singapore, for examples, universities, polytechnics, and professional development schools. The sample size is the number of registered institutions in Singapore that can be identified so as to survey a complete entrepreneurial education environment in Singapore.

The SITEE Survey, approved by the university's ethics committee, is hosted on [http://sg.geocities.com/slsee\\_research/Survey](http://sg.geocities.com/slsee_research/Survey). For subjects that do not have Internet access, the questionnaire can be made available to them via surface mail with paid return envelope, fax or email attachment. The returned and completed questionnaires are filed, sorted, and the data entered into an MS Excel spreadsheet to obtain an overall statistics for analysis. Written information received in the returned questionnaires is also studied to substantiate the statistical outcome. Content analysis is used to better delineate the curriculum provisions in entrepreneurship education. The World Wide Web (WWW) has been an efficient and convenient tool to elicit additional information about the subjects and topic under study.

To answer the second research question, a Technopreneurship Education (TEd) Delphi Forecast Study is being conducted with field experts (both in Singapore and Overseas) to examine the satisfactoriness of current curriculum provisions in entrepreneurship education, and to suggest improvement. Broadly there are three specific research questions that the TEd Delphi Forecast Study aims to answer:

What is the purpose of entrepreneurship education? Is current state of entrepreneurship education appropriate for the creation of technopreneurs? Should current state of entrepreneurship education change and, if so, how? By answering these research questions, it could then shed more lights to answering the main research questions of the doctoral thesis.

A questionnaire is designed to capture experts' views to above research questions and a pilot study is being performed to refine it. The final questionnaire is then circulated to the experts at least two rounds to collect their views and answers for above research questions. The researcher will do analysis of the answers at each round, update the questionnaire to follow up with the experts for a more accurate outcome.

The subjects of the TEd Delphi Forecast Study are selected experts teaching and managing entrepreneurship programmes and courses, and the sample size is 50. All subjects in the SITEE Surveys and TEd Delphi Forecast Study will remain anonymous throughout the research study.

### **Results and Implications**

Preliminary outcomes and implications from the 2001 SITEE Survey and recent internet surveying were presented at the SMU EDGE Conference 2006 in Singapore (See and Kirby 2006). The 2006 SITEE Survey and TEd Delphi Forecast Study are in progress, and this paper will therefore update these findings further.

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