

## Toward Effective Education of Innovative Entrepreneurs in Small Business: Initial Results from a Survey of College Students and Graduates

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### Purpose

Entrepreneurship education has become more commonplace in academia in the past few decades. It is important for researchers and policymakers to more fully understand the outcomes of these students so that we can better tailor future curricula needs accordingly. This paper discusses initial results from a survey funded with a Ewing Marion Kauffman Foundation challenge grant. The survey was designed and conducted by a team of researchers from the Berkley Center for Entrepreneurial Studies at the Stern School of Business and the Steinhardt School of Culture, Education, and Human Development, both at New York University. The study analyzes these data to provide some initial results that indicate whether and the extent to which courses that cover entrepreneurial topics influenced future participation in entrepreneurial activity, particularly in small business, by survey participants.

More precisely, the central purpose of this study is to focus on one critical subject: how prospective innovative entrepreneurs can be trained most effectively. It investigates the relationship between the educational experiences of subjects studied and their subsequent innovative performance.

For this first pilot study, five universities participated, three private universities in the Northeast and two public research universities in the South and Southwest. Another round of surveys is planned for 2010 and will involve additional universities in the United States, as well as universities in Europe, China, and the Middle East. Lessons from these preliminary findings will be helpful in designing these

future surveys, allowing the researchers to delve deeper into some of these issues.

### Overall Findings

Graduates who have taken entrepreneurship courses are significantly more likely to select careers in entrepreneurship, which the authors define as ever founding, having run, or having been employed in a start-up or entrepreneurial team. This finding should not be surprising, given that students interested in entrepreneurship would be more likely to enroll in such coursework. The survey results tend to suggest that this coursework might improve students' abilities to identify and take advantage of new innovative opportunities. Further study may succeed in teasing out many of these relationships.

### Highlights

- Taking an entrepreneurship course as part of an undergrad or MBA program significantly increases the odds of later founding or working for an entrepreneurial organization.
- Having a parent involved in entrepreneurship also tends to increase the likelihood that the respondent has founded or worked for an entrepreneurial organization.
- The authors found no statistical relationship between a student's grade point average or SAT score and their propensity for involvement in an entrepreneurial organization.
- Students who took an entrepreneurship class were more likely to have engaged in three separate types of "innovation": (1) offering new

products or services, (2) obtaining patents or copyrights, and (3) using production techniques that differ from those of the industry's main competitor.

- The survey results suggest that there is a strong correlation between respondents having taken an entrepreneurial course and their self-reported skill in identifying new business-related opportunities.
- As this project moves forward, the research team plans to focus on providing data that will help instructors train prospective innovative entrepreneurs more effectively. In particular, the team wants to identify the educational approaches that will stimulate students' creativity and alertness to promising technological developments and other opportunities for innovation.

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## Scope and Methodology

This pilot survey was conducted between April and June 2008 using an online survey questionnaire. (The SBA Office of Advocacy was not involved in the funding or implementation of the survey, and Paperwork Reduction Act requirements therefore did not apply.) The full text of the survey instrument can be found in Appendix B of the paper. The analysis primarily examines relative correlations based on participants' educational and other background experiences. Logistic regressions are used to further test some of these relationships.

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