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Learning what works, from the Human Development Network

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# Can Entrepreneurship Training Improve Work Opportunities for College Graduates?

Improving educational achievement for youth doesn't always result in better employment opportunities, and this can be especially acute in developing countries. As the World Bank's 2013 World Development Report highlights, the mismatch between the skills and aspirations of college graduates and the realities of labor markets not only limits a country's economic development, but can also affect social cohesion. In the Middle East and North Africa, access to higher education has been booming but so have unemployment rates among young adults. Joblessness and underemployment are viewed as some of the triggers of the Arab Spring, which started with Tunisia's so-called Jasmine Revolution in early 2011. Even before the Arab Spring, many countries in the region—and elsewhere - recognized the importance of improving employment opportunities for their citizens. But what sort of programs work

best and in what context is still something that governments are grappling with.

The World Bank is committed to helping countries meet the employment needs of their people, part of the United Nations Millennium Development Goals. In Tunisia, the World Bank worked with the government to evaluate a program designed to give university students entrepreneurship training and assistance developing a business plan. The evaluation found that the program increased self-employment and helped students develop some skills associated with successful entrepreneurship. As new and old governments in the region grapple with high unemployment among skilled and educated youth, the lessons learned from the evaluation will help policymakers and development experts hone programs that deliver an impact.



#### Context

The Government of Tunisia has long recognized the gap between the expectations of the growing number of college graduates and existing jobs in the economy. Similar to many countries in the Middle East and North Africa region, the unemployment rate among university-educated Tunisian youth is extremely high. The rate in 2009 was 44 percent, compared with 34 percent in 2005. As part of a set of measures to expand employment opportunities among graduates, in 2009

the government made changes in the undergraduate curriculum to introduce a special entrepreneurship track. Students in their last semester could receive entrepreneurship training and support developing a business plan. The program began in the 2009/2010 academic year and eligible students in the country's 12 public universities took part during the second semester, running from February to June, 2010.

### Evaluation

All 18,682 students in their third year, which is the last year, of university (*licence appliquée*) were eligible to apply for the program. Just over 9 percent, or 1,702 students, filled out an application form. Some students applied in pairs, so the total number of registered projects was 1,506. Two-thirds of the applicants were women, which reflected their enrollment level in the universities.

Because the program only had capacity for about half the number of applicants, researchers were able to randomly assign half the students to the program and half to continue with the standard university curriculum. Randomization was conducted at the project level and stratified by gender and study subject. The treatment group included 856 students, and the control group 846 students. The students took part in the training program between February 2010 and June 2010, when they graduated. Follow-up interviews were conducted in-person between April and June 2011, a few months after the Tunisian revolution. Interviews included questions on employment, business skills, behavioral skills, personal aspirations, and attitudes.

### Findings

#### Students assigned to the entrepreneurshiptrack were more likely to be self-employed one year after graduation.

Students who were in the training program were 3 percentage points more likely to be self-employed than those who didn't receive the same training. Because the self-employment rate in the control group was very low—4.4 percent—this 3 percentage point gain equals a 68 percentage increase in the likelihood that someone who participated in the entrepreneurship track would be self-employed after graduation. (Indicators excluded employment in a family business.)

# While the program met the primary objective of increasing self-employment, the overall employment rate among program beneficiaries didn't change.

Graduates of the entrepreneurship track were more likely to start their own businesses, but not more likely to find salaried employment. In fact, the overall employment and unemployment rates remained unchanged. Approximately 29 percent of students were employed one year after graduation, while 49 percent were unemployed. This suggests that the program partly shifted graduates from wage-employment into self-employment. While it's possible that graduates starting their own businesses freed up wage jobs for those not in the program, the evaluation was not designed to measure such effects. Overall, there was no discernible effect on the likelihood that graduates were employed in any capacity one year after graduation.

# The program itself was very comprehensive and sought to give students what they needed to develop themselves as entrepreneurs and to create successful business plans.

The program had two parts. The first consisted of a 20-day entrepreneurship course organized by the public employment office, which aimed to give students the business, behavioral and networking skills for successful business creation. Students were given training in

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developing business ideas, writing a business plan and managing a project. Subsequently, they presented their business plans to bankers and experts to get feedback. Students were given training and time to research implementation, estimate financials and build networks. In the next phase, students were assigned a personal private-sector coach and were supervised by a university professor to finalize their business plan. Students were expected to participate in 8 coaching sessions. After graduating, the students could enter their plan in a competition for seed funding.

# 41 percent of students did not complete the full program, a percentage that is high but consistent with other training programs.\*

About 67 percent of students finished the program's first module, which was business training at the local employment office, and 59 percent completed both the business training and the coaching. Students who had a project idea when they applied for the program were more likely to complete it. Those who dropped out were more likely to be male students or students enrolled in economics or another business-related program. Researchers hypothesized that those already studying business may have felt that the program had less to add than students coming from other subject fields. Anecdotal evidence indicated that some students didn't receive the right information about the training or coaching, causing them to drop out.

## The entrepreneurship track did not promote higher quality jobs for graduates.

Students who went through the program were not any more likely to work longer hours, earn more money, or be covered by social security, compared with those who didn't enter the program. The program did increase the so-called reservation wage for private sector jobs—which is the lowest wage someone will accept to take a job. However, there was no corresponding increase in the reservation wage for a public sector job. This likely reflects the value with which people in Tu-

nisia, and in many parts of the Arab world, hold public sector jobs, largely due to the stability of such jobs and related benefits.

### But the program did boost students' self-reported business skills...

One immediate goal of the program was to give students the technical and business know-how they



needed to be entrepreneurs. Seventy-seven percent of participants reported knowing how to write a business plan, compared with 45 percent in the control group. Participants also reported a 10 percentage point increase in practical, business experience—a 27 percent increase over the control group.

### ...and students in the program had larger business—related networks.

Program participants were more likely to know an entrepreneur and a banker, but were less likely than those in the control group to seek advice from a professor to develop a new project idea. Those on the entrepreneurship track also were marginally more likely to be registered at employment offices and more likely to know an employment agent, though they were just as likely to use an employment agent as graduates from the control group. Those who participated in the entrepreneurship track also were more likely to have some behavioral skills linked to success as an entrepreneur versus success in salaried jobs. But not all.

Based on measures of personality, participants were found to be more extroverted and less agreeable than the control group. This is in line with findings\* suggesting that agreeableness is negatively associated with occupations such as business professionals or managers. However, those in the entrepreneurship track also were less conscientious and showed lower emotional stability than those in the control group, both of which are viewed as important to succeeding in life. One explanation for this may be that the experience of writing an academic thesis, which is what the control group had to do, may be more effective at shaping certain skills than entrepreneurship training. The results both show

that behavioral skills are malleable among youth and that there may be some potential trade-offs in building behavioral skills for self or salaried employment.

Still, when it came to feeling hopeful about their future, participants were much more optimistic and more confident in their ability to obtain credit. But they weren't any more likely to have gotten credit.

Students assigned to the entrepreneurship track were more optimistic about their overall prospects in the labor market, compared to those in the control group. They also were more confident in their ability to access credit – but they were not any more likely than the control group to know how to apply for credit it or to have been qualified for credit. And the majority of graduates in the treatment group reported that lack of access to credit was the biggest problem in terms of starting their own business.

\*Cobb-Clark, D. A. and M. Tan (2010). "Noncognitive skills, occupational attainment, and relative wages." Labour Economics 18(1).

#### Conclusion

The entrepreneurship track was introduced in academic year 2009/10 and is currently in its fourth year of implementation. Since its inception, the program has been expanded to Master's and engineering students. The evaluation results have been useful in showing that additional accompanying measures are needed to more effectively

promote entrepreneurship. The public employment office, which also has a mandate to assist in supporting selfemployment, is currently working with the World Bank to address other constraints that program beneficiaries face by, among other things, promoting entrepreneurship support activities for the post-graduation period.

The Human Development Network, part of the World Bank Group, supports and disseminates research evaluating the impact of development projects to help alleviate poverty. The goal is to collect and build empirical evidence that can help governments and development organizations design and implement the most appropriate and effective policies for better educational, health and job opportunities for people in developing countries. For more information about who we are and what we do, go to: http://www.worldbank.org/sief.

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