Educating entrepreneurs: Can in-school youth be taught to start a business? Evidence from South Africa

1. Key findings

- Business studies classes for in-school youth can create positive attitudes about entrepreneurship. After attending lessons over grades 10 to 12, secondary school students in South Africa viewed entrepreneurship more favourably, and were more informed about the feasibility of starting their own business upon graduation.

- A group of business studies students who were exposed to an additional component of experiential entrepreneurship education were subjectively more competent and capable of starting a new business, reporting better soft and hard skills than business studies students who did not receive the experiential component. Through innovative teaching techniques - incorporating audio-visual elements, entrepreneurship games and simulation exercises - students reported they had improved their team work and communication skills. Students also demonstrated better technical knowledge about marketing and finance.

- The added entrepreneurship component, however, had no additional impact in terms of entrepreneurial intentions compared to students taking regular business studies. Across both groups, the share reporting that starting a business was a good career choice increased from 67% pre-training to 90% post-training. This may be because students were already pre-disposed towards entrepreneurship due to the fact that they chose to study business.

- Students taking experiential entrepreneurship education were no more likely to start a business. One year after completing business studies classes, four percent of students had created a new company. However, most students are still in education or further training, with over 50 percent reporting that they have the intention to become a business owner in the next five years. It may therefore be that results will emerge over a longer time horizon - and that it is premature to reach conclusions about the impact on enterprise formation and job creation.

What Works in SME Development

The What Works in SME Development Series is presenting key findings of interventions promoting small and medium enterprises as a means to create more and better jobs. It covers ILO programs as well as interventions of other agencies using ILO products.

The main objective of the new Series is to increase the take up of effective SME programs by leading actors in this field. The issue briefs target ILO constituents, other policy makers, development practitioners, and the private sector presenting key evidence at a glance. Preference is given to rigorous quantitative research, but the Series also covers other research approaches contributing to more evidence on what works and what does not work.

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2. The Challenge

While global youth unemployment rates are high, school enrolment rates have never been higher. This ticking time bomb means a large number of more educated young people are entering the labour market each year, unable to find jobs that can match their hopes, expectations and aspirations – let alone meet their basic livelihood needs.

South Africa is no exception. As a young nation where almost 60 per cent of the population is under the age of 35 years, the country has one of the highest youth unemployment rates in the world averaging close to 52 percent from 2013-2017. This equates to more than 3.3 million young people that are not in employment, education or training.

High levels of youth unemployment go hand-in-hand with an educational system that, although well-funded with one fifth of the state budget, delivers highly unsatisfactory results. South Africa is ranked 146 out of 148 countries in terms of quality of education according to the World Economic Forum. Many school-leavers do not possess sufficient literacy, numeracy and life skills to be able to participate actively in the economy. Those who do attempt to engage in business activities lack basic business skills as well as employment experience, and are therefore at a disadvantage in a competitive and changing business environment. In South Africa only one per cent of youth are formal entrepreneurs, a number significantly lower than in other African countries.

Entrepreneurship education is promoted in schools and communities in many parts of the world to better prepare school leavers to enter labour markets where formal job opportunities are scarce. However, little rigorous research is available to assess the impact of such programmes, and what literature there is presents a mixed picture about effectiveness. Key concerns are whether an entrepreneurial mindset can really be taught in a classroom setting, and whether taking a class can increase the chance that a student will eventually start up and sustain a successful enterprise.

The research presented here aims to provide new evidence about whether a package of dedicated experiential entrepreneurship education materials and teaching methods - designed to supplement a standard business studies curriculum - can improve entrepreneurial attitudes and intentions among learners, and increase the number of young people starting formal enterprises.

3. The programme and evaluation design

The ILO’s startUP&go programme helps high-school teachers incorporate practical entrepreneurship components into the national curriculum through experiential learning techniques such as use of videos, games, posters and market days at the participating school. The ILO designed the programme with the Free State Department of Basic Education (DBE) adapting the ILO’s global Know About Business curriculum, which has been introduced to 56 countries. The DBE selected 62 previously disadvantaged schools for a startUP&go pilot in grades 10, 11 and 12 and business studies teachers from these schools were then trained in the startUP&go experiential pedagogy. Each school

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1 2013
2 South African SME Observatory, 2013
3 Business studies is part of South Africa’s National Curriculum as articulated in the Curriculum Assessment Policy Statement (CAPS) for Business Studies, grade 10-12. The subject deals with the knowledge, skills, attitudes and values critical for informed, productive, ethical and responsible participation in the formal and informal economic sectors. Whereas the curriculum includes topics on developing basic entrepreneurial initiatives and stressing entrepreneurial qualities the time allowed in the annual teaching plan is limited to less than one week per year and is text book based.
4 For more information see www.knowaboutbusiness.org
Researchers conducted a baseline study at programme start-up in 2013, collecting data from all students who were enrolled in business studies classes in the 60 schools who were eventually part of the programme (2 schools dropped out). To provide a means to compare differences in entrepreneurial outcomes over time, baseline data was also collected from 10 schools who were not part of the programme, but were in close geographic proximity to startUP&go schools. All grade 10 business studies students in the control schools were interviewed.

Outcomes were measured nine months after the programme began (October 2013) and again in 2016 one year after the cohort had completed their business studies education and graduated from high-school at the end of 2015.

Researchers interviewed students in the 60 schools who participated in the programme (the treatment group), and those in the 10 chools who did not (the control group). The 2016 follow-up study was done through a combination of telephonic and online methods and 330 surveys were conducted: 203 from students in the treatment group, and 127 students in the control group. The evaluation design is summarised in figure 1.

Researchers used a mixed methods approach to collect and analysis both qualitative and quantitative data on entrepreneurial outcomes.

4. What we found

Students had a more realistic view of entrepreneurship

After participating in the startUP&go programme, students were more informed about the feasibility of being an entrepreneur. As a result, some identified that they do not have the necessary skills to start a business. But a larger percentage became more certain that starting a business is in fact possible. Almost half (46%) of students who participated in the programme thought starting a business would be easy, compared to 32% of students in control schools.

Entrepreneurship as a career choice was viewed more favorably

The proportion of students reporting that starting a business was a good career choice increased from

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5 This included: A Teachers Guides for each teacher with detailed session plans and assignments to be able to mark students’ work, Learners' Workbooks, Learners Journal, Informal Assessment Portfolios for all students, posters with entrepreneurial messages to be put up in the class room and DVOs with curriculum related documentaries and filmed instructions on how to set up, play and facilitate and debrief the learning outcomes of the entrepreneurial games to be played. In addition, a guide on how to organize a market day at the school was developed.

6 Note: researchers aimed to reach 360 individuals, as this is the estimated sample size required to conclude that findings are representative to the baseline sample, with 95% confidence. However, due to difficulties in contacting students, 330 individuals were reached. This resulted in a confidence interval (or margin of error) of 5.23% instead of target of 5%.
67% pre-training to 90% post-training. However, there was no difference between treatment and control group participants, indicating that startUP&go entrepreneurship education had little additional effect on entrepreneurial intentions. This may be because students were already pre-disposed towards entrepreneurship: The majority of students (86%) said they took business studies because they had an interest in learning about business. On average, entrepreneurial intentions for all business studies learners increased by 23 percentage points.

Students gained knowledge and skills critical to business success
Students improved their knowledge of business marketing and finance by participating in the programme. These changes can be attributed to startUP&go with statistical significance, especially with respect to finance knowledge. In terms of the soft skills instrumental to individual workplace success, qualitative interviews suggest that startUP&go helped support better quality entrepreneurs. Interviews identified and attributed the following outcomes to the programme:

- Improved self-esteem;
- Enhanced confidence and individuals becoming more outspoken;
- Better communication and team work;

More people harbor plans to start their own business in the future
The majority of earners are still studying, with only 8% starting or preparing to start their own business. This is despite the fact that more than 50% of learners from both programme and control schools reported seeing themselves running their own business in five years. Across all business studies students, there has been a 100% increase in those who see themselves running their own business in five years.

Only a few students had successfully started a business one year after programme completion. Out of the sample of 330, 14 formal businesses were started - employing 44 people. There is little distinction to be made between businesses started by learners from programme or control schools – six out of the 14 businesses were started by young people who had not participated in startUP&go. It appears that entrepreneurship education has not yet been any more successful in stimulating new businesses than the regular business studies curriculum. However,

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7 These findings are anecdotal as they have arisen from select qualitative interviews.
8 Rising from 91 out of 330 to (91 at baseline to 183 at the endline
given most participants are still studying, and the programme ended relatively recently, it may be that results will emerge over longer time horizons – and that it is premature to reach conclusions about the impact on enterprise and job creation.

Implementation challenges constrained the impact of programme
The programme was never fully implemented over the three years for a number of reasons. Firstly, many teachers struggled with the experiential non-text book approach despite participating in a one week teacher education workshop each year. This resulted in more than half of the teachers not delivering the full startUP&go programme as intended. Secondly, constraints in the time available to teach the core business studies curriculum resulted in some of the experiential entrepreneurship activities being moved to outside of school hours or omitted completely. Thirdly, some teachers were not able to operate the projector and laptops that had been provided to them as part of the startUP&go package and it was later learned that in some schools the materials had been appropriated for other purposes. Fourth, for logistical reasons teachers were not trained for the grade 12 materials and the distribution of the materials was done several months after school started. These implementation challenges likely resulted in less exposure to programme materials across all schools.

5. Policy recommendations
Entrepreneurship education has become central to national education and employment strategies in many developing countries and is increasingly considered an important strategy for tackling the youth unemployment challenge. Today, it is widely accepted that new venture creation is an important means for economic growth, technological progress and employment creation. However, the cost-benefit of developing and delivering dedicated entrepreneurship education should be carefully considered, as more evidence is collected about their effectiveness.

While exact figures were not calculated for startUP&go, researchers found that the programme was very costly. Educators attended an annual week-long training to become familiar with the material. Apart from the cost of the training each educator also received a starter pack which included a laptop, a projector, posters, and workbooks that they needed to successfully implement the programme in their classrooms. To-date, this investment has not yielded significantly different outcomes than the ‘regular’ business studies classes which use a more standard curriculum. Whereas the initial intention was to fully equip and prepare teachers to teach a new and innovative experiential entrepreneurship approach the ILO and the provincial Department for Basic Education probably underestimated the difficulties in working with previously marginalised and still poorly resourced schools, which in many cases also employed teachers with had low social and human resource capital and lacked the ability to fully embrace an experiential teaching approach.

Policymakers should also be realistic about the impact of entrepreneurship education, even when initiatives are successful. There are other binding constraints inhibiting youth from starting up their own business. During focus group discussions with learners, it emerged that financial capital was mentioned as a more significant constraint than a lack of knowledge. In the 2016 survey, 259 of the 330 students (78%) reported a lack of financial support as the main reason for not starting their own business. Choosing to stay in education to study and obtain a degree was also cited a means to access capital and overcome market constraints to starting a business in future. School-based learning is therefore a potentially necessary, but far from sufficient, tool to increase the number of young people starting enterprises. To achieve more sustainable and scalable impact on entrepreneurial intentions and actual start-up success, programmes should ensure that young people who have been exposed to business studies and entrepreneurship education also have access to financial and non-financial business development services in a healthy entrepreneurial ecosystem as they make the transition from school to the world of work.
6. Further reading


Note on Impact Evaluation Technique: The methodology applied for this research was a quasi-experiment using difference-in-difference. This means that a control group was selected to match the profile of the treatment group. The treatment group was purposively selected. Impact is the difference in the before/after outcomes between the treatment and control groups. As this method cannot fully exclude differences between the two groups, results are of medium reliability and cannot be generalized for other contexts or countries.

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