

Entrepreneurship Education in Rwanda

A Summary of Research on Curriculum, Classrooms,
and Life after Graduation

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Executive Summary

The following pages present a summary of findings from a three-year research project, conducted from 2009 to 2011, focusing on Rwanda's policy of entrepreneurship education.² The policy requires all students—regardless of their major course of study—to take classes in entrepreneurship during all six years of secondary school.³ The research presented here involved participating in entrepreneurship curriculum-development processes, observing eleven classrooms of students during the course of an entire academic year, and then carrying out a tracer study of 100 young Rwandans after their graduation from Senior 3 and Senior 6. In addition, this research also included interviews with policy makers and teachers, focus group discussions, and a survey of 350 students at both the beginning and the end of the school year.

In five brief sections, I provide some basic answers to the most important questions facing Rwanda's entrepreneurship education policy:

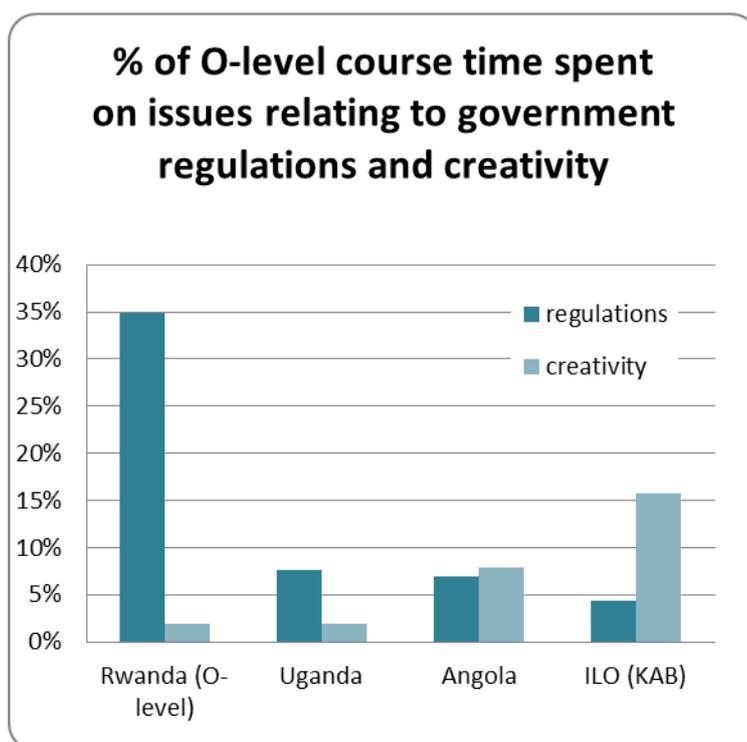
- I. How is entrepreneurship taught in Rwandan schools?*
- II. Do Rwandan students have entrepreneurial attitudes?*
- III. Do Rwandan students want to become entrepreneurs?*
- IV. Are young Rwandans becoming entrepreneurs after graduation?*
- V. What are the main obstacles young Rwandans face in starting viable enterprises?*

Rwanda's entrepreneurship education policy represents an intriguing effort to influence the attitudes and aspirations of an entire generation in an entrepreneurial direction. In a concluding section, I summarize key policy recommendations arising from this research, with the aim of further advancing efforts to help young Rwandans be able to earn sustainable livelihoods.

How is entrepreneurship taught in Rwandan schools?

Rwanda's six-year course in entrepreneurship for secondary-school students has significant potential to influence young people's attitudes about entrepreneurship, in addition to helping them develop entrepreneurial skills and knowledge. As a result of studying this course, the Rwandan government hopes, young Rwandans will become more capable of creating jobs for themselves and others.

Curriculum developers at the former National Curriculum Development Center worked hard to incorporate into the entrepreneurship course the various areas of knowledge they thought a practicing entrepreneur would need.⁴ These include basic information about commerce, accounting, legal regulations, management, and business planning. Interestingly, *the O-level curriculum places a great emphasis on regulations, while it focuses less on other key issues for entrepreneurship, such as creativity.* The distribution of time spent on these two issues is different from that found in other entrepreneurship curricula used in this region, such as the International Labour Organization's program "Know About Business" (see chart).



Curriculum developers did, however, also make efforts to include innovative practical activities in the entrepreneurship syllabi and teachers' guides, especially in the A-level curriculum. These practical activities are intended to develop entrepreneurial capacities, such as creativity, initiative, and independent problem-solving. Yet in a few different ways, it has been difficult for teachers to achieve that practical vision within the classroom.

First, because it is a new course, *many teachers are not yet confident about offering the material and holding students' interest in it.* Technical topics like accounting methods are particularly difficult for teachers to explain accurately and clearly. The curriculum could be re-thought to emphasize a simple but effective system of accounting sufficient for the needs of a small business, reinforced by working through plenty of real-life examples illustrating how such accounting methods can be useful in practice.

Teachers also need significant further training in order to be able to employ teaching methods that develop entrepreneurial skills, such as analysis of complex business situations and creative problem-solving. The course is currently being offered in a way similar to other academic subjects, with teachers writing notes on the chalkboard that students must copy down and memorize for their examinations. Though this approach may help students learn new terminology and drill cer-

tain basic skills, it is not very effective in developing the sorts of independent thinking abilities that a practicing entrepreneur needs.

One effective approach for shifting teaching methods may be to simply change the kinds of knowledge that are being tested. The focus on examinations is very strong within Rwandan schools, making examinations a potentially powerful source of influence on teaching methods. The national examinations in entrepreneurship could, in particular, require detailed analyses of real-life case studies and the writing of an original business plan for a business idea of the student's own choice. To connect examinations to practice even more strongly, the best business plans on the end-of-year examinations from each District could receive business financing. As administrators and teachers become more aware about the practical orientation of the entrepreneurship examination, they may become more supportive of practical teaching methods within the classroom as well.

Finally, because so much of students' time is spent in school, *school institutions themselves may have to put more effort into giving students the chance to practice their entrepreneurial skills.* Group income-generating activities and savings and loan groups are two options that school Directors might consider encouraging during break times or after school hours. The more hands-on experience students can get in managing finances and putting entrepreneurial ideas into practice—even on a very small scale—the better equipped they will be to start or grow their own activities once they have graduated.

Do Rwandan students have entrepreneurial attitudes?

Despite the challenges in teaching a new course in entrepreneurship, *this research shows a slight overall gain in Rwandan students' entrepreneurial attitudes over the course of the academic year*. 350 Senior 3 and Senior 6 students from five different Kigali-area schools (in both rural and urban settings) completed a questionnaire at the beginning and end of the school year designed to measure eight attitudes typically cited in psychological studies of entrepreneurship.⁵ The following table lists the measured attitudes, in order of their level of strength, and indicates whether there was a statistically significant change from the beginning to the end of the academic year:

Entrepreneurial Attitudes Measured			
Attitude	Description	Initial Level*	Change during the year**
1	Entrepreneurial Planning	Strongly Positive	(none)
2	Confidence in Entrepreneurship	Moderately Positive	DECREASE
3	Entrepreneurial Creativity	Slightly Positive	(none)
4	Entrepreneurial Initiative	Slightly Positive	Increase
5	Need for Achievement	Slightly Positive	Increase
6	Preference for Autonomy	Neutral	(none)
7	Reasoned Risk-Taking / Tolerance for Ambiguity	Neutral	(none)
8	Locus of Control	Moderately Negative	Increase
Overall Entrepreneurship Attitude Index		Moderately Positive	Increase

* Attitudes were measured by asking students to rate affective, cognitive, and conative items on a five-point Likert scale.

** Statistically significant changes, determined to the 0.05 confidence level, using the Wilcoxon Signed Rank Test.

At the beginning of the year, *students held some entrepreneurial attitudes already—particularly entrepreneurial planning and confidence in entrepreneurship—while creativity, initiative, and need for achievement were only slightly positive*. Yet their acceptance of *Reasoned Risk-Taking*, a requirement for any entrepreneurial activity, was very low, with roughly half of the students noting that they preferred not to take a risk without being certain about the outcome, even if some benefit seemed likely. Similarly, students showed low levels of *Preference for Autonomy*, a measure of a person's inclination towards being in control of their own activities. Many students preferred to have someone else give them instructions and supervise them, rather than being fully responsible for their own work. Furthermore, *students actually showed a negative Locus of Control*—indicating that they often felt that chance or other external influences affected their life circumstances more than their own efforts.

Over the course of the year, students' *Entrepreneurial Initiative* and *Need for Achievement* both experienced a statistically significant increase, though only of modest proportions. Students' *Locus of Control* also increased, moving from its initially negative level closer towards neutral. It is possible that this entrepreneurship course, in combination with other initiatives promoting entrepreneurship in Rwanda, may have begun convincing a greater number of students both that they would enjoy the challenge of starting their own businesses, and that their efforts in this regard might actually lead them to a better life in the future.

Surprisingly, although students' sense of *Business Confidence* was fairly strong in the beginning of the year, it had experienced a small but statistically significant decline by ten months later. This is a sign that the course may be introducing students to complex theoretical terminology and the extensive range of legal requirements for doing business in Rwanda, without giving them enough practice to feel confident about applying their new knowledge.

This study thus suggests that there is room for growth in Rwandan students' entrepreneurial attitudes, though students are already becoming more oriented in an entrepreneurial direction. *Entrepreneurship education efforts could be targeted at reinforcing students' already positive sense of business confidence with further opportunities for practical experience*, which would simultaneously bolster their sense of initiative and creativity. The attitudes that students are weakest in—need for achievement, preference for autonomy, reasoned risk-taking, and locus of control—can all also be strengthened by giving students more opportunities for independent action in the more protected context of their studies, allowing them to both enjoy the experience of success brought by their own efforts and to learn that minor failures can be overcome.

Do Rwandan students *want* to become entrepreneurs?

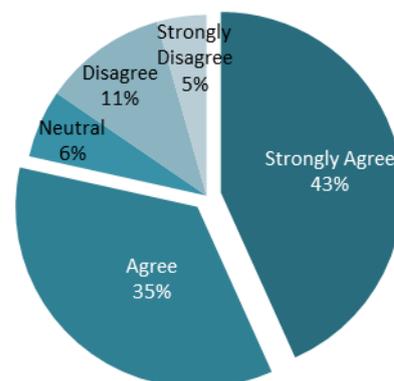
This study suggests that *young Rwandans' level of interest in entrepreneurship is at or above the global average*, though self-employment would not always be their first choice of ways to earn a livelihood. Data from 65 countries collected by the Global Entrepreneurship Monitor shows that, around the world, an average of 20% of young people aged 16-25 plan to start enterprises within three years.⁶ Differences among countries are high. In South Africa, for example, the figure was 11%, while in Uganda it was 52%. This study, in contrast, shows that Rwandan students have an even higher rate of interest in entrepreneurship, with 57.5% of the Senior 3 and Senior 6 students surveyed planning to start a business or become self-employed within three years.

Interestingly, *while the rate of interest in short-term business start-up increased slightly for Senior 6 students over the course of the year, there was a statistically significant decrease (from 56% to 43%) for Senior 3 students*. Qualitative data from the same survey indicates that this may be due, in part, to Senior 3 students gaining a better understanding of the meaning of entrepreneurship over the course of the year.⁷ However, it is also possible that—just as with the attitude of “business confidence” discussed earlier—the O-level entrepreneurship course may have actually made students *less* sure about their ability to become entrepreneurs in the short term.

Students' overall high level of interest in becoming entrepreneurs was reflected in the conversations they had with their friends and family. In focus group interviews with Rwandan students, *many counseled their peers to start enterprises and work hard*, arguing that it was preferable to be self-employed rather than being an employee. Furthermore, 51% of Senior 3 students and 68% of Senior 6 students reported that they had received similar advice from their family and friends as well.

Overall, the students surveyed also thought that entrepreneurship was a positive thing for Rwanda as a country. 78.5% either agreed or strongly agreed that “Rwanda would be a better place if more people were entrepreneurs” (see chart). Interestingly, however, nearly 50% of students also agreed that “Most people would only become self-employed if they are forced to, because they failed to find good employment.”

"Rwanda would be a better place if more people were entrepreneurs."

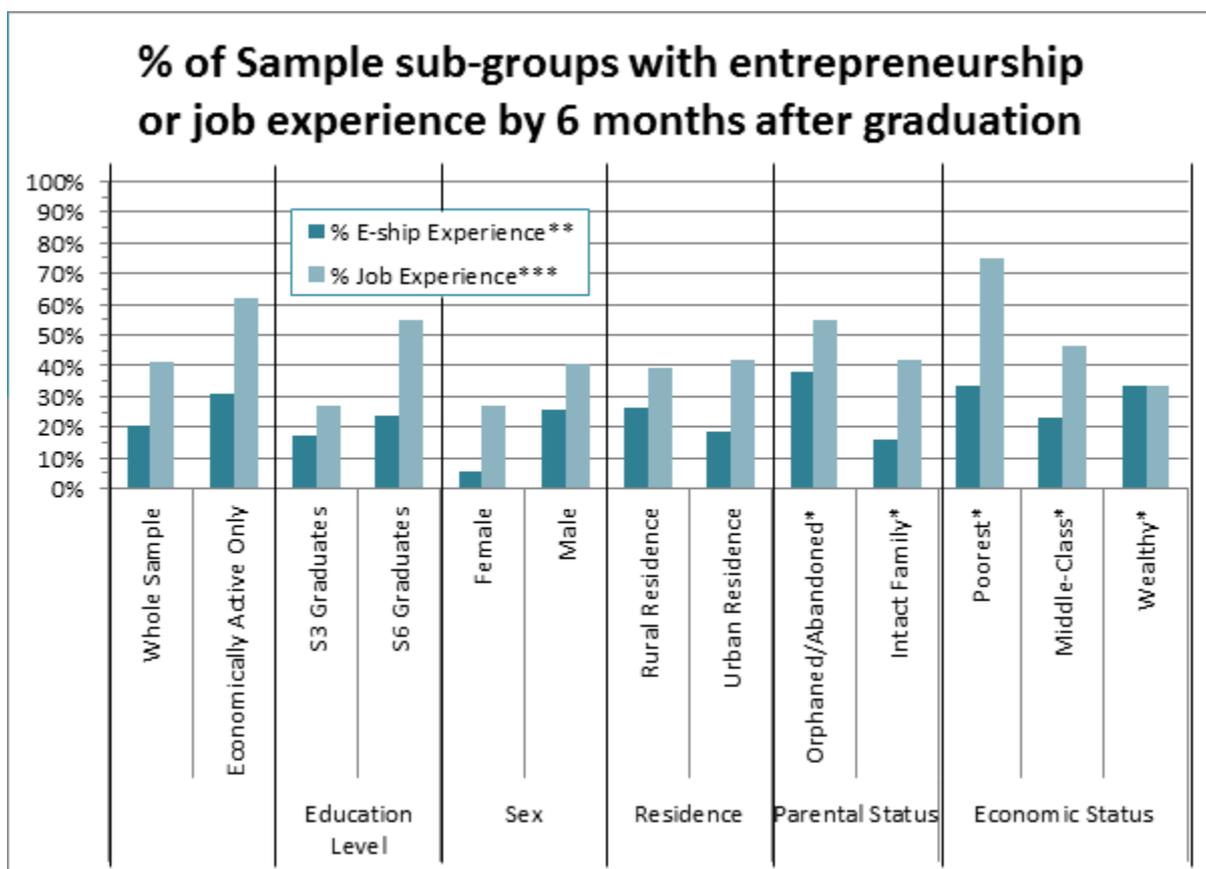


Students appeared to feel that entrepreneurship, when entered into by choice, is likely to be both positive for the individual and for the country in general. *Many also recognized, however, that “entrepreneurship” may also occur in a much less desirable form—the kind of subsistence-level self-employment that people are forced into simply for lack of better options*. And unfortunately, as discussed in the following section, it was often the latter type of “forced” entrepreneurship with which students had the most direct experience.

Are young Rwandans becoming entrepreneurs?

The thousands of lower- and upper-secondary school students from around Rwanda who earned their diplomas in November 2010 represented the first cohort to be exposed to a full year of formal entrepreneurship classes within their schools. On graduation, the Senior 3 and Senior 6 graduates in this study faced a number of choices. From the perspective of Rwanda’s labor law, they were already potentially independent economic actors—or soon would be, in the case of those who had not quite yet turned sixteen. Some accordingly started to look for work, or to create their own jobs. But despite the high interest in business that so many students had displayed in focus group discussions and on their questionnaires, *comparatively few graduates actually contemplated immediately starting up their own enterprises*. Many were content to treat the time after graduation as simply another school holiday, resting up or helping out at home and waiting for their examinations results, which would determine the next stage of their academic careers.

Out of the 100 Senior 3 and Senior 6 graduates included in the tracer study component of this research, two-thirds could be considered economically active, in that they were deliberately looking for ways to earn an income. Yet this overall average masks a significant difference between the Senior 3 and Senior 6 graduates. While 90% of the Senior 6 graduates tried to find jobs or start businesses within six months of graduation, only 36% of the Senior 3 graduates did the same:



* “Middle class” indicates those whose homes were in reasonably good repair, usually with electricity.
 ** “Entrepreneurship Experience” indicates that the graduate has managed his or her own source of income at some point in time. This includes both business activities and self-employment, but not paid work in another person’s business.
 *** “Job Experience” indicates that the graduate has worked for another person for wages. This does not include assisting his/her family in farming or other economic activities, as the interviews showed that such work is rarely remunerated.

These summary statistics hint at some basic trends regarding youth entrepreneurship in Rwanda. *Overall, about one-third of the economically active graduates had gained entrepreneurial experience during the six month tracer study or at some time before*, while two-thirds had carried out some kind of wage employment. The Senior 6 graduates sampled, and particularly the male graduates, had a slightly higher rate of experience in entrepreneurial activities, and a much higher rate of job experience than their younger peers graduating from Senior 3.

While entrepreneurship experience was a little higher among graduates from rural areas than urban areas, the two populations were roughly equal in terms of employment. Significantly, *the highest rates of entrepreneurship and employment, in turn, were among orphaned or abandoned graduates and those from the poorest backgrounds*. Most of the graduates who had some experience with business or self-employment had actually begun working many years earlier. As students, or during years when they did not have enough money to pay school fees, they had driven bicycle and motorcycle taxis, sold telephone airtime, traded chickens at the market, repaired cell phones, and hawked biscuits and sweets on the street—before this became illegal—among other activities.

The prevalence of these cases suggests that *youth entrepreneurship in Rwanda is still primarily a phenomenon related to poverty and parental abandonment*, in which young people feel forced to earn their own living through whatever means they can arrange. The more ambitious youth in this category oriented their entrepreneurial activity not just towards survival, but also specifically towards earning school fees in order to attain the highest educational level possible. To these youth, the attainment of educational credentials seemed like the only path through which they could have a chance at entering higher-earning occupations. These students did not attend class in order to learn about becoming entrepreneurs, as the entrepreneurship education policy assumes. Rather, they *were* entrepreneurs, in order to attend class.

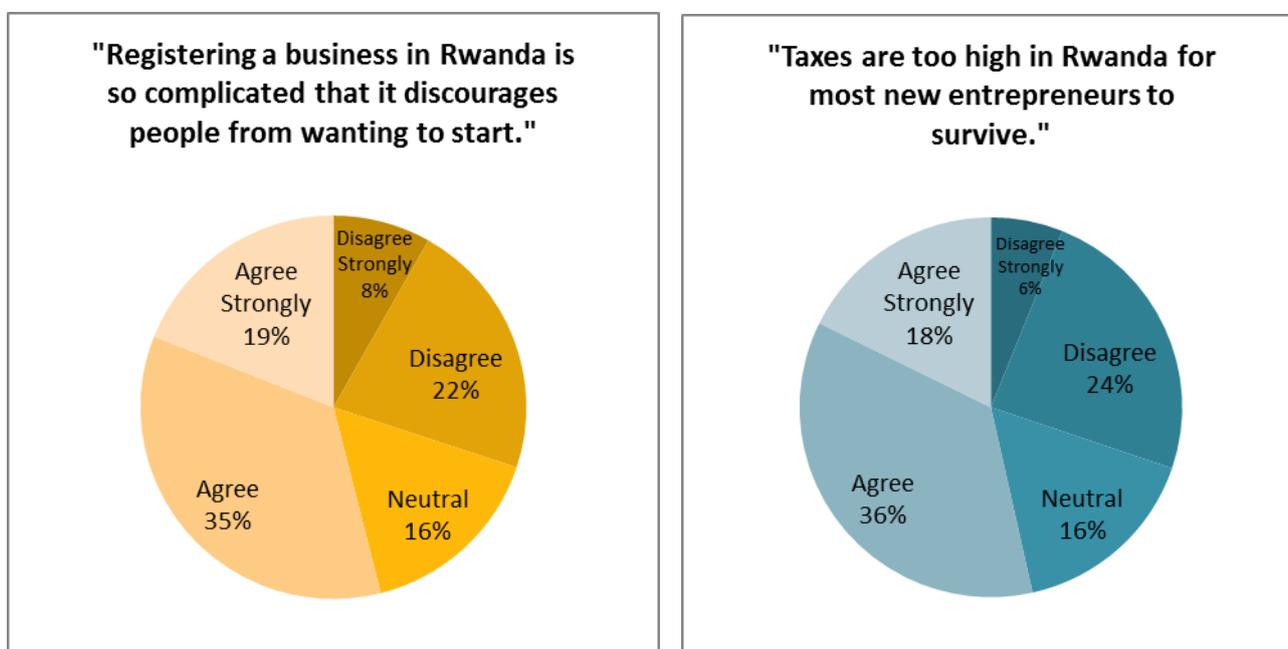
At another level of entrepreneurial activity entirely, *some students in this research were inspired to pool ideas and capital with their classmates in order to initiate more lucrative activities*. These students were invariably from more advantaged backgrounds, with at least some parental resources at their disposal to invest in a group enterprise. Though these groups had not yet begun any entrepreneurial activity by the time this tracer study ended, they had developed some concrete ideas and some had begun the process of registering at Rwanda Development Board.

Overall, *the greatest amount of entrepreneurial experience was in the form of subsistence-level informal self-employment, while the most common (as-yet-unrealized) aspirations were for more capital-intensive and formalized activities that would be able to generate a more attractive income*. For most graduates, however, the path to that more attractive form of entrepreneurship was long. First, they argued, they needed to find a job and earn some capital of their own, so that they could eventually become self-employed on their own terms.

What are the main obstacles young Rwandans face in starting viable enterprises?

The participants in this study were cautiously optimistic about the feasibility of starting and running their own businesses in the future, but they also saw certain significant obstacles. In response to a survey question, **46% of the participants in this study agreed that “it is easy to start a business and do well in Rwanda”**. In order to understand why the majority did *not* agree with this statement, however, it is important to explore the impact of registration and licensing procedures, taxes, and capital constraints on young Rwandan entrepreneurs in particular.

As the charts below show, the majority of study participants agreed or strongly agreed that registration, licensing, and taxes all present an obstacle to entrepreneurship in Rwanda:



The Rwandan government has made significant efforts to simplify business registration and taxation procedures at the national level, even introducing incentives such as reduced tax rates for new investors. National business registration is also now free of charge, at least for those who can gain access to and use the Rwanda Development Board website. **But at the local level, taxes and fees remain a significant burden for new businesses, especially for those with little capital.** Now that business registration is increasingly well-supervised, and street clean-up efforts have discouraged many kinds of informal petty trading activities, it is especially important to consider the entry barriers that may prevent young Rwandans from starting formalized business activities.

In addition to registration, **the current requirements for starting a formal business include having a fixed place of business (which often involves paying rent), as well as paying a yearly licensing fee, monthly taxes at the sector level, local fees for sanitation and security, and other required contributions to local funds and special events.** Most of these fees are payable on business start-up, before the business has even begun its activities, much less become profitable.

These start-up taxes and fees represent a significant burden for those who would like to initiate more formalized activities outside of the agricultural sector, such as small-scale trading, food processing, hairdressing, or mobile phone repair. Out of the meager amount of start-up capital that a young person may be able to mobilize, those in sectors classified as “urban” must use at least 50,000 francs just to pay initial taxes and fees. Start-up fees in rural sectors amount to around 25,000 francs, but start-up capital is also often significantly lower in those areas. And each month starting from business registration, entrepreneurs are required to continue paying fixed local taxes regardless of how much the business is actually earning.

Young Rwandans’ worries about registration, licensing, and taxation are, however, secondary to *their overriding concern with the difficulty of finding enough capital to start a business in the first place*. An overwhelming 72% of the Senior 3 and Senior 6 students surveyed agreed or strongly agreed that they would have significant difficulties in finding enough capital to start any kind of business. A number of programs have been established in Rwanda with the intention of helping young people—and others—gain better access to capital. Unfortunately, however, most youth contacted in the course of this study remained unaware of how these initiatives could help them start and grow their businesses. Although Business Development Centers exist in every District office, for example, the youth interviewed seemed to feel that such a service was out of their league. Very few had ever tried to get business financing from micro-finance sources such as COOJAD and the Umurenge SACCOs. They were also largely unaware of the business plan competitions that could help them start more capital-intensive projects, such as those that have been hosted by the Private Sector Federation and MINICOM.

Recently, there have been a number of further efforts to help young Rwandans find or create their first jobs—such as the opportunities provided by Hanga Umurimo⁸ and the Vision 2020 Umurenge Program (VUP).⁹ *Further studies will now need to be undertaken to discover whether these and other related programs are helping young Rwandans—particularly the disadvantaged—to build the capital needed to start their first businesses.*

Conclusion

Rwanda’s entrepreneurship education policy represents one of the most comprehensive efforts in the region to address the challenges of youth employment by encouraging business start-up and self-employment. The first few years of this policy’s implementation suggest that it has promising potential, though there is more that could be done to create an enabling environment for entrepreneurship, both within schools and beyond. The final page of this report offers some recommendations for Rwandan schools and government agencies, drawing on the findings of this research study in order to suggest further strategies for helping young Rwandans earn sustainable livelihoods through entrepreneurship.

Notes and References

1. Note: Some parts of this summary have been adapted from a report prepared for the USAID/EDC project *Akazi Kanoze* in January 2013, also written by the same author. That report has not yet been formally published.
2. This research was originally conducted for a PhD Dissertation in Educational Policy Studies at the University of Wisconsin-Madison: Catherine Honeyman, "Governing Transformations: Entrepreneurship Education and the Rise of Rwanda's Post-Developmental State" (University of Wisconsin-Madison (USA), 2012).
3. MINEDUC, "Education Sector Strategic Plan 2010-2015," ed. Ministry of Education (Kigali, Rwanda: MINEDUC, July, 2010); Rwanda, "Economic Development and Poverty Reduction Strategy, 2008-2012," (Kigali: Government of Rwanda, 2007).
4. NCDC, "Entrepreneurship Education Curriculum for Advanced Secondary Level," ed. National Curriculum Development Centre (Kigali: Ministry of Education, Rwanda, 2009); "Introduction to Entrepreneurship Curriculum for Ordinary Level," ed. National Curriculum Development Centre (Kigali: Ministry of Education, Rwanda, 2008).
5. Rosemary Athayde, "Measuring Enterprise Potential in Young People," *Entrepreneurship Theory and Practice* 33, no. 2 (2009); Peter B. Robinson et al., "An Attitude Approach to the Prediction of Entrepreneurship," *Entrepreneurship: Theory & Practice* 15, no. 4 (1991); NCDC, "Introduction to Entrepreneurship Curriculum for Ordinary Level."
6. GEM, "Gem 2001 - 2008 Aps Global - Individual Level Data " Global Entrepreneurship Research Association, <http://www.gemconsortium.org/docs/2192/gem-2001-2008-aps-global-individual-level-data>.
7. After students reported whether or not they planned to start a business within the next three years, they were also asked to describe the type of business they wanted to start. At the beginning of the year, some Senior 3 students mentioned "business" ideas that were in fact more likely to be forms of employment than self-employment or business ownership and which also may not have been attainable in the short-term (such as "becoming a doctor"). By the end of the year, however, most of the responses in the same part of the survey did refer to actual business ideas.
8. MINICOM, "Hanga Umurimo Project: Opportunities Are All around You," ed. MINICOM (Kigali: Government of Rwanda, 2011).
9. MINALOC, "Vision 2020 Umurenge Program (Vup)," ed. MINALOC (Kigali, Rwanda: Government of Rwanda, 2009).

Recommendations for Empowering Rwandan Youth Entrepreneurs

1. Revise the entrepreneurship curriculum to emphasize a simple but effective system of accounting sufficient for the needs of a small business. Help students work through real-life accounting examples.
2. Condense the discussion of legal regulations to only those procedures that are necessary for initial registration, licensing, and small-business tax payments.
3. Provide further training to teachers, allowing them to experience and model teaching methods that develop entrepreneurial skills, such as analysis of complex business situations and creative problem-solving.
4. On the national examinations, require detailed analyses of real-life case studies and the writing of an original business plan for a business idea of the student's own choice.
5. To connect examinations to practice even more strongly, the best business plans on the end-of-year examinations from each District could receive business financing.
6. Schools should encourage income-generating activities and savings and loan groups in order to give students the chance to practice their entrepreneurial skills and prepare for graduation by building up some personal savings.
7. Expose students to more media sources (periodicals, radio, internet) and ask them to analyze those sources for new business ideas.
8. Decentralize business registration to the sector level and make it free of charge for youth, whether it is done in-person or by internet.
9. Link registration to business support services targeted towards youth, such as invitations to trainings offered by the Business Development Centers, RDB, and NGOs.
10. Registration alone should be accepted as the first year's license to operate. There should be no license charge and no local monthly taxes in the first year after registration, to give businesses a chance to become established and profitable.