Entrepreneurship education and training in Sub-Saharan Africa

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Abbreviations

DfID   UK Department for International Development
EET    Entrepreneurship Education and Training
GEM    Global Entrepreneurship Monitor
SME    Small and Medium Enterprises
SSA    Sub-Saharan Africa
Developing Sub-Saharan Entrepreneurs

1 Introduction

The UK Department for International Development (DfID) has commissioned a literature review on the evidence of whether entrepreneurship can be taught and what areas can be taught. The question this paper is trying to answer is the following:

Query 2: What are the most effective ways to skill entrepreneurs? Are there models which have been shown to work in sub-Saharan Africa (SSA)?

This literature review examines the existing evidence about entrepreneurship education and training (EET) in SSA. The paper identifies the main methods of EET in SSA and describes some of the main characteristics associated with education and training in entrepreneurship. It then proceeds to analyse the existing evidence as to efficacy in SSA.

It is important to highlight that this is the second of two papers looking at the issue of education and entrepreneurship. This first paper looks at the general evidence from across the world, while the second focuses specifically on Africa.

2 Methodology

The approach taken by this literature review includes conducting a broad-based search of relevant content, based on the main focus of the paper, keeping a record of search strategies and inclusion/exclusion criteria such as time frame, focus of the paper, methodology, etc. The literature review covers the academic literature, research and technical papers, government reports and working papers which are considered to be useful to answer the main research questions.

The list of documents reviewed is by no means exhaustive; it represents material available online or through databases. The selection criteria were broadly defined as any text reviewing, analysing, evaluating or describing entrepreneurship education and training programmes. The term impact is used only colloquially, as rigorous research on the topic is still limited. With only a handful of methodical external impact evaluations, the review relies mostly on observational research and the ‘grey literature’.

The review considers only reports written in English. For the purposes of this paper we use the following definitions:

Technical skills education is the teaching of specific skills that are quantifiable and necessary in certain fields. Whether job-specific or generalized, technical skills are the ‘hard’ skills that enterprises and entrepreneurs need to run successfully.

This review considers business management training to focus on the skills required for running a business, not necessarily the exact skills a certain profession requires. Business management education includes how to manage employees, how to write business plans, how to effectively make partners and connections, and other aspects of running an enterprise that requires these ‘soft’ skills.

Entrepreneurship training, in this review, is the teaching of ‘soft’ leadership skills that encourage the student to start his or her own business. These skills include vision, risk-taking, personal and public leadership, and other skills that are typically necessary when venturing into new business territory.

Mentorship is the aspect of EET that often occurs outside of the classroom. Mentors act as sounding boards and role models for younger (or less experienced) entrepreneurs; they can teach and guide their mentees through the process of starting and running a business.
3 Literature review

Entrepreneurship and entrepreneurship education can be powerful tools in helping shape a positive dynamic of change in sub-Saharan Africa (SSA). Multiple governments, organizations, and institutions recognize the value that entrepreneurship education and training (EET) brings to the table. Economists and analysts note the growth opportunities that skilled entrepreneurship makes possible, even among the most marginalized of groups. EET is often free of the massive investments required to expand the workforce in the public sector, therefore making promotion of EET more attractive in an era of limited resources and time. Entrepreneurism can be scalable and adaptive, triggering ripple effects across communities, countries and regions if utilized correctly (Robb et al, 2014).

While many policy makers are enthusiastic about EET, holistic, pragmatic and effective EET remains an elusive target. The previous paper discussed the question of whether entrepreneurship can be taught; the paper uncovered a lively debate about the efficacy of EET and the methods through which EET takes place. While the evidence does not overwhelmingly support one or another method of EET, much of the evidence does support that some forms of entrepreneurship can be taught, and that differing methods produce positive results. Weak evidence supported simply practical training except in building capability among students, while education alone was found to mainly support entrepreneurial mind-set and status. These different aspects of EET are then applied within this paper to EET in SSA—and further broken down by training personal skills, business management skills, or technical skills. This paper cannot by itself examine every single aspect of all training programs in SSA, and thus must rely on some assumptions. For this review, it is assumed that some EET is effective through differing methods, though it needs to be recognised that not all aspects of EET (or even entire programs of EET) are productive.

However, there are multiple methods of training that produce differing outcomes across SSA. Most interestingly, despite the myriad of methods and recognition across SSA of the importance of EET, few nations take full advantage of the proffered opportunity EET represents. Therefore, any study must focus on those EET policies and programs that do exist in SSA.

Since EET has been recognized as a possible agent of change in many economies if used effectively, the question then is asked, “Why don’t SSA nations focus on enlarging and expanding EET?” Multiple explanations emerge from the literature. Bawuah et al (2006) points to a general preference in SSA for education that deals with running a business, not starting one. Kaijage and Wheeler (2013) echo this statement by underlining the growing gap between what business schools are teaching and what is needed to start a business. Steenekamp et al (2011) also notes that graduates of EET have little in the way of certification or guaranteed employment—difficult propositions in nations with little in the way of social safety nets. Multiple authors cited the typical stumbling blocks for most small and medium enterprises (SMEs): lack of access to capital, lack of regulatory environment, lack of networking among other factors (Ogundele et al, 2012; Brixiová et al, 2014).

However, entrepreneurship is not unknown in SSA; in fact, most literature pointed to the abundant presence of small businesses that provide much of the economic activity in SSA. While these businesses are run by entrepreneurs, they often are part of the informal economy, built on family and societal ties, and lack the ability to scale up. Rarely are these small businesses ran by skilled entrepreneurs, and therefore, often remain income sources for the entrepreneur and close relationships alone. This low productivity entrepreneurship does not generate the larger economic impacts necessary to grow SSA (Brixiová et al, 2014).

Overall, all literature pointed to the need for significant developments and progress needed in EET in SSA. The growing bulge of unemployed youth will not be curbed by expansion of the public sector or waiting for multinational companies to arrive in country. SSA contains within its youth the makings for major entrepreneurial expansion. The literature acknowledged the steps made towards better EET, but noted that more aggressive and stakeholder-supported efforts are
needed. If harnessed effectively, EET could create a generation of “home-grown” entrepreneurs that can help drive positive growth in the economies of SSA.

3.1 Methods of EET and effectiveness

This review, and much of the literature surrounding EET, finds the objectives put forth by Garavan and Occineide (1994) to define the ultimate goals of EET:

- the acquisition of knowledge and skills that are relevant to entrepreneurship;
- the identification, exploration and fuelling of entrepreneurial drive, talent and skills;
- undoing the risk-averse bias of many analytical procedures;
- developing understanding and support for all unique facets of entrepreneurship;
- the development of positive attitudes towards change;
- and to encourage new start-ups

Through these objectives, EET can be seen as improving the business and growth climate in SSA.

University-based education is discussed by Kaijage and Wheeler (2013) as an already-established system that reaches secondary school graduates who already have learned the initial skills necessary to establishing and running a successful business. Including management and finance classes, as well as heavy emphasis on entrepreneurship within the university context, assists future entrepreneurs in the realization of their start-ups. Ogundele et al (2012) point to the acquisition of technical skills, business management, and personal entrepreneurial skills as key to success of any EET program, especially those focused on university-level education. This review then uses these aspects of any program to evaluate the impact of EET:

- **Technical Skills**: Specific skills that are measurable, such as financial literacy, grant management, or specific skills necessary for work, such as engineering or architectural skills for construction or input/output tracking for production-heavy businesses.;
- **Business Management**: Skills that are geared towards running a business, managing employees, writing business plans, and general work ethic;
- **Personal Entrepreneurial Skills**: These are the soft skills and introduction to entrepreneurship as a possible career. This includes vision, risk-taking, leadership, and more hard-to-quantify skills.

Ogundele et al (2012) note that EET should start even earlier than university-level—at some point during primary or secondary education students should be exposed to entrepreneurship as a possible career path. Steenekamp et al (2011) second this with positive perceptions of entrepreneurship among youth after exposure in school.

Outside of state-sponsored education, local and regional training centres—developed by NGOs or the private sector—may be a method by which to reach those who are out of schooling (Ogundele et al 2014). Formal schooling may involve certain costs or barriers to entry that keep future entrepreneurs from accessing available training. As well, training centres may also assist those entrepreneurs currently in the workforce with learning or honing skills (Kaijage and Wheeler, 2013).

Specific skills sets like financial literacy are particularly useful for marginalized groups. Financial literacy, alongside grant management, may be more impactful than other types of training (Krause et al, 2014).

3.2 Constraints to EET in SSA

Sought-after productive outcomes of many EET programs are constrained throughout SSA.

Individually, many entrepreneurs lack access to sufficient capital and business services (Brixiová et al, 2014). Steenekamp et al (2011) points to a lack of role models and mentors for young entrepreneurs as a constraining factor. Social and business networks are not as developed for
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Youth, nor do the social safety nets exist in many SSA nations that allow entrepreneurs to risk themselves in business.

Ogundele (2012) et al found that throughout Nigeria, government at all levels tended to lack full engagement and support for EET programs. Bawuah et al (2006) seconds this with reference to a lack of coherent policies and programs from SSA’s governments, despite consistent rhetoric on the need for greater EET.

Robb et al (2014) reviews the constraints imposed by EET programs themselves. They find that EET programs are often teaching the wrong lessons and are incorrectly tailored to their audiences. Business acumen and entrepreneurial mind-set are seen as key by stakeholders, but EET programs in Kenya and Ghana are typically only teaching specific business skills. As well, programs mix large groups without understanding the specific needs of future entrepreneurs.

Olenik and Fawcett (2013) note that the enabling environment for effective EET may not exist in certain SSA nations. Disrupted employment due to conflict or economic troubles, political systems that discourage entrepreneurship, limited institutional capacity, and limited access to resources for disadvantaged groups all hinder effective EET.

3.3 The evidence

3.3.1 A note on geography of studies

All studies reviewed were the work of researchers examining specific countries, and in many cases, even smaller communities within certain nations. Brixiová et al, (2014) note that all their findings “need to be put in context of experiences of other countries and regions with programs supporting youth entrepreneurship”. Blattman et al (2013) researched specific communities in Uganda, while Ogundele et al (2012) examined only the programs in the Lagos State of Nigeria. Cho et al (2013) went into depth on Malian youth, and Karuse et al (2014) examined Tanzanians; both authors noted that their research can help inform policy makers, but needs local context and perspective. In one of the more comprehensive studies on EET, Valerio et al (2014) examined multiple programs across varied nations, but noted that isolation of specifics as to a program’s success (or failure) were extremely difficult to trace.

Overall, there is need for larger, comprehensive review of EET as a whole across SSA, with comparative sample sizes, participant make-ups, equal access to markets, similar laws and regulations, and a host of other individual factors.

3.3.2 A note on participants/audience

Most studies focused on youth entrepreneurs, but used varying definitions of youth and participant range. Some studies focused on female and minority entrepreneurs such as Blattman et al (2013). Valerio et al (2014) noted the wide range of participants in most studies and programs, noting that different outcomes could be the result of different make-ups of the participants (age, status in community, ability to access capital, education, and more). Krause et al (2014) reminds the reader to remember that supportive conditions may matter more than effective training. Some programs focused on new entrepreneurs while others worked with businessmen and women who had a few years experience underneath their belts. Some aimed at secondary school students while others targeted high-school dropouts. Some participants were well-connected and well-educated, others had few advantages in their communities. It is important to highlight that different studies evaluated differing groups and participants—where appropriate, some forms of EET may be more effective than other methods.

3.3.3 Incentives

Multiple authors noted the existence of incentives in EET programs (such as low-or-no interest loans). Robb et al (2014) note that these incentives were often the drivers for youth to participate in an EET program. As well, they mention that business-plan competitions with cash-
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Based prizes were helpful in linking innovation to implementation. However, the authors do not view incentives as the only method to foster more interest in EET programs.

Valerio et al (2014) state in some cases that monetary incentives are unlikely to drive would-be entrepreneurs, noting that “independence,” “achievement,” and “challenge,” were the top reasons for participation in studies. Money was ranked sixth. However, in another study they examined, small cash incentives increased attendance in an EET program; they indicate that this uptick may not have had to do with the incentives, but it may be a significant factor.

Breton et al (2013) follow in this vein by remarking that varied participants in EET programs did not take up short-term no interest loans and grants. While incentives can be employed in encouraging EET attendance, their existence does not necessarily cause youth to choose to start a business.

3.3.4 Technical Skills Education

When reviewing technical skills education, this review employs the previous definition of technical skills—those that are quantifiable and necessary in certain fields. This definition can range from those very job-specific skills sets (i.e. engineering skills or the ability to interpret specific data) to financial literacy, which has benefits in all lines of work.

While most EET programs included some aspect of technical training, Ogundele et al (2012) found a significant relationship between technical education and eventual youth employment in a study on Lagos State. The literature argues that technical education provides youth with the skills and knowledge to raise incomes, which could stem from starting businesses or taking those new skills into the job market.

In a study on Swaziland, Brixovia et al (2014) notes that young Swazi entrepreneurs view lack of skills as their biggest barrier to embarking in business. However, this emphasis on technical skills is mixed with interest in combining business linkages and networking as key components to EET.

Krause et al (2014) found evidence that supports and refutes the importance of technical skills education in evaluations of programs in Tanzania. Business knowledge improved in one study, whereas profits did not increase. However, with technical skills, participants did mention they were more likely to start a business. Krause et al (2014) uncovered more support for technical skills education in marginalized and disadvantaged groups, who may lack even basic skills. Bawuah et al (2006) note that, while technical skills are important, without components of entrepreneur-specific education, few youth will eventually start a business.

Cho et al (2013), in a paper looking both at Malian TVET and drop outs, found that there existed major discrepancies between male and female participants—females were more likely to drop out as the cost of the training, both direct and indirect, were too high for the expected outcomes. In Cho et al (2013) study, males took greater advantage of the training, yet little actual impact was seen for businesses outside of self-reported greater technical skills.

3.3.5 Entrepreneurship training

Entrepreneurship training focuses on introducing students, who are viewed as potential entrepreneurs, to the idea of starting one’s own business. Instead of focusing on specific hard skills as in technical training, or on management skills in business-style training, entrepreneurship education is that training to develop vision, risk-taking, leadership, and other qualities that are necessary to establish a new venture.

Many participants in EET programs saw entrepreneurship skills as the most important (Bawuah et al 2006). Entrepreneurship education, especially to promote leadership, vision, and risk-taking, is important to overcome societal and familial pressures that discourage entrepreneurship (Robb et al, 2014).
Interestingly, Krause et al (2014) found through an in-depth examination of EET in Tanzania that results were mixed. Youth who underwent training though they were more likely to succeed in starting their own business, but also doubted they had the right skills to succeed. It seems that more in-depth examination of this issue is required.

Kaijage and Wheeler (2013), in a comprehensive review of entrepreneurship education in East Africa, arrived at the following conclusions: EET is most effective when introduced to children and adolescents; entrepreneurship is socially driven, and needs to be paired with specific skills; much EET occurs outside the formal training and educational systems; and that EET, in order to be more credible, requires effective and learned teachers. The authors also uncovered a significant gap between Kenya and Tanzania regarding the very concept of entrepreneurship, with the latter nation having a much less developed understanding of the importance of entrepreneurship.

Entrepreneurship training across much of Africa is limited, in part to narrow degrees that discourage students from exploring EET (Bawuah et al 2006). To take full advantage of EET while in formal schooling, many African degree programs will need to include the idea of entrepreneurship.

North (2002) follows this with a recommendation that formalized entrepreneurship education in South Africa not to become highly theoretical, and remain “fun,” as it increases ownership of the education itself.

3.3.6 Business Management Training

Business and management training can be geared to a large manner of potential entrepreneurs. The skills that come with this type of training lend themselves to many of the established business training programs at African universities; however, there are aspects of business training that may require practical application.

McKenzie and Woodruff (2014), reviewing literature for the World Bank, find that most evaluations suffer from small sample sizes—thereby many recommendations and conclusions tend to be localized at best. However, overall they found there is slight evidence that business management training helped entrepreneurs start businesses sooner—they then countered this with the unknown aspect of whether those entrepreneurs were going to launch a business anyways. As well, they note even less positive effect on sales and profits with associated business management.

Filmer et al (2014) notes that SSA is in serious need of management training, but that achieving specific results from said training has been mixed. More research is required with a broader scope to make in-depth conclusions.

Berge et al (2012) found in a Tanzanian study that business training has resulted in positive outcomes, especially when weighed against infusions of long-term capital. Berge et al (2012) note that this is contingent upon gender, as females may have benefitted from the training, but saw little positive movement for their businesses. Finally, Berge et al (2012) address an increase in household welfare, noting that trained entrepreneurs made more investments in their own household.

Steenekamp et al (2011) spell out the difficulties of purely testing any training with so few focused entrepreneurship and business training programs in many African nations. Without enough background information to test relevance and significance, any conclusions are necessarily incomplete.

Brixiová et al (2014) pointed again to the effectiveness of early EET, as well as how basic business management training improved business practices and performance. The authors then point to preconditions such as timing, targeting, and others, that make business training more effective across the board.
3.3.7 Combination of Methods

Blattman et al (2013), when researching a larger program that combined varied methods of training in Uganda, found that individuals who were offered loans and cash grants in a program but did not receive training on their usage or specifically how to manage them were reluctant to take up the funds. Fiala et al (2013) notes that further work needs to be done to evaluate efficacy of a program that combines these aspects.

Brixovia et al (2014) in discussion of business management training, notes that combining the initial training with more specific technical training—such as fund discovery and management—is more effective than simply building business management skills alone.

Robb et al (2014) continue in their support of a ‘wrap-around’ services, wherein young entrepreneurs receive connection with mentors, entrepreneurship training, and technical training. They continue as they recommend that EET programs also include follow-up services to ensure that lessons and skills are used beyond the initial education. They found promising evidence of this in several programs, notably those higher-education linked and entrepreneurship incubator programs in Kenya.

Olenik and Fawcett (2013), in consideration of multiple EET and workforce development programs across a range of developing economies, noted that many programs of EET did feature a combination of trainings, rather than a focus on separate silos. The overall success rate, however, was limited; the authors of the State of the Field Report point out that this may be the context of the programs, rather than content.

3.3.8 Mentorship

Dhilwayo (2008) found that mentorship is effective in certain disciplines (engineering and nursing), but is lacking in much EET across South Africa. Certain foundations and programs have started to rectify this situation, such as the Mara Foundation or the Tony Elemelu Foundation, but there is little scholarly work as to the actual effectiveness of these approaches. However, Inoue et al (2015) highlighted that a microfinance program in Kenya that included mentorship led to increased savings, though was plagued with implementation problems.

Valerio et al (2014) recognized programs in South Africa, Kenya, and Tanzania that included mentoring within EET implementation. In South Africa, mentoring services were the most accessed by program participants, and an overall increase in profits were shown by those who responded to surveys; however, not all participants were surveyed, nor were all mentoring services accessed. In Kenya, it was found that better mentorship was needed to be truly effective; the Tanzanian study is still awaiting full results.

Krause et al (2014) studies of Tanzanian youth included mentorship within the program’s aspects, but the number of factors in the study makes it difficult to specifically point to mentorship as effective or not. Breton et al (2013) mention there is major room for expansion of mentoring programs for women in SSA, as little is currently being executed outside of smaller, niche programs. Waya (2013) notes that this lack is not limited to women, pointing to the lack of mentorship opportunities in the higher education institutions in SSA.

3.4 Conclusion

The literature is near unanimous in recommending that governments, institutions, and the private sector spend more time and effort on establishing EET programs. All reviewed works noted that governments of SSA have some distance to go before investments in EET match current rhetoric. As well, the literature pointed out that the bulging youth unemployment crisis will necessitate home-grown entrepreneurs to foster economic growth, create innovative new industries, and develop the jobs of the future. By investing only partially in EET, governments are selling themselves and their citizens short.
The evidence as to the most effective method of EET is mixed, with support for all methods. While the literature and data analysis of EET programs is building, there are little long-term studies that deal with SSA on a larger, regional whole. Many studies in the literature dealt with smaller SSA towns, communities, or states—so results must be tempered with the understanding that there may be local issues at play that influence outcomes. As well, SSA is a vast array of nations with differing levels of economic growth, strong or weak governments, regional trade, levels of crime and corruption, and many other factors—therefore what is effective in Nigeria may not be appropriate for South Sudan, or vice-versa.

Most studies pointed to varying degrees of effectiveness of technical education, though this may have undue influence if looking at employment, because technical skill acquisition can lead to employment outside of entrepreneurship. However, technical skills were noted as necessary for many entrepreneurs to improve their current businesses or embark on a new venture. Technical skills are most important in keeping a business running, or understanding the necessities to start a business.

Business management was important when viewed as the skills of networking, capital acquisition, business planning, and employee management. These skills were necessary to move the many SSA micro-businesses out of localized economies and build scale. However, these skills may be most difficult to teach, and may be impossible to deploy. Universities and institutions may emphasize capital acquisition, but if there is little local capital to be found, an entrepreneur cannot use this skill.

Many studies noted the importance of personal entrepreneurial education—this is the vision and perseverance to start a business. These skills may be hardest to instil but are necessary for the initial leap into start-up.

Generally, no single aspect of education was universal in effectiveness across participant and geography. Most authors supported the idea of combining aspects of education from all differing skill sets—as in combining the teaching of financial management with networking strategies or entrepreneurship with business plan development. By widening the breadth of the education, participants in any program were at least somewhat more likely to involve themselves in entrepreneurship. This falls in line with the idea of full-spectrum education as being more effective than one simple skill training.

Overall, there was little evidence that supported training as more effective in universities vis-à-vis training centres. Both access different demographics, and comparison is likely incongruous. However, the introduction of EET in earlier schooling was shown to significantly affect outcomes of students in desire to start a new business. Therefore, governments and stakeholders should acknowledge this and make necessary changes to introduce EET in primary and secondary schooling.

A summary of the findings is reflected in the table below:

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<tr>
<th>Entrepreneurial outcome</th>
<th>Effectiveness</th>
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<tr>
<td>Technical Skills</td>
<td>Some evidence</td>
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<tr>
<td>Business Management</td>
<td>Weak evidence</td>
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<tr>
<td>Entrepreneurial Skills</td>
<td>Some evidence</td>
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<tr>
<td>Combination of EET</td>
<td>Some evidence</td>
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<tr>
<td>Mentorship</td>
<td>Some evidence</td>
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4 References


