

STRATEGIC ENTREPRENEURSHIP CURRICULUM IN THE U.S. AND EUROPE: LESSONS FOR SUB-SAHARAN AFRICA

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Abstract

The field of entrepreneurship education has grown in recent decades to a full-fledged discipline in its own right. Yet, the current approach to implementing entrepreneurship education varies drastically not only from one program to another, but also across continents. This study investigates current trends in entrepreneurship education in the United States and Europe, particularly as they relate to entrepreneurship education in Sub-Saharan African countries. Social, political, regional, cultural, and legal dynamics are examined to better understand contextual differences observed. Insights from each of these regions are presented on how they can benefit each other, and policy implications and recommendations are provided.

Keywords: *Africa, Entrepreneurship, Curriculum, U.S., Europe, CCEE, Cross Campus.*

INTRODUCTION

The field of entrepreneurship education has grown in recent decades to a full-fledged discipline in its own right. As a result, students in the global context have studied and applied entrepreneurship principles, theories, and practices in countless settings. These actions continuously lead to the introduction of countless innovations that improve the quality of life for populations throughout the world. The actions also generously reward their creators with enormous wealth, and therefore lure future inspiring entrepreneurs to the field.

However, the current approach to implementing entrepreneurship education varies drastically not only from one program to another, but also across continents. Different strategies have been adopted to increase entrepreneurial education and success among university students. These teaching strategies range on a spectrum from a theory-based classroom approach to an experiential field-based approach. Programs that adopt a theory-based approach deliver entrepreneurship education by teaching students much *about* the principles,

practices and theories of entrepreneurship primarily through lectures, cases, and guest speakers (Kozlinska, 2011; Sirelkhatim & Gangi, 2015). Programs that adopt an experiential field-based approach deliver entrepreneurship education by having their students actually performing some of the actual steps of launching or attempting to launch an actual new venture (Sirelkhatim & Gangi, 2015).

The degree to which entrepreneurship education is spread throughout a campus and its broader ecosystem, instead of being centralized in one program, also varies on a spectrum (Schulman & Lyons, 2014). Private foundations, namely the Coleman Foundation, the Kauffman Foundation, and Kern Engineering Entrepreneurship Network (KEEN), have made notable inroads in advancing the spread of entrepreneurship education throughout university and college campuses in the U.S. This phenomenon is referred to as Cross Campus Entrepreneurship Education (CCEE) (Katz et al., 2014; Roberts et al., 2014) and is viewed as a superior model for delivering entrepreneurship education. Yet, in the U.S., much work still remains as the *focused model* (and not CCEE) remains the dominant model for entrepreneurship education there. (Katz et al., 2014; Sirelkhatim & Gangi, 2015). In contrast, since 2006, CCEE throughout Europe has far surpassed its spread in the U.S. (Katz et al., 2014). Borrowing CCEE lessons from the Kauffman Campus Initiative launched in 2003, the European model developed three major goals, teaching students entrepreneurship as an occupation, teaching students to be entrepreneurial as employees, and teaching universities to be entrepreneurial (Katz et al., 2014).

This study looks at these current trends in entrepreneurship education in the United States and Europe with particular emphasis on how they might relate to entrepreneurship education opportunities throughout countries in Sub-Saharan Africa. Thus, social, political, regional, cultural, and legal dynamics within Sub-Saharan African countries are examined to better understand contextual differences observed there. Insights from each of these three regions are presented on how they can benefit each other, and policy implications and recommendations are provided.

LITERATURE REVIEW

The field of research on entrepreneurship in Sub-Saharan Africa is in a budding stage. Reasons on why the field has not advanced further include, diversity among the many countries there in language, political and legal systems, infrastructure, culture, religion and others. Kiggundu (2002) lays out recommendations to researchers engaging in entrepreneurship studies *on or for* Sub-Saharan Africa (See Table 1).

Geographic Context in Sub-Saharan Africa

Africa is a continent extremely rich with minerals and other natural and human resources. Its thriving export industries in agriculture offer tremendous

entrepreneurial opportunities if agricultural raw materials are converted to more refined products. Additionally, Africa's attractiveness as a consumer market for imported goods is increasingly growing (Kshetri, 2011). The main beneficiaries of Africa's abundant natural resources have primarily been American, European and Asian multinationals and the continent's dictators and tiny minorities there (Kshetri, 2011).

Yet, constraints to improving the continent's entrepreneurship exist. Among the greatest of these forces are the lack of entrepreneurial skills and poor management of human resources (Alamine, 2006, as cited in Kshetri, 2011). One reason relates to the age and education attainment levels among the region's population. Africa is a continent with an estimated 60 percent of the population being 25 years or younger (Kshetri, 2011). Roughly twenty-five percent of the children there receive a secondary education, and of those who do, only five percent receive some sort of vocational training (Kshetri, 2011). Any substantial removal of these constraints should help the region to further energize and activate its vast human resources to engage in significantly more innovation, creativity, and entrepreneurship.

Political Environment in Sub-Saharan Africa

Sub-Saharan African countries are primarily mixed economies with governments nationalizing many firms, controlling a significantly high proportion of their country's national resources, and in most African countries, being the largest employer (Kshetri, 2011; Mvunganyi, 2010). Some scholars have argued for more involvement in the economy from the private sector in order to push for more of a market-based system (Kshetri, 2011; Prahalad, 2005).

There has been a vanishingly small stock of Foreign Direct Investment (FDI) outside the oil industry (Kshetri, 2011). A lack of strong institutions in place to ensure the impartial enforcement of contracts and to protect the long-term security of property rights have remained one of the major impediments to inward FDI (Mbaku, 2007). This lack of FDI leads to wealth redistribution in far too many African countries as opposed to wealth creation (Fosu, Bates & Hoffler, 2006; Kshetri, 2011). Zambian economist Dambisa Moyo advocates alternatives such as attracting increased trade and foreign direct investment to the continent and developing micro-financing and capital markets (reuters.com, 2009 as cited in Kshetri, 2011).

Munemo (2012) examined nearly 100 developing countries to compare entrepreneurship in developing African countries to developing non-African countries. He found that the number of new firms being formally added to each country's economy is significantly much lower in African developing countries than in other developing countries (Munemo, 2012). He also found that the positive effect of political stability and entry deregulation on new firm creation is much more pronounced in African countries (Munemo, 2012).

TABLE 1
Recommendations Researching Entrepreneurship in Sub-Saharan Africa

| | |
|----------|--|
| 1 | Produce “useful and useable knowledge” to local, front-line entrepreneurs in Africa. |
| 2 | Research published should be devoid of jargon. |
| 3 | Translate research into key African languages. |
| 4 | Foreign researchers should ensure local ownership of research findings, and avoid extractive research. |
| 5 | Instead of concentrating research efforts and studies on either the entrepreneur, the entrepreneurial firm, or the external environment, researchers should produce better research by adopting a more holistic approach that combines all three. |
| 6 | Interpret research findings and recommendation to be useful to different entities such as researchers, public administrators, individual entrepreneurs, financial institutions, and countries as a whole. |
| 7 | Conduct better and more usable research, focusing on “real entrepreneurs” versus hawkers and the underemployed, and taking multi-disciplinary approach. |
| 8 | Study entrepreneurship in different contexts such as public institutions, politics, the military, the volunteer sector, and lessons from history. |
| 9 | Remain realistic about entrepreneurship in Africa as having both problems and challenges at the “lower end” and opportunities at the “higher end.” This should help the public and people who drop out of school to be better informed about both the prospects <i>and</i> limitations of employment in the entrepreneurship sector. |

Source: Kiggundu, 2002.

Innovation in Sub-Saharan Africa

The main type of innovation that occurs in developing countries is *incremental* versus *novel* (Robson et al., 2009). Entrepreneurs with higher education, irrespective of gender, are more likely to introduce innovations. Therefore, innovations typically occur among higher social groups such as people in the middle or upper class (Robson et al., 2009). Innovations also occur more among larger firms, firms that export, and firms in conurbations (extended urban areas consisting of a mass of several cities) versus firms in small towns (Robson et al., 2009).

Family firms in West Africa tend to hire family members over more qualified applicants and are therefore less likely to produce innovations than non-family firms (Robson et al., 2009). Furthermore, older people are viewed and treated as wiser and more knowledgeable in West Africa than younger people. As a result, innovations presented by younger minds are more often rejected in favor of the wisdom espoused by older people there (Robson et al., 2009).

Entrepreneurship Education in Sub-Saharan Africa

Given the education attainment of youth in Africa, entrepreneurship education is viewed as a solution. Yet, DeJaeghere and Baxter (2014) point out that much of the entrepreneurship education in Africa consists of necessity-driven training aimed at creating micro-enterprises and livelihood options aimed at getting out of poverty. In contrast, opportunity entrepreneurship education is aimed at business and economic development. DeJaeghere and Baxter (2014) therefore emphasize as key, national and local governments cultivating the necessary conditions for youth to succeed in entrepreneurship once the youth are equipped with the entrepreneurial skills and resources. They assert that necessity entrepreneurs will otherwise fail as they transition into competitive and struggling marketplaces.

Perceptions of Entrepreneurship in Sub-Saharan Africa

Research shows that in general African citizens possess a favorable perception toward becoming an entrepreneur (Amine & Staub, 2009; Kiggundu, 2002; Rheault & Tortora, 2008). They view entrepreneurship as a means for increasing one's economic standing, and also as a means of achieving higher social status and wider social relations. Research also shows that among some in Africa, perceptions exist that may run counter to entrepreneurship expansion in the region. One example is a perceived stigma among many in Africa including some governments that being self-employed in a small enterprise equates to being unemployed (Amine & Staub, 2009). Another perspective widely held in West Africa is the belief that the higher social standing that entrepreneurship provides is accompanied by a perceived obligation that negatively disadvantages one's business performance (Kiggundu, 2002; Robson et al., 2009). This perceived obligation stems from expectations externally imposed on an entrepreneur by family members.

West African countries are primarily collectivist versus individualistic societies (Hofstede, 1983). As such, people there are likely to elevate the needs of broader family and community over their individual needs. Research shows that this resulting devotion to family leads to a tendency in West Africa for entrepreneurs to employ family members over hiring more qualified applicants. While this practice may prove itself as a greater good to those families in the short-term, the practice may also lead their firms to creating a workforce that is less creative and that lacks independent thinking (Robson et al., 2009).

As collectivist societies, many in West Africa believe that if a business owner has attained a higher social status with more people in his/her social network, that person has a duty to share his/her income and employment opportunities with extended family members and others when needs arise (Kiggundu, 2002; Robson et al., 2009). This belief has often pressured entrepreneurs in West Africa to relocate their businesses away from their hometowns because of fear their businesses may become encumbered with family members (Robson et al., 2009).

Amine and Staub (2009) further explain that particularly in rural areas, many people practice and believe in witchcraft where sorcerers provide blessings, curses, and protection. As a result of this belief, entrepreneurship is often suppressed in these areas because prospective entrepreneurs accept that if they become a business owner and are viewed as neglecting their duty to support extended family members in times of need, they are highly likely to become the target of a curse. Prospective entrepreneurs in such areas envision that if they decide to become an entrepreneur, they may have to choose from fulfilling a practical need of reinvesting income into their firms for business survival, growth, and maintenance needs, or instead to divert those resources to satisfying a social need of sharing income with extended family (Amine & Staub, 2009).

One additional perception that restrains entrepreneurship in Sub-Saharan Africa is a widely held negative attitude toward women there becoming entrepreneurs (Amine & Staub, 2009; Rheault & Tortora, 2008). Amine and Staub (2009) provide a detailed explanation on many systemic barriers that women there face in trying to become entrepreneurs. Hence, the majority of women-owned businesses in sub-Saharan Africa are informal economy firms, formed out of necessity, and small-scaled enterprises (Amine & Staub, 2009; DeJaeghere & Baxter, 2014). Amine and Staub (2009) argue the need for women and girls in particular to have more diverse social networks, and to be provided adequate education and training programs with special emphasis on teaching business methods, communication skills, and financial expertise.

ENTREPRENEURSHIP CURRICULUM LITERATURE: BEYOND AFRICA

We now move beyond Africa to examine entrepreneurship curriculum in the more general body of literature. The field of entrepreneurship education has grown for more than the past 100 years to a full-fledged discipline today (Katz, 2003). Yet, most of its growth surged over the past few decades (Katz, 2003; Roberts et al., 2014). Today, the discipline remains in rapid growth and is regarded as one of the fastest growing fields in education (Sirelkhatim & Gangi, 2015). In spite of this fast growth, certain institutional barriers to entrepreneurship education nonetheless exist. One of these barriers is *low level of cooperation between universities and businesses* which leads to decreased entrepreneurial activity. This barrier also manifests itself through the existence of

a small number of start-ups versus a high proportion of individuals who are trained in starting a business, and a wide gap between *intentions* and *start-ups* (Kozlinska, 2011).

As a result, entrepreneurship educators in the last decade have been strongly cautioned to resist excessive reliance on teaching knowledge *on* business creation, and instead, to rely more heavily on developing practitioners by teaching students to *experience* entrepreneurship (Kozlinska, 2011). Similarly, entrepreneurs have been advised to build an entrepreneurial ecosystem that links universities and other developers of entrepreneurship skills, to government agencies, corporations, community-based organizations, and other interested parties (Schulman & Lyons, 2014). Entrepreneurship educators have also been advised to, in addition to more traditional student populations, include experienced workers as a target student population for teaching entrepreneurship. Experienced workers have specific ideas on real solutions to actual entrepreneurial problems that can work (Schulman & Lyons, 2014). The degree to which entrepreneurship education programs reflect this advice varies.

Sirelkhatim and Gangi (2015) examined curricula content and teaching methods in 129 articles on entrepreneurship education and entrepreneurship learning. They found that three general approaches are common among entrepreneurship education program, content and teaching methods.

- The first approach (teaching “*about*” entrepreneurship): relies on theory content, is a teacher-centered teaching method, and aims to increase students’ awareness about entrepreneurship as an occupation choice.
- The second approach (teaching “*for*” entrepreneurship): aims to graduate students who will become entrepreneurs, is more learner-centered, is designed to build entrepreneurial skills rather than only providing content, and is delivered through creating an environment where students imitate real business situations.
- The third approach (teaching “*through*” entrepreneurship) is almost identical to the second, except instead of imitating real situations, students participate in actual launch activities for a real new business. The aim in this third approach is to foster new venture development and to develop entrepreneurial competencies among students. Table 2 lists common activities used by each approach.

Creativity in Entrepreneurship Education Curriculum

Creativity is the act of producing novel and effective solutions to problems (Steinberg & Lubart, 1999). This act is firmly established as a critical and necessary component that must be included in entrepreneurship programs (Fillis & Rentschler, 2010; Schmidt, Sopar & Bernaciak, 2013; Yar Hamidi, Wennberg

& Berglund, 2008). Schmidt et al. (2013) explain that creativity is a measure of both divergent and convergent thinking. Divergent thinking is coming up with multiple *thinking outside the box* innovative ideas around a given problem, and convergent thinking is honing in on the one best potential candidate of those ideas.

Effective and successful entrepreneurship depends on first identifying problems, trends, or gaps, and then generating multiple potential *reactions* or solutions to them. The ability to diverge from conventional thinking to generate multiple innovative solutions is central to this process. Then, convergent thinking allows an entrepreneur to pursue the best among the multiple creative alternative solutions.

Schmidt et al. (2013) found that 82 percent of top ranked entrepreneurship program directors rated creativity and innovation as very important to any entrepreneurship program. 71 percent of these programs include stand-alone courses in creativity/innovation in their major, while 44 percent include such coursework in their minor. In terms of embedding creativity/innovation in courses, 86 percent do so in their entrepreneurship major, while 78 percent do so in their minor. Moreover, convergent creativity was taught in team projects in 95 percent of the top entrepreneurship programs, and in individual projects, convergent creativity was taught in 85 percent of the programs. Schmidt et al. (2013) recommend to incorporate creativity and innovation as both a stand-alone course in entrepreneurship, as well as integrating it in coursework throughout an entrepreneurship program.

Five Models of Entrepreneurship Education Programs at Universities

The strategic placement of entrepreneurship education in a university or college setting varies from being centrally housed in one location to being decentralized and spread throughout (or across) the campus. Streeter et al. (2002) selected a sample of 38 top ranked programs in the U.S. and created a typology of entrepreneurship education programs among U.S. universities. The types are focused, collaborative, magnet, radiant, and mixed.

Focused programs are those where entrepreneurship education is housed in a single discipline. Currently, focused programs have remained the dominant model in the U.S. for more than 100 years. *Collaborative* programs are those where entrepreneurship education involves two or more disciplines (e.g., business and engineering, or business and the *arts*). This approach has traditionally been used in the U.S. as primarily an *entrepreneurial occupation* (explained later in this paper) approach. *Magnet* programs are those where entrepreneurship education is housed in a central administration of a cross-campus program. *Radiant* programs are those where entrepreneurship education is decentralized with resources spread across a campus. The radiant model is very rare in the U.S., and is adopted in only two of the programs in

TABLE 2
Common pedagogy activities for each teaching approach

| Teaching " about " entrepreneurship | |
|--|--|
| 1 | Business plan |
| 2 | Conventional Management-related subjects |
| 3 | Small Bus. Management Courses |
| 4 | Teacher centered passive learning about personality, economic success, and cognition |
| 5 | Lectures |
| 6 | Guest speakers |
| 7 | Case studies |
| Teaching " for " entrepreneurship | |
| 1 | Skills-based: running a business |
| 2 | Learning by doing, experiential |
| 3 | Simulations |
| 4 | Self-directed activities, team taught by academic & practitioners, mentoring & networking with entrepreneurs |
| 5 | Students act, role play and pretend to be entrepreneurs rather than really being one |
| Teaching " through " entrepreneurship | |
| 1 | Learning "with" and "through" real-life e-ship |
| 2 | Students experience "being" entrepreneurs rather than "pretending" |
| 3 | Pitching business ideas to investors and shareholders, and teaching with real-life entrepreneurs |
| 4 | Person-induced business simulation |
| 5 | Internships to create and implement innovative products for real clients |
| 6 | Live projects where students collaborate with real business people |

Source: Sirelkhatim & Gangi, 2015.

Streeter et al.'s (2002) study. The final model is referred to as *mixed*. *Mixed* programs are those where entrepreneurship education is housed somewhere between focused and radiant (Katz et al., 2014; Roberts et al., 2014; Streeter et al., 2002).

Moving beyond Number of Start-ups to Assess Entrepreneurship Education Effectiveness

Regardless of the size or location of an entrepreneurship program, the importance of assessing its effectiveness cannot be overstated. The fate of any entrepreneurship education program is without doubt intricately connected to how successful the program is to a broad group of stakeholders. Moreover, the success of any such program to any stakeholder will vary based on the vantage point of the stakeholder category. Accordingly, a high school junior, a college junior, and a person who graduated from a program 3 year ago, the parents of each of these 3 groups, investors, and institutional administrators may all look at drastically different outcome measures of success for an entrepreneurship program. Entrepreneurship programs would do good to know how they are assessed by various stakeholders, and which assessments metrics help optimize attainment of their goals. Roberts et al. (2014) provide a set of commonly used means by which stakeholders assess the effectiveness of entrepreneurship education programs (See Table 3).

TABLE 3
Commonly Used Assessments of Entrepreneurship Education Programs

| | |
|---|---|
| 1 | Rankings systems: Bloomberg, Businessweek, The Financial Times, The Princeton Review, and U.S News & World Report |
| 2 | Ventures formed by current students |
| 3 | Enterprises launched shortly after graduation |
| 4 | Student reports of increased inclination to start a business |
| 5 | Measures of innovative behavior |

Source: Roberts et al., 2014.

In addition to providing the list of assessments in Table 2, Roberts et al. (2014) argue that institutions should move beyond *number of start-ups* as the critical metric for program effectiveness. They assert that any entrepreneurship education which stops a student whose entrepreneurship would have resulted in a failure has successfully helped not only the student but also those financing the venture, and the larger community. These researchers also argue as a positive outcome the case where a program convinces a student not to currently implement entrepreneurship because that student presently lacks the necessary motivation or skills to successfully do so.

A Race for Cross Campus Entrepreneurship Education in Europe and the U.S.

Whereas entrepreneurship education has traditionally remained in the business discipline, a new global movement in its early stages is called Cross Campus Entrepreneurship Education (CCEE) (Katz et al., 2014; Roberts et al., 2014). This initiative consists of infusing entrepreneurship skills, knowledge and abilities to promote entrepreneurial behavior not only in business disciplines, but also within the non-business disciplines (Roberts et al., 2014). Universities that house their entrepreneurship education primarily in business schools only, constrain campus entrepreneurship effectiveness particularly among students in non-business majors who aspire to become entrepreneurs and who will not take any business courses.

Katz et al. (2014) explain that there are many occupations (*e.g.*, podiatrists, dentists, lawyers, child care workers, accountants, entertainers and performers, artists, writers and authors) of which the majority of practitioners are self-employed, and of which self-employment is the norm. He argues that because many of these occupations are housed in college programs which are spread throughout a campus, that entrepreneurship education should likewise be dispersed throughout these locations. Katz et al. (2014) also cite seminal work such as McMullan and Long (1987), Birch (1987), and a key conversation between a researcher and an industry expert (J. Roberts, personal communication, November, 2009, as cited in Katz et al., 2014) which all emphasize the importance of entrepreneurship not being centrally housed in a business school entrepreneurship program.

As a result of this more inclusive movement, three distinct forces in universities are driving the imperative and prospect for CCEE. They are (1) entrepreneurial occupation, (2) entrepreneurial employment, and (3) entrepreneurial university (Katz et al., 2014). *Entrepreneurial occupation* acknowledges that for many occupations of which college students train to work in after graduation, the students will face self-employment at some point in their careers. Given this reality, the purpose of entrepreneurship education in this area is to prepare such students for this type of career-specific self-employment. *Entrepreneurial employment* acknowledges that employees who are more entrepreneurial minded help create more innovations in firms, are more attractive to firms, and help create more entrepreneurial firms. Therefore, the purpose of entrepreneurship education in this area is to teach students to be more entrepreneurial as future employees in other people's firms (Katz et al., 2014).

Entrepreneurial universities view themselves as having a role of active contributor to the economic development of the broader region and nation. To help perform this role, university entrepreneurship is achieved through both the licensing of inventions and other intellectual property, as well as the development

of spin-outs, which are new interdisciplinary businesses created by faculty, students, staff, or combinations of these, with the purpose of taking the same technology to market (Katz et al., 2014).

Though CCEE is in its early stages, it has become official policy of education institutions throughout the European Union (EU). In contrast, the U.S. far trails the EU in CCEE adoption (Katz et al., 2014; Roberts et al., 2014). In the U.S., the Coleman Foundation (Coleman Fellows Initiative launched in 2009), Kauffman Foundation (Kauffman Campus Initiative launched in 2003), and Kern Engineering Entrepreneurship Network (KEEN) have been major impetuses infusing and funding entrepreneurship across campuses, thereby contributing to CCEE in the U.S. Progress is evident in that by 2014 in the U.S., between 10 and 20 universities with technology transfer offices had made the commitment to become an entrepreneurial university (Katz et al., 2014).

In 2006 in Europe, the European Commission (EC) organized an entrepreneurship conference in Oslo, Norway. The Oslo Agenda was a major outcome of that conference which consisted of a European Union (EU)-wide initiative to promote entrepreneurship education throughout the education system and throughout the EU in order to encourage an entrepreneurial mindset among EU citizens over the long term. This included entrepreneurship education in institutions of higher education that would spread entrepreneurship across different fields of studies, as well as promote technology commercialization across the university.

Drawing from earlier findings that showed that entrepreneurship needed to be taught differently in different disciplines, the Oslo Agenda sought to develop programs that were not dependent on, nor central to, entrepreneurship programs at business schools. Thus, they borrowed from the Kauffman Campus Initiative, and embraced the magnet and radiant models for CCEE (Katz et al., 2014).

Three broad goals of entrepreneurship education in the EU, as per Roberts et al. (2014) are, (1) Improve the entrepreneurial mindset of young people to enable them to be more creative and self-confident in whatever they undertake and to improve their attractiveness to employers, (2) Encourage innovative business start-ups, and (3) Improve the role of entrepreneurs in society and the economy. A distinction among funding is that the Oslo Agenda's CCEE initiatives are publicly funded, whereas the U.S.'s CCEE initiatives were initially foundation funded, and largely remain privately funded (Katz et al., 2014). In 2012 the EC published its first evaluation of the impact of its CCEE on entrepreneurs. It found that graduates of its entrepreneurship classes display more entrepreneurial intentions and attitudes, get a job earlier after finishing their studies, innovate more even as employees, and start more companies (Katz et al., 2014).

The majority of campuses in the U.S. still rely on a focused or collaborative model of CCEE (Katz et al., 2014; Morris et al., 2014). Focused and collaborative models can be financed with minimal support. Magnet and radiant models exist in programs that are well-funded internally, or substantially funded externally through foundations or government entities. Thus, restricted financing to build CCEE in the U.S. may explain its slow evolution. Yet, this constrained speed may also stem from informal institutional forces such as rivalries, fiefdoms, and switching costs (Katz et al., 2014; Morris et al., 2014; Roberts et al., 2014; Scott, 2003).

FINDINGS AND CONCLUSION

Roberts et al. (2014) state the following: “The EU recognizes that to keep up with the world, Europe must be more entrepreneurial, and getting the future generation of Europeans to respect, admire, and understand entrepreneurship will help make the region more supportive of entrepreneurship.” (p.10). A similar opportunity for Sub-Saharan Africa likely exists. Given the following five conditions, Sub-Saharan Africa may be situationally positioned to carve out tremendous growth in entrepreneurship education effectiveness:

- that 21% of business schools worldwide offer entrepreneurship programs at the bachelor’s level, and 10% in MBA programs in 2011-2012 (AACSB 2013, as cited in Roberts et al., 2014).
- the inertia and slow speed with which large bureaucratic institutions embrace needed change (Katz et al., 2014; Scott, 2003)
- the embeddedness and ownership of entrepreneurship educational programs housed in business schools, and therefore their high switching costs (Katz et al., 2014; Morris et al., 2014; Roberts et al., 2014). Katz et al. (2014) explain that inter-college rivalries make it difficult for business schools to promote CCEE in other schools, and that some disciplines sidestep ownership in entrepreneurship education by passing it off to business school-based entrepreneurship programs rather than taking responsibility of infusing entrepreneurship into their own programs.
- silos and institutional incentive structures that discourage business schools from ceding entrepreneurship programs and resources for the greater good of the institution, its students, and other stakeholders (Katz et al., 2014; Morris et al., 2014)
- entrepreneurship educational programs in Sub-Saharan Africa have not yet evolved to the same degree of embeddedness and switching costs as in the U.S.

Thus, the low switching costs to implementing CCEE programs across Sub-Saharan Africa, and the high level of flexibility of its entrepreneurship programs to do so (given the level of development of their entrepreneurship programs), give the region a potential competitive advantage to do so. Sub-Saharan Africa

may be situationally positioned to carve out competitive advantage in the race for CCEE between Europe, the U.S., and itself.

Recommendations to Entrepreneurship Education Programs in Africa:

How to Build an Effective CCEE If Sub-Saharan African countries choose to implement CCEE programs and strategies throughout the region, they can draw from the entrepreneurship literature which provides a helpful roadmap on how to do so. Recently, several scholars presented their recommendations for universities wishing to build effective CCEE programs and entrepreneurial ecosystems (Katz et al., 2014; Morris et al., 2014; Morris et al., 2013; Roberts et al., 2014; Schmidt & Molkentin, 2015). The following section organizes some of that work.

Morris, Kuratko, and Cornwall, (2013) Building Entrepreneurial Ecosystems: Several Approaches for Universities:

1. Support campus-wide new business competitions.
2. Develop co-curricular activities to support entrepreneurship.
3. Connect entrepreneurship programs to other programs across campus (Morris et al., 2013; Schmidt & Molkentin, 2015; Welsh & Tullar, 2014).
4. Develop hatching or incubators.
5. Expand entrepreneurship programs off campus through student run ventures.
6. Develop partnerships between universities: for the good of a third institution; or to share resources between campuses.
 - a. Essential that each partner contain an equal stake or ownership in any partnerships.
 - b. Each partnership should develop its own mission rather than work with a variety of member institutions' missions.
 - c. Collaboration among members should be synergistic, win/win, and interwoven throughout the program.
 - d. Combat funding shortfalls, and potential conflicts of interest arising from members seeking funding for their own institutions and for the partnership.
7. Lessons Learned and Worth Sharing:
 - a. Stay focused on the objectives of the partnership versus getting distracted.
 - b. Maintain diversity in students and partner schools/institutions.
 - c. Keep the partnership autonomous and maintain member ownership by ensuring each member is ready to contribute cash and sweat equity when needed.
 - d. Ensure that the team of members is ideal based on the partnership's objectives, and that members volunteer to join the team versus being assigned by superiors.

- e. Maintain team-based focus on collaboration and students versus members focusing more narrowly on their own institutional agendas.
- f. Communicate frequently with the team and other stakeholders of the partnership.
- g. Hire competent outside help when necessary (“*i.e.*, legal, auditing, insurance, program evaluation, web development, and fundraising (Finkle [et al.], 2009).” p. 167.

Morris, Kuratko, and Prior, (2014) Morris et al. (2014) provide very descriptive information on how a new CCEE program might look. They provide:

1. A set of courses as a sample minor in entrepreneurship for non-business minors
2. A sample set of university-wide activities that show how entrepreneurship is manifested across a campus
3. A sample set of entrepreneurship research areas for collaborations that include perspectives of those in non-business disciplines
4. Details on four key audiences for cross-campus initiatives: students, faculty, administrators/staff, and external stakeholders
5. Four alternative types of governance structures to achieve overall direction and coordination for a campus-wide entrepreneurship initiative:
 - a. Independent university office of entrepreneurship
 - b. Separate entrepreneurship centers
 - c. Extending entrepreneurship from the business school
 - d. Entrepreneurial diffusion approach
6. Twelve (12) critical building blocks toward creating an integrative cross-campus entrepreneurship initiative.

LIMITATIONS OF STUDY

Africa is a broadly diverse continent, and as such, no such singular attribute defines Sub-Saharan Africa as a research subject. Its religious, cultural, economic, political diversity make it difficult for researchers to analyze problems and solutions that are easily generalizable. Moreover, given the scarcity of published studies, and diverging nature of research available on the topic, it is extremely difficult on deciding where to begin. Nonetheless, the critical importance of advancing knowledge in this area to Sub-Saharan African students and education institutions, and to U.S. education institutions (especially including HBCUs) and their students, makes such an effort worthwhile.

FUTURE RESEARCH RECOMMENDATIONS

Future research should investigate the state of cross campus entrepreneurship education in Nigeria, as well as in other Sub-Saharan African countries. Particular emphasis should be made toward identifying constraints and

opportunities, especially from the perspective of Sub-Saharan Africans. Research in this area should begin by assessing how Sub-Saharan African students, educators, business leaders, policy-makers, and broader community feel about this topic. Research should also investigate ways that Sub-Saharan African countries can partner with each other to fund and implement CCEE. Third, ways that educational institutions in Sub-Saharan Africa can partner with HBCUs and other education institutions in the U.S. to encourage CCEE should be investigated. Finally, we recommend that researchers investigate possible ways that Nigeria's large population of informal economy entrepreneurs can participate in entrepreneurship education partnerships with HBCUs and other education institutions in the U.S.

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