Enterprise Education and Venture Initiative in Developing Entrepreneurial Potentials

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Abstract—The development of entrepreneurial potentials is important to sustaining a competitive advantage among people coexisting in innovative environment. Quality entrepreneurship education and training seem to be a mechanism in promoting and encouraging entrepreneurial potentials among youth in schools. However, identifying and nurturing these potentials can contribute immensely for the development of entrepreneurial skills to sustaining economic growth and development. This research investigates the effect of enterprise education in arousing entrepreneurial spirits among pre-tertiary level students. Ten public secondary schools in Gombe metropolis Nigeria were examined to identify students who started a given form of business after graduation; students that graduated ten years ago from 2000-2010 was sampled. The study among non-science based students examined that had entrepreneurship related subjects and the science based students that had not. The study observed that entrepreneurship education can influence psychological attributes commonly associated with entrepreneurship spirit. Further reveals that secondary school students with entrepreneurship or related knowledge have higher achievement motivation and creativity for starting a business than their counter part without it. The study recommends that there is need to include a compulsory entrepreneurship subject in the secondary school curriculum.

Keywords—Enterprise education, venture initiative, entrepreneurial potential, pre-tertiary and Gombe.

I. INTRODUCTION

IDENTIFYING and nurturing entrepreneurial potential among pre-tertiary school students can have positive impact on entrepreneurship, economic growth and development of a country. Available empirical evidence has not addressed whether enterprise education and venture initiative will affect the development of entrepreneurial skills among pre-tertiary level students. This study, therefore, investigates whether entrepreneurial training among youth in pre-tertiary schools can affect their psychological attributes commonly associated with entrepreneurial potential. It is expected that if students can improve their motivation to achieve, personal control, selfesteem, and creativity they are more likely to avoid social vices such as political thug, teen-age pregnancy, drug-abuse, violence, and gangsterism. Youth may also become more economically empowered through enterprise education for self-employment as a career option. The results of this study should provide important information to assist stakeholders' decisions to allocate resources to youth development in pretertiary school level through enterprise education and venture initiative in Gombe state in particular and Nigeria in general.

The development of entrepreneurial potentials among youths is important to sustaining a competitive advantage in this dynamic global economic environment driven by innovation and creativity. The position of quality entrepreneurship education and training in nurturing and developing entrepreneurial potential among youth is becoming apparent to students, educators and policy makers. According to a Gallup poll of American high school students (as cited in Kourilsky, 1999), 85% reported they knew little about business; 80% of high school students think that more entrepreneurship should be taught while 68% indicated a desire to learn more about entrepreneurship.

It is observe that more entrepreneurs can be produced by developing a positive perception about the feasibility and desirability of entrepreneurship through educational preparation at an early age (Kourilsky, 1995). Entrepreneurial education embedded in solid learning theory will develop entrepreneurs by increasing business knowledge, and promoting psychological attributes associated with entrepreneurs such as self confidence, self esteem, and selfefficacy (Kruegar & Brazeal, 1994; Kourilsky & Walstad, 1998; Walstad & Kourilsky, 1999). There are two basic streams of literature related to the effects of entrepreneurship education and venture initiative on the cognitive and psychological development of youth.

Firstly, in his study Bandura, (1989) established that there is effects of traditional education intervention on psychological attributes of youth. Secondly, there is also empirical evidence related to enterprise education on youth awareness and attitudes about the social and economic desirability of entrepreneurship as a career option (Kourilsky & Walstad, 1998; Walstad & Kourilsky, 1999). Even though, some studies has strongly supported psychological attributes, as the basis for predicting adult entrepreneurial behavior and potential (Wayne, Watson, Carland, & Carland, 1998), there has been limited empirical evidence to support the application of this assertion to enterprise education intervention among youth of

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pre-tertiary school age.

II. ENTREPRENEURSHIP DEVELOPMENT

Identifying and nurturing potential entrepreneurs through the education process could lead to economic growth and development. Enterprise education designed to stimulate and facilitate entrepreneurial activities, could reduce unemployment rate, increased establishment of new firms, and fewer failures of existing businesses (Hatten & Ruhland, 1995; Ronstadt, 1985; & Hansemark, 1998). Entrepreneurship education is an important component of economic development through job creation (McMullan & Long, 1987). Vesper (1990) observe that university entrepreneurship educators facilitate the entrepreneurial process by creating awareness among graduates, however not much has been written on the pre-tertiary level.

Gasse (1985) recommended that entrepreneurial potential should be identified and nurtured at the secondary school level, during the developmental stage when the possibility of self-employment as a career option is still untie. However, according to Chamard (1989) the formal education system is not particularly supportive of entrepreneurship and possibly holds back the more important entrepreneurial characteristics. In his independent study Kourilsky (1990) found that 25% of kindergartners demonstrate important entrepreneurial characteristics (need for achievement and risk taking) compared to 3% of high school students. In another different research by Singh (1990) also suggest that traditional education actually slow down entrepreneurship and the school systems need to be reorganized to stimulate entrepreneurship in order to develop an enterprise culture and potentials among youths.

III. ENTERPRISE EDUCATION

Enterprise education is defined as the process of equipping students (or graduates) with an enhanced capacity to generate ideas and the skills to make them happen. Entrepreneurship education equips students with the additional knowledge, attributes and capabilities required to apply these abilities in the context of setting up a new venture or business. All of this is a prerequisite for entrepreneurial effectiveness, that is, the ability to function effectively as an entrepreneur or in an entrepreneurial capacity, for example within small businesses or as part of 'portfolio careers, where multiple job opportunities, and personal ventures combine'.

Enterprise education has been defined as education with the purpose of creating a new product or service that results in higher economic value (Hanesmark, 1998). Entrepreneurial education also focuses on knowledge of small business ownership and self-employment, as well as entrepreneurial skills and attributes. Available empirical evidence suggests that entrepreneurial education will develop entrepreneurs by increasing business knowledge, and promoting psychological attributes associated with entrepreneurs such as self confidence, self esteem, and self-efficacy (Krueger & Brazeal, 1994; Kourilsky & Walstad, 1998; Walstad & Kourilsky, 1999). Formal entrepreneurial education has been found to affect attitudes of college students toward entrepreneurship as a career option (Hatten & Ruhland, 1995; Hansemark, 1998), as well as the tendency toward entrepreneurship by adults (Gorman, 1997). Although not empirically tested, Kourilsky and Walstad (1998) suggest that stimulating entrepreneurial attitudes through education at the pre-collegiate level could encourage entrepreneurship as a career choice.

McMullan and Long (1987) propose that entrepreneurship education should include skill-building components such as negotiation, leadership and creative thinking, exposure to technological innovation and new product development. Vesper and McMullan (1988) argued that entrepreneurship program should also teach skills in detecting and exploiting business opportunities, as well as incorporate detailed and long-term business planning.

IV. ENTREPRENEURIAL ATTITUDES

Although it has been debated that entrepreneurial characteristics are inborn or not, recent findings support the idea that psychological attributes associated with entrepreneurship can be culturally and experientially acquired (Vesper, 1990; Gorman, 1997). Individuals are predisposed to entrepreneurial potentials based on a combination of personal and contextual factors (Boyd & Vozikis, 1994). Personal factors such as prior experience as an entrepreneur and contextual factors such as job displacement have limited applicability to entrepreneurial tendency among youth.

Other personal and contextual factors attributable to entrepreneurs have generally been categorized as demographic characteristics and personality traits. According to Robinson, Stimpson, Huefner, & Hunt (1991) demographic circumstances do not enhance our ability to predict entrepreneurial potentials. Psychological attributes, on the other hand, have produced the most support for predicting whether a person will hunt for entrepreneurship (Wayne, Watson, Carland, & Carland, 1998).

A number of psychological attributes have been suggested as predictors of entrepreneurial behavior in the literature of entrepreneurs, with some degree of consensus. Kourilsky (1980) suggested the following are the most relevant: need for achievement; creativity and initiative; risk taking and setting objectives; self-confidence and internal locus of control; need for independence and autonomy; motivation, energy and commitment; and persistence. Gorman (1997) maintained that predisposition toward entrepreneurship is associated with several personal characteristics: values and attitudes, personal goals, creativity, risk-taking propensity, and locus of control. Of the personality traits, McClelland (1961) proposed achievement motivation, risk taking and locus of control as important characteristics.

Moreover, Robinson et al. (1991) assert that self-esteem and innovation are more prominent in entrepreneurs than the need for achievement. Sexton and Bowman (1983) agreed with Brockhaus (1980) that risk-taking propensities are not good predictors of entrepreneurial behavior. In another study Wayne, Watson, Carland, & Carland (1998) opposed, finding that entrepreneurs had higher achievement motivation, risktaking propensity, and preference for innovation than corporate managers and small business owners. However, risk taking may not apply to youth who have not undertaken significant economic risk and opportunity cost due to wage loss and the loss of wealth risk associated with business failure. Following Robinson, Stimpson, Huefner, and Hunt's (1991) conceptualization of the prominent characteristics of entrepreneurial propensity, this research considers whether achievement motivation in business, personal control of business outcomes, perceived self-esteem in business, and innovation/creativity in business can be develop by enterprise education and venture initiative at the pre-tertiary school level.

Among entrepreneurs personality traits achievement motive is well established as an important entrepreneurial characteristic. The need for achievement is based on expectations of doing something better or faster than anybody else or better than the person's earlier accomplishments (McClelland, 1958). It is also a process of planning and striving for excellence (Hansemark, 1998). McClelland (1965) established that founders of business have a higher level of Need for Achievement and achievement motive is an important factor for economic development and business growth (McClelland, 1965). He also suggests that motivational training is necessary to accompany programs geared toward increasing business opportunities. Hansemark (1998) observe that young adults in an entrepreneurial program had a significant increase in their need for achievement scores.

Specifically related to achievement motive in business, this study proposed that:

Hypothesis 1: Enterprise education positively affects student's need for achievement.

Locus of Control as a trait is related to the expectation of success or failure in a judgmental task. People will attribute the reason why something happens either to themselves or to the external environment. Brockhaus (1982) and Gasse (1985) opine that entrepreneurs have greater internal locus of control than non-entrepreneurs; therefore, entrepreneurs believe that the outcome of a business venture will be determined by their own efforts. Likewise Hansemark (1998) observe that young adults participating in an entrepreneurship program developed a more internal locus of control.

Similarly, self-efficacy relates to the strength of a person's belief that he/she is capable of successfully performing specific tasks. In the case of entrepreneurship it is a predictor of venture initiation, but primarily relates to the self-efficacy of innovation and risk taking (Chen, Greene, and Crick, 1998). Gorman (1997) opine that the transfer of knowledge and the development of relevant skills should increase self-efficacy and the effectiveness of the potential entrepreneur. Chen et al.

(1998) found convergent validity with locus of control, concluding that entrepreneurial self-efficacy is a belief-based construct and specifically relates to personal control. Related to this, Robinson et al. (1991) also establish that internal personal control will lead to a positive entrepreneurial attitude. Since personal control is a more important element for youth than risk-taking, this research is consistent with Robinson et al. (1991) and uses personal control of business outcomes, a hybrid construct of self-efficacy and locus of control, expecting to find that:

Hypothesis 2: Entrepreneurship related subjects positively affect student's personal control.

Kourilsky (1980) and Robinson et al. (1991) postulate that innovation and creativity are important variables. Innovation is defined as creating new products, methods, markets or a new organization. Similar to creativity, Kourilsky (1980) defined persistence as the willingness to seek alternative approaches and problem-solving methods, as well as a manifestation of flexibility and divergent thinking; and it was found to be a powerful predictor of success. Using Robinson et al. (1991) concept of innovation in business this study propose that:

Hypothesis 3: Enterprise education positively affects student's levels of innovation and creativity.

Prior experience as an entrepreneur has been linked with the propensity for adults to start a new venture (Boyd & Vozikis, 1994). Gibb (1993) proposed a model of enterprise education appropriate to primary and secondary school curricula. Critical elements of the model were the incorporation of enterprise education into the classroom environment, a project management task structure, and an enterprising teaching mode. The combination of these elements was expected to stimulate enterprising behavior, skills, and attributes in students.

V. SAMPLE

The sample for this study consists of 61 students that graduated and are self-employed from six Public Secondary Schools in Gombe metropolis, Gombe State - Nigeria. This sample was drawn from students graduated from the year 2005 – 2010 in the selected schools. The list of the students was conveniently adopted from the schools old boys/girls association active members list. Through which the address and current occupation of the past students was discovered. Within this group of students, 40 of them had entrepreneurship related subjects during their school days. While the remaining 21 were science based (had no entrepreneurship related subject during their school days). A questionnaire method of data collection was used to gather the information from the respondents.

VI. RESULTS

 TABLE 1

 Students That Started Business After Graduation From 2000

 2005

2005				
S /	Schools	No. of	Students that had	Students that had no
Ν		Students	entrepreneurship	entrepreneurship
			related subjects	related subjects
1	GSSS	09	01	08
2	GCDSS	12	12	00
3	GGSSSD	08	03	05
4	GDSS	09	08	01
	GANDU			
5	GDSS	10	08	02
	PILOT			
6	GVTCG	13	13	00
	TOTAL	61	45	16
E: 11 Courses 2012				

Field Survey 2013

Table 1 provides descriptive statistics for the sample population including sample size from each school. (i) Government Science Secondary School Gombe (GSSS) 9 students started businesses after graduation with the period under investigation. Being a science based school 8 out of the 9 had no entrepreneurship related subjects, only one student had entrepreneurship related subjects. (ii) Government Comprehensive Day Secondary School (GCDSS) 12 of its past students in the period 2000-2005 are self-employed (started their own business) and all of them had entrepreneurship related subjects in school. (iii) Government Girls Secondary School Doma (GGSSD) 3 students had entrepreneurship related subjects and initiated a business after graduation out of the 8 students identified by this study. The remaining five had no entrepreneurship related subjects and they venture in to business. (iv) Government Day Secondary School Gandu (GDSS Gandu) 9 of its students are self-employed after graduation within the period under investigation. 8 students out of them had entrepreneurship related subjects in school while 1 person had none. (v) Government Day Secondary School Pilot (GDSS Pilot) out of its 10 students examine who started a business after graduation.

VII. DISCUSSION AND CONCLUSIONS

The purpose of this study is to investigate the effects of enterprise education and venture initiative on the entrepreneurial potentials of pre-tertiary students. There have been many unreliable claims that entrepreneurship training and firm creation, as an intervention strategy for underachieving students, has positive benefits. This research provides empirical evidence to support these claims.

The results indicate that students receiving entrepreneurial training have higher motivation to achieve. These findings suggest that by providing entrepreneurial education at an early age a student's need for achievement will increase, and consequently, they are more likely to establish and grow businesses as an adult.

The results reveal that students with entrepreneurship related subjects in school had a higher sense of personal control and self-esteem. These factors are very important in the short-term behavior of students and the likelihood of avoiding destructive and criminal behavior.

Student with more personal control are less likely to resolve conflict and express anger through violence. Internal personal control, related to internal locus of control and self-efficacy, results in students having more audacity to be self reliance. Thus are less likely to participate in socially undesirable behavior. The higher their self-esteem the more likely they are to avoid undesirable peer pressure associated with teen-age pregnancy and gang participation.

Finally, the results make a strong link between venture initiative and each of the three entrepreneurial attitudes. The results are consistent with prior literature on adults which indicates that the establishment and growth of business is associated with a higher need for achievement. In this study, it may be hard to isolate whether the entrepreneurial characteristics of achievement motivation, self-esteem, and personal control, were impacted through entrepreneurship related subjects thought in classroom for secondary school students. It is important to note is traditional classroom education can have an impact on innovation and creativity of students after graduation.

This paper presents the findings of the study--the effects of entrepreneurship education and venture initiative on entrepreneurial potentials of pre-tertiary school students in Gombe metropolis.

This study has provided support for theories related to entrepreneurial attitudes in general. More importantly, the application to young people confirms the universality of these concepts. Previous literature has suggested that entrepreneurial training will improve attitudes toward entrepreneurship, but this research concludes that training and enterprising behavior can have a significant impact on psychological tendencies and potentials associated with business ownership. Based on this study the educational system and the business community can be encouraged about investing in education and training to develop and nurture entrepreneurship at an early age. The investment in enterprise education for youth should have longterm positive effects on economic development and global competitiveness by creating an entrepreneurial culture for our youth.

This study, therefore, calls for enterprise education that is fit for today's youth. That is, an enterprise education (for and about entrepreneurship) for all students that will not only provide theoretical knowledge but ensure pre-tertiary school graduates develop an entrepreneurial potentials, through developing entrepreneurial skills, behaviours and attitudes and equipping them with the key competencies to enable them to enjoy an entrepreneurial /intrapreneurial career or engage in new venture creation. This can only be achieved through student-centred teaching and learning that employs innovative, practical learning methods in concurrence with assessment mechanisms that award credit for extra-curricular and practical activities delivered by a designed and coordinated school curricular and Institutional infrastructure. It is therefore essential that educators should be recognized and encouraged to act as "entrepreneurial champions" and provided with the means to enhance their own teaching skills and to be entrepreneurial and innovative in developing new teaching methods and resources.

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