An Exploratory Study of Entrepreneurial Leadership Development of Polytechnic Students

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Abstract

Polytechnic entrepreneurship programs play fundamental roles in developing entrepreneurial qualities of students. However, little is known about the contributions of such programs in developing students' entrepreneurial leadership capabilities. A qualitative research was conducted to explore the roles of entrepreneurship programs of Accra Polytechnic in developing students' entrepreneurial leadership. Two student entrepreneurial leaders who are actively involved in entrepreneurial leadership activities through holding the leadership positions of the Polytechnic entrepreneurship clubs and also participated in the Polytechnic entrepreneurship development courses were purposefully selected as the participants of this study. The semi-structured interview data analysis indicates that the polytechnic entrepreneurship development programs facilitate entrepreneurial leadership development of students in many ways including experiential learning, social interaction learning, and opportunity recognition. Moreover, entrepreneurial leadership development occurs in a process of transforming the knowledge acquired from experience and social interaction to identify the opportunities for personal development and business creation. Implication of the findings and suggestions for improving the polytechnic entrepreneurship programs are presented in the closing section of this paper.

Keywords: Entrepreneurship, Development Programs, Entrepreneurial Leadership, Polytechnic, Education, Students.

1. Introduction

Entrepreneurship research has long investigated the impacts of higher education entrepreneurship programs on developing entrepreneurial attitudes, intentions, and capabilities of students (Souitaris, Zerbinati & Al-Laham, 2007; Fayolle, Gailly & Lassas-Clerc, 2006; Liñán, et al., 2005; Segal, Borgia & Schoenfeld, 2005; Audet, 2002; Krueger, Reilly & Carsrud, 2000). However, little we know about the association between entrepreneurship programs and students' entrepreneurial leadership development (Okudan & Rzasa, 2006). In effect, little attention has been directed to offering students entrepreneurship programs with the objective of developing their entrepreneurial leadership, the quality that students need in different stages of new venture creation, growth, and success (Mattare, 2008; Surie & Ashley, 2008; Kuratko, 2007). This qualitative research aimed at investigating the role of the polytechnic entrepreneurship programs in developing entrepreneurial leadership capabilities among students. It contributes to our understanding of the polytechnic entrepreneurship development programs through demonstrating the specific roles that such programs play in developing entrepreneurial leadership capabilities of students in order to provide more purposeful and effective polytechnic entrepreneurship development programs. The remaining parts of this paper discuss the development of entrepreneurial leadership as a new paradigm, how polytechnic entrepreneurship programs facilitate students' entrepreneurial leadership development, and the research methodology. It concludes with discussing the findings and the implications to improve higher education entrepreneurship development programs.

2. Entrepreneurial Leadership: A New Paradigm

Interestingly, entrepreneurship and leadership passed the same way of historical evolution. At the very early stage, both disciplines focused on personality traits and demographic characteristics to differentiate between entrepreneurs and leaders from other people. Thereafter, they both looked at the behavioural factors that entrepreneurs and leaders need to be able to successfully motivate a group of followers to achieve a vision. Finally, contextual or situational factors have been studied to show the effects of environmental elements in stepping into entrepreneurship and leadership activities. Similarities between the two disciplines are so much that inspired some of the scholars to define entrepreneurship as a type of leadership, though in an economic and dynamic context (Fernald, Solomon & Tarabishy, 2005; Cogliser & Brigham, 2004; Vecchio, 2003). In contrast, other researchers called this definition as a simplistic and parsimonious explanation of entrepreneurship (Vecchio, 2003). Since, entrepreneurs establish a firm from the first scratch but leaders operate in an existing one (Gupta, et al., 2004). Moreover, although there may be some common features, entrepreneurs are more complex in personality traits and skills and lead in an extraordinary situation (Cogliser & Brigham 2004). Therefore, entrepreneurial leaders need to develop more personal and interpersonal abilities to be able to successfully lead a new venture. Despite all the debates, the critical issue is that how entrepreneurship can take advantage from

leadership to cope with the various challenges of venture creation and increase the probability of success in business world. In turn, how leadership can benefit from entrepreneurial capabilities to deal with highly agitated and competitive organization environment (Cogliser & Brigham, 2004). Thus, in order to gain better understanding of both phenomena and utilizing the synergy in sake of improving the two disciplines, scholars integrated them into a new paradigm as 'entrepreneurial leadership' (Yang, 2008; Gupta, et al., 2004).

By definition, entrepreneurial leadership is the process of creating an entrepreneurial vision and inspiring a team to enact the vision in high velocity and uncertain environments. It has three main components of proactiveness, innovativeness, and risk taking (Surie & Ashely, 2008; Chen, 2007; Kuratko, 2007; Gupta, MacMillan & Surie, 2004) as follows:

- *Pro-activeness*: is being active to influence and lead the future rather than waiting to be influenced by it, exploit opportunities, and accept the responsibility of failure (Kuratko, Hornsby & Goldsby, 2007). It is being able to anticipate future problems, needs for change, and improvement (Okudan & Rzasa, 2006). As a matter of fact, entrepreneurial leadership is a proactive response to environmental opportunities (Surie & Ashley, 2008).
- *Innovativeness*: is defined as the ability and tendency to think creatively, develop novel and useful ideas in opportunity recognition, resource utilization, and problem solving (Mattare, 2008; Chen, 2007; Okudan & Rzasa, 2006; Gupta, MacMillan & Surie, 2004). It is the distinctive attribute that differentiates entrepreneurs from those who want just to be self- employed (Okudan & Rzasa, 2006; Kuratko, 2005; Mueller & Thomas, 2000).
- *Risk taking*: is the willingness to absorb uncertainty and take the burden of responsibility for the future (Chen, 2007). Prudential and calculated risk taking is one of the common characteristics of entrepreneurial leaders particularly in the early stages of entrepreneurship process (Robinson, Goleby & Hosgood, 2006; Zhao, Seibert & Hills, 2005). Importantly, individuals need to develop all these qualities to be able to successfully perform the challenging tasks and roles of an entrepreneurial leader (Okudan & Rzasa, 2006).

3 Developing Entrepreneurial Leadership Capabilities of Students Through The Polytechnic Entrepreneurship Programs

In spite of the increasing demand on developing entrepreneurial leaders, few of the numerous number of entrepreneurship development programs offered by higher education institutions have been dedicated to develop students' entrepreneurial leadership capabilities. Of all the U.S universities providing entrepreneurship programs in 2004, only eight universities conducted entrepreneurial leadership courses with the focus on knowledge and skill development in basic leadership areas, motivation, innovation, communication skills, and team working (Okudan & Rzasa, 2006). Through a review of 25 undergraduate entrepreneurship programs in 2006, Mattare (2008) reported that only 4% of the programs addressed developing entrepreneurial leadership of students. Moreover, there is no information on the distinctive role that the programs play in developing students' entrepreneurial leadership capabilities (Okudan & Rzasa, 2006).This is partially due to the scarcity of empirical studies on effectiveness of such programs in developing students' entrepreneurial leadership (Mattare, 2008) and the necessity of entrepreneurial leadership abilities in new business creation, performance, and success (Murali, Sambasivan, Mohani, Abdul. & Yuzliani, Yusop, In press; Kuratko, 2007). In fact, after facing the high rate of new business failures that scholars recognized the importance of entrepreneurial leadership on business performance and success (Cassar, 2006).

To be effective, entrepreneurship education should provide opportunities for students to practice a combination of all the entrepreneurial leadership components (Okudan & Rzasa, 2006). Although, providing opportunities for students to experience real entrepreneurial risk taking, creativity and innovativeness through traditional pedagogy is not that easy (Heinonen, 2007). An evidence for this issue is that all the students participated in Okudan and Rzasa's (2006) study stated that the entrepreneurship program was unable to show them the amount of risk taking that entrepreneurs face in their real life. The following sections discuss the different aspects of entrepreneurial learning in the process of entrepreneurship.

4. Entrepreneurial Learning

There is an ongoing debate among scholars on the definition and process of entrepreneurial learning. Despite all the differences, the entire proposed entrepreneurial learning definitions share a common component which is experience. Rae and Carswell (2000) defined entrepreneurial learning as the cognitive processes of gaining and structuring knowledge as well as giving meaning to the experiences. In slightly different words, Rae (2006) defined entrepreneurial learning as "a dynamic process of awareness, reflection, association and application that involves transforming experience and knowledge into functional learning outcomes". Based on the definitions, entrepreneurial learning is a dynamic and constant process of acquiring, assimilating, and organizing the new

information and knowledge with pre-existing structures (Cope, 2005; Harrison & Leitch, 2005; Minniti & Bygrave, 2001; Rae & Carswell, 2000).

Focusing on the nature of the experiences that stimulate entrepreneurial learning, some scholars believe that entrepreneurial learning occurs through experiencing different challenging events such as recognizing the opportunities, coping with problems, and performing different roles of an entrepreneur (Pittaway & Cope, 2007; Cope, 2005; Politis, 2005; Erikson, 2003; Minniti & Bygrave, 2001). In this sense, learning is "an indispensable reaction to the new venture's dynamic of change and is a central element of success (or failure) in start-up situation" (Fayolle & Gailly, 2008).

4.1 Experiential Learning and Entrepreneurship

The importance and necessity of experience in learning entrepreneurship is so that many scholars believe there is no other way to learn entrepreneurship than personal experience (Henry, et al., 2005). They also state that it is through the experience that students acquire requisite knowledge and skills to not only choose entrepreneurship as their future career path, but also to be able to face the challenges and cope with the problems surrounding their enterprise (Matlay, 2006; 2005; Smith, Collins & Hannon, 2006). It is through experience that students "can generate new meaning which consequently leads to change in thinking and behaviour" (Fayolle & Gailly, 2008, p. 580). Moreover, experience develops students' entrepreneurial self-efficacy, the strong belief and the desire to successfully perform the roles and tasks of an entrepreneur (Zhao, Seibert & Hills, 2005; Peterman & Kennedy, 2003). Erikson (2003) highlights experience as an influential factor in developing entrepreneurial self- efficacy. He postulates that entrepreneurial self-efficacy develops through the journey from being completely inexperienced to becoming completely experienced. However, to better understanding entrepreneurship, more in-depth studies on entrepreneurial learning are needed (Corbett, 2005).

On the other hand, there has been a long debate among educators on the combination of theory and experience in entrepreneurship courses. Henry, Hill and Leitch (2005) postulate that emphasis on active and experiential methods of entrepreneurship education should not result in ignorance of theory. Fiet (2000) also advocates including theories on entrepreneurship courses to enhance students' cognitive skills for better entrepreneurial decision making. In contrast, commentators on concentrating more on entrepreneurship theories propose the deficiencies of theory-based approaches to entrepreneurship education in developing creative, innovative, and practical abilities of entrepreneurship students (Heinonen & Poikkijoki, 2006; Tan & Ng, 2006).

Although, the deficiencies of utilizing traditional lecture method to teach entrepreneurship has been emphasized by many researchers (Heinonen & Poikkijoki, 2006) even today many entrepreneurship lecturers are not willing to change their teaching method since, shifting to new methods is difficult and they feel more secure with the traditional methods (Smith, Collins & Hannon, 2006). A robust research findings indicate that the entrepreneurial capabilities are learned through a process in which students are actively engaged in a challenging experiential learning environment (Pittaway & Cope, 2007; Hannon, 2006; Heinonen & Poikkijoki, 2006) which raises students' self- awareness of their strengths and weaknesses, increases their readiness to take risk, and enhances their creativity through helping them to exploit their full potential, regard mistakes as learning opportunities, and encourage critical thinking (Fuchs, Werner & Wallau, 2008). Challenging activities give students the opportunity to experience failure, learn from it, and develop their capacity to cope with more serious challenges (Fayolle & Gailly, 2008).

Furthermore, applying traditional and repetitive methods of entrepreneurship pedagogy makes students to get bored and distracted easily. Therefore, they do not actively cooperate and fully engage in the activities, since it is not the students who are the most engaged in the process of learning (Fiet, 2000). Many scholars believe that creativity, innovativeness, and risk taking as the essential competencies of entrepreneurship process cannot be taught through conventional methods of entrepreneurship (Plumly, et al., 2008; Heinonen, 2007; Rae, 2006). Many innovative and entrepreneurial- directed programs have been recently designed which can be applied to develop students' entrepreneurial capabilities. 'Discovering Entrepreneurship' (Smith, Collins & Hannon, 2006); 'Entrepreneurial-directed approach' (Heinonen & Poikkijoki, 2006); and 'Real-life problem solving' (Tan & Ng, 2006) are some examples of such programs.

4.2 Social Interaction Learning and Entrepreneurship

While there is an extent body of literature on the impacts of experiential learning in imparting entrepreneurial qualities on students, little attention has been directed to the interactive aspects of entrepreneurship education, although social interaction is crucial in the whole process of entrepreneurial learning (Man & Yu, 2007; Pittaway & Cope, 2007). In general, entrepreneurial learning occurs in a process of personal interaction with environment (Rae, 2007, 2000; Cope, 2005) aiming at discovering, evaluating and exploiting opportunities (Heinonen & Poikkijoki, 2006; Corbett, 2005; Shook, Priew & McGee, 2003). In essence, social interactions shape and develop the entrepreneurial perceptions, attitude, and abilities (Rae & Carswell, 2000) particularly, entrepreneurial leadership (Holt, Rutherford & Clohessy, 2007; Dess, et al., 2003). It is through social interactions that students' self-awareness of their weaknesses and strengths improves and they become mature in

networking and communication skills. Indeed, social interactions help students to share and challenge their different insights and reasoning processes; discover weak points on their reasoning and the ways to improve them; correct one another; adjust their understanding on the basis of others' understanding; and more importantly, apply the acquired knowledge and skills to solve the problems (Fuchs, Werner & Wallau, 2008). Additionally, the knowledge gained as a result of social interaction between people who have different experiences and perspectives is in higher level than the learning acquired by individuals. Furthermore, this synergetic learning is more in-depth and lasts longer (Man & Yu, 2007; Smith, Collins & Hannon, 2006). On the other hand, this social interactive learning enhances creativity and innovativeness which are the core components of the whole entrepreneurship process (Ko & Butler, 2007; Rae, 2006). Worthy to mention that by being involved in various entrepreneurial roles and activities, entrepreneurial leaders learn social interactions through socialization process (Surie & Ashley, 2008).

Entrepreneurship education programs provide various opportunities for students' social interactions (Peterman & Kennedy, 2003) which develop their entrepreneurial leadership (Vecchio, 2003). Firstly, they provide opportunity for social interaction with teacher and peers in groups which is critical for entrepreneurial learning process and improves students' affection on entrepreneurial activities as well as their perceived level of entrepreneurial competencies (Man & Yu, 2007). Secondly, they facilitate students' access to groups of entrepreneurial minded students and research findings. In addition, the programs provide opportunities for students to be exposed to other entrepreneurs, investors, and lecturers on occasions such as training, club meeting, and business dealing where they have the chance to observe and learn from successful models (Souitaris, Zerbinati & Al-Laham, 2007; Zhao, Seibert & Hills, 2005). Finally, such programs provide social experiences through which students exercise significant responsibilities which affect their desire to step into entrepreneurship (Peterman & Kennedy, 2003). Therefore, "it seems extremely useful to have students from different backgrounds in order to enhance social learning" (Heinonen, 2007). Accordingly, Collins and Robertson (2003) believe that entrepreneurial learning occurs through social interactions rather than written word of formal instructions.

4.3 Opportunity Recognition

While, two previous sections of this paper focused more on the entrepreneurial learning process and how entrepreneurial leadership capabilities develop through experience and social interaction, opportunity recognition is more on applying the acquired knowledge to develop a new idea or explore an existing one. Indeed, entrepreneurial learning is highly associated with opportunity recognition and exploitation (Ko & Butler, 2007; Rae, 2006). However, there is no study which directly addresses the role that the process of learning plays in identification and exploitation of opportunities (Corbett, 2005). Opportunity recognition involves not only technical skills like financial analysis and market research, but also less tangible forms of creativity, team building, problem solving and leadership. It can involve both the recognition of already existing opportunities by improving the operation of existing activities and the creation of new opportunities. Opportunity identification is typically taught through innovative problem-solving and creative-thinking exercises and techniques rather than traditional classroom activities (Klein & Bullock, 2006). Politis (2005) argues that although several authors pointed out that some of the information and knowledge can be learned through education, much of the necessary information for entrepreneurship particularly for identifying and exploiting opportunities can only be learned by experience. From the view of Heinonen and Poikkijoki (2006) in university settings, the opportunities are identified through acquiring deeper knowledge about entrepreneurship and its general relevance in modern society. They may also be introduced to students by the teacher as a triggering event.

5. Methodology

This study employed a qualitative research design to explore the contributions of polytechnic entrepreneurship development programs in developing students' entrepreneurial leadership. Specifically, it was the intention of this study to investigate how entrepreneurial leadership capabilities of students develop through entrepreneurship academic programs and polytechnic entrepreneurship club activities. Drawing upon Swiercz and Lydon's (2002) study on entrepreneurial leadership, semi- structured interviews were used to a further understanding of how students develop their entrepreneurial leadership abilities. Thus, two polytechnic students were purposefully selected as to be interviewed based on two main criteria. First, they were holding the leadership position of entrepreneurship class. This was based on the belief that being active in the class and associations helps students to develop their entrepreneurial qualities (Fayolle, Gailly & Lassas- Clerc, 2006). Second, they had passed or were currently taking entrepreneurship course. In this sense, they had a lot of information about the polytechnic entrepreneurship courses.

The participants' contact information was obtained through the polytechnic student representative. An appointment was made with each of the students for conducting the interviews. The interviews were conducted in English and the questions aimed to elicit the students' perceptions of how polytechnic entrepreneurial

programs and activities helped them to develop their entrepreneurial leadership capabilities. Each interview began with a brief explanation of the purpose of the study and lasted approximately an hour. The audio-recorded data were transcribed soon after each interview. The interview transcriptions were analyzed in two main phases including: a) preliminary data analysis to explore the emerging issues and potential themes coming out from the data as well as the issues needed further investigation in next interview; and b) thematic data analysis (Grbich, 2007) to generate the themes on the role of the polytechnic entrepreneurship programs on students' entrepreneurial leadership development.

As illustrated in table 1, the first participant of the study was a 22 year male student from the School of Business and Management Studies and majoring in Accountancy. He was in fifth semester and no one in his family was an entrepreneur. The second participant, who was a 20 year female student from the School of Engineering and already in fourth semester, had her father as an entrepreneur. The findings are presented and discussed hereafter.

Table 1: Demographic Profile of the Participants

Family Name	Age	Gender	Field of Study	Semester	Family member as an entrepreneur
Aboagye	22	Male	Accountancy	5	No
Kwarteng	20	Female	Civil Engineering	4	Father

Source: Authors Computation

6. Findings

The main purpose of this qualitative study was to explore the role that polytechnic entrepreneurship development programs play in building up students' entrepreneurial leadership capabilities. Particularly, this research aimed to investigate how academic courses and activities in polytechnic entrepreneurship help students to develop their entrepreneurial leadership. Although this is an early study on entrepreneurship development programs provided by the Polytechnic and includes only two students, the in-depth approach has enabled the researchers to explore the participants' perceptions on the contributions of the polytechnic entrepreneurship programs to their entrepreneurial leadership development. The analysis of interview transcripts indicates that both of the participants explained their entrepreneurial leadership development through how they acquired the knowledge and experience being involved in academic courses. In particular, polytechnic entrepreneurship programs play three distinctive roles on developing entrepreneurial leadership of the participants through providing opportunities for experiential learning, social interaction learning, and opportunity recognition. After presenting the participants' overall perceptions of the polytechnic entrepreneurship programs, each of the roles is discussed with relevant quotations from the interviews.

7. The Impacts of Polytechnic Entrepreneurship Programs on Students' Entrepreneurial Leadership Development

Previous research findings indicate that entrepreneurship education should provide opportunities for students to experience a balance of all the entrepreneurial leadership components (Okudan & Rzasa, 2006). Being asked how the polytechnic entrepreneurship programs contribute to your entrepreneurial capabilities development specifically, developing a vision, being proactive, innovative, and risk taking the participants of this study asserted that:

> "A little bit, the entrepreneurship studies helped me to develop my knowledge about leadership, how I manage myself, little bit of it, it's only a little bit, like how I manage myself, or manage my time, how I can get to know people, something like to be independent, to be strong, to be competitive and hard worker" (Aboagye).

> "It is not that much, like,.. what is going in that entrepreneurship, what is it entrepreneur about a basic ideas of it and understand the process and.. not that much" (Kwarteng).

In terms of developing a vision to create and lead the future, Aboagye also explained that the polytechnic entrepreneurship programs offered him the opportunity to "get to know people" and recognize their needs and from there he developed the vision of establishing a multi-functional company which imports and exports many things with the help of his friends from different fields of studies. Both participants agreed in that "the content of most of the entrepreneurship programs is the same" even "the lecturers" are the same. More importantly, they believe that the simple and much paperwork assignments in entrepreneurship courses are not challenging enough to develop students' innovation and creativity. Moreover, such assignments do not face students with the risk taking or the uncertainties and failure involved in real life of an entrepreneur. Thus, students become "bored and discouraged easily" as Aboagye asserted. To deal with this problem, they suggested that variety of programs should be provided for students specifically some courses outside the polytechnic.

Aboagye further stated that "we cannot force someone to become a good leader", thus entrepreneurship education programs should:

> "Make projects that students experience leadership in a business project doing with their friends, so like activities regarding entrepreneurship should have that activities about leadership, it has to come from experiences".

While, Kwateng looks at the problem from slightly different angle and suggests: "I think, we can design some business simulations and let students compete each other's, and try to make it competitive, make it fun I think, first of all students must have the chance to choose what they want to do, and do something that they are interested in, and I will reward students who give very brilliant ideas,… manage [for students] some trips to real business filed something like one, two days, [a visit to] some entrepreneurs sites, where they can really observe real life of an entrepreneur"

Developing entrepreneurial leadership of students through a project-based and team work approach has been confirmed in some other studies (Okudan & Rzasa, 2006). Generally, entrepreneurial capabilities of students can more effectively be developed through engaging them in venture creation projects through which they interact with and learn from variety of people such as their teachers, team members, and nascent and/or experienced entrepreneurs (Fuchs, Werner & Wallau, 2008; Fayolle & Gailly, 2008). The following parts discuss the specific roles that university entrepreneurship programs play in providing the opportunities for students to learn entrepreneurship and apply the knowledge to recognize the opportunities for personal development and venture creation.

8. Entrepreneurial Leadership Development Through Experience

The key question is that if polytechnic entrepreneurship courses currently focus more on theoretical or practical aspects of entrepreneurship and if such courses can help students to develop their entrepreneurial qualities. Stressing that the polytechnic entrepreneurship courses focus much on theory, the participants of this study explained that:

> "I can see that students are lack of practical like, I myself, I am studying entrepreneurship but there is no practical, it is only theoretical and very simple assignments, so much paper works, so actually it will not help people to become an entrepreneur,.... so from the beginning the faculty or the department, they need to focus on entrepreneur [ship] students so they become more practical than just theoretical" (Aboagye).

Being asked how entrepreneurship studies and courses helped him to develop his leadership skills, he answered:

> "Just a bit, because I have many course like, many subjects, some of them have assignments, sometimes I become the leader of the group and so on, and from there just it polishes up my leadership skills but not so much, not sufficient enough to become, to become the leader of a business".

Moreover, the excerpt below explains how experience in entrepreneurial activities helped students to recognize business opportunities:

> "Let say, I thought of one like, I don't know it can be obtained or not but like as we can see all the women like to wear jewellery, gold but when they want to wash it they have to go to the shop and so on, so I thought of,.. a shop which is on a Van or so on with the services is cleaning the jewelries,…because nobody has done it before, so I thought it but in terms of security I haven't thought of" (Aboagye).

In addition to entrepreneurial activities, working as a research assistant to do some researches gave him the opportunity to gain the experience and knowledge to improve his communication skills and interpersonal efficacy which he believes is important in team building and enabling team members to achieve the objectives:

> "...the first semester I worked as an enumerator, an enumerator,.. the people that distribute questionnaire, it was actually a highly paid job,....so from there I gained experiences for my communication skills, I managed to communicate I have done so much enumerators, so much researches, so that I can communicate actually with everybody to managers, housewives, workers, school teachers and so on, so it makes my leadership with my team better" (Aboagye).

Interestingly, they change the acquired knowledge of experiences from being involved in entrepreneurship courses and leadership position of the entrepreneurship club through a process of reflection on the failure and transforming the knowledge to solve the problems of new situations (Fayolle & Gailly, 2008; Cope, 2005; Politis, 2005). Kwarteng described learning from mistakes as a process of "learning to improve oneself". Aboagye gives more explanation on the process:

> "when I come across failure, I think I will just, it will not slow me down but I will think of it again and again to see the reasons, like I will put effort, it will not stop me from doing it, for wanting to be an entrepreneur, but I will have to slow down, and just focus on the problem, and just try to solve it,... and use it again" (Aboagye).

9. Entrepreneurial Leadership Development through Social Interaction

On the influence of interaction with peers in developing new ideas and recognizing opportunities, Muhammad

explained that "my ideas most of them come from like, when I talk with my friends and so on we like to think of crazy ideas". In addition, the polytechnic provides the chance for students to share their knowledge and from there they find the opportunities to develop their entrepreneurial knowledge and abilities as they explained:

"Actually, the polytechnic is all a like a beginning platform like, in polytechnic you mix around with many people, and we get to know new people, and let say my friend, he wants to be an entrepreneur, but he doesn't know the way, so when he mix with me like my friend who is an entrepreneur, so he gets the new knowledge, he can test new things, he can learn to be a very good entrepreneur, and so on, so actually the university a basic platform" (Aboagye).

Furthermore, Kwarteng believes that through meeting friends in social occasions they learn how to "sort out the problems and try to help them, support them".

In respond to the question of how entrepreneurship club facilitates entrepreneurial leadership development of students, Aboagye stated that being involved in entrepreneurship club helped him to meet successful entrepreneurs who can support him to develop new ideas for business:

"to get to know people because when you are dealing with the entrepreneurship club you meet all the successful entrepreneurs, so from there, when you have relationship with them, when you get to know them, they will help you to get more business.... from the business courses that I have attended and facilitated, I get to know people, well because every new course in the club, even if it is the same course, different lecturers, different successful entrepreneurs are involved, so from there, I get to know people, I get to share our knowledge, and widens up my business like recently I met my friend, he is in printing business, but he has no access in the Polytechnic, and I have the access, so I can get the opportunity ".

10. Applying the Knowledge to Identify Opportunities

Being active in many polytechnic entrepreneurial programs and activities makes the participant of this study capable to utilize his acquired knowledge from his experiences and social interactions to identify new opportunities for business. Some of the examples of which are as followings:

"Actually, I was one of the main suppliers of stationeries and stuff for the offices from there currently I am into stationary business, most of the importers of stationeries and office equipment, are from the Chinese, … from the Chinese,.. talking to the officers, I am planning to import myself stationeries from china" (Aboagye).

"My vision is to build up a kind of company that can do everything, let say because I work with my friends, I am more to trading, some of my friends are civil engineers, some of them electrical, computer science and so on, so we want to form.... a very big company, that can do anything, like we will look like,... we can support like the air cons the tables, everything, so just from one company,..." (Aboagye).

Importantly, peers are not only the source of opportunity identification, but also opportunity creation when they share their knowledge and think creatively about "crazy ideas" which may become the initiation of very innovative ones. Peers also help each other to identify the opportunities for developing their entrepreneurial knowledge and skills through knowledge sharing and synergic learning as well as exchanging the information about entrepreneurship programs, events, and resources of learning when they participate in meetings and associations in and across the polytechnics. This necessitates providing opportunities for students to have social interactions with their peers from different backgrounds and entrepreneurs in various occasions (Smith, Collins & Hannon, 2006; Zhao, Seibert & Hills, 2005). Moreover, entrepreneurs are the other sources of information, support, and opportunity identification, in addition to being their role models (Zhao, Seibert & Hills, 2005). The concluding part of this paper discusses the implications of research findings for designing more effective university entrepreneurship programs.

11. Conclusion

The main purpose of this qualitative study was to investigate how the polytechnic entrepreneurship development programs facilitate entrepreneurial leadership development among students. Although this study is an early analysis of the role that Accra Polytechnic entrepreneurship development programs play in developing entrepreneurial leadership of students, and only two students were selected as the participants, the in-depth research methodology enabled researchers to gain a further understanding of how university entrepreneurship programs facilitate the students' entrepreneurial leadership development. The findings emphasized necessity of including entrepreneurial leadership components in the polytechnic entrepreneurship development programs. Moreover, among others, the polytechnic entrepreneurship development programs play three distinctive roles on developing entrepreneurial leadership of the participants through providing opportunities for experiential learning, social interaction learning, and opportunity recognition. The findings contribute to our knowledge about entrepreneurial leadership development in that learning entrepreneurial leadership capabilities occurs in a process of experience and social interaction through which students recognize the opportunities for their personal

development as well as business creation. Moreover, the knowledge acquired from experience and social interaction is transformed through a process of reflection, particularly on failures, to adopt entrepreneurial behaviours (Rae & Carswell) and solve the problems of new situations (Fayolle & Gailly, 2008; Cope, 2005; Politis, 2005).

Based on the findings, entrepreneurship education in the polytechnic can develop students' abilities in learning from experiences and social interactions through developing their reflective learning and creative thinking (Pittaway, Hannon, & Thompson, 2009). Moreover, students should learn how to recognize various opportunities for learning entrepreneurship; how to drive meaning from different learning opportunities (Rae & Carswell, 2000); and how to learn through the whole process of entrepreneurship (Corbett, 2005). To do so, entrepreneurship educators can provide various collaborative and cooperative occasions and events for students to learn entrepreneurship through experience and social interactions (Fuchs, Werner & Wallau, 2008; Smith, Collins & Hannon, 2006; Zhao, Seibert & Hills, 2005; Peterman & Kennedy, 2003) particularly, across universities. More importantly, to experience the challenges and responsibilities of an entrepreneurial leader, students "should be given the opportunity to actively participate in the decision making process whenever possible" (Fuchs, Werner & Wallau, 2008).

On the other hand, the polytechnic entrepreneurship programs should develop students' communication and interaction skills to be effective in the activities of entrepreneurship programs and develop their abilities to transform the acquired knowledge from experiential and social learning to opportunity recognition and problem solving. Therefore, it is "learning to learn" that should be more emphasized rather than theoretical aspects of entrepreneurship (Zhao, Seibert & Hills, 2005; Fiet, 2000).

The two participants of this study perceived the overall role of polytechnic entrepreneurship programs on their entrepreneurial leadership development "a little bit" because of focusing much on theory, ignoring practical aspects of entrepreneurial behaviour development, and not being challenging enough to develop students' creativity, innovativeness, and risk taking. This spells out the necessity of integrating interpersonal and leadership skills into the university entrepreneurship education (Mattare, 2008) and stresses the need for reviewing and linking the objectives, content, and pedagogical methods of university entrepreneurship programs as suggested by Fayolle and Gailly (2008). Furthermore, this necessitates employing innovative and project-based approaches to entrepreneurial entrepreneurship education (Okudan & Rzasa, 2006). It is through such programs that each and every student has the chance to lead an entrepreneurship project and experience the responsibilities and challenges of performing the tasks and roles of an entrepreneurial leader. However, this is an early study based on entrepreneurship development programs at Accra Polytechnic and perceptions of only two participants which needs more investigations specifically, with a more diverse sample of polytechnic students.

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