SOCIAL MEDIA AND ENTREPRENEURSHIP EDUCATION: PEDAGOGICAL IMPLICATIONS OF COMPUTER MEDIATED COMMUNICATION IN HIGHER LEARNING IN AFRICA

By

EMMANUEL OSITA ANIEMEKA

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Dissertation by

Emmanuel Osita Aniemeka

Approved By:

____

Shamir Andrew Ally, PhD, MBA, FAIA (UK), DTM

Chairman, Dissertation Committee

____

Norman Pearson, PhD, DBA

Member, Dissertation Committee

____

Cathleen A. Carney, PhD

Member, Dissertation Committee

June 30, 2013

____

Date

ABSTRACT

Social media is a burgeoning phenomenon that characterizes many professional and non-professional environments in the world today and brings new opportunities of interaction to education. This dissertation examines the global integration of social media in pedagogy and how this incorporation specifically strengthens and augments the quality of teaching and learning in Africa. The purpose of the research is to examine how computer mediated communication in particular; social media is employed for entrepreneurship education in Nigeria. The research identified four Nigerian universities from a stratified sampling who formed the test group that was interviewed for the study. The thesis employed the philosophy of critical realism in order to answer the research question, and employed a qualitative methodology consisting of structured interviews and focus group discussion. Data obtained from the email interviews indicate that educational background an d ap t i t u de influence the use of social media in entrepreneurship education. Moreover, the research indicates the use of online social networks could play important role in university teaching in Nigeria. The findings allay concerns that distributed learning could be separate and separable from the face-to-face experience of conventional pedagogy, and identifies major shift in teacher education globally and how learners are demanding more, thus making a small contribution to the under-researched area of social media and entrepreneurship education in Africa. It concludes that while the internet has been praised as an instructional tool, it is also a strong contrivance for transforming the teaching-learning process in new and powerful ways. These may be of interest to the Nigerian Federal Ministry of Education, the National Universities Commission in Nigeria, Nigerian universities and education in Africa in general.

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DEDICATION

To the memory of my late mother and teacher, Mrs. Jessie Chinwe Aniemeka, and to all my children, and my grandchildren.

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CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 Overview and Introduction

There's a major shift in education globally and learners are demanding more. While the Internet has been praised as an instructional tool, it is also a strong contrivance for transforming the teaching-learning process in new and powerful ways. Nations across the world have found this tool most useful and most of them have collectively moved the power of the Internet for learning from promise to practice (Web-based Education Commission, 2000).

Throughout the years, humans have used many different means to communicate with one another. Face to face speaking, letter writing, telegram, and telephone are just several examples of these different media. An on-going method that has emerged, though, is computer mediated communication. This could be carried out through e-mail, listserves, usenet groups, chat rooms, etc. Because of all of these different modes of communication by way of computers, Steve Jobs labels them "interpersonal computers" rather than "personal computers" (Walther & Burgoon, p.51).

This growth of computer mediated communication and education has been fostered by the affordability and advancement of computer-based communication technologies, which includes powerful and reasonably priced private computer systems including notebooks, ThinkPad and a plethora of handheld devices and the myriads of homes with Internet access (Moore, 2003).

As institutions and organizations put their best foot forward in encouraging the collaborative sharing of knowledge and effective practices to improve computer mediated communication in education, the gains are harnessed in access, learning effectiveness, affordability for learners and providers plus faculty and student achievements. Almost a decade ago, over 1.6 million students in the United States were studying via computer mediated communication (Allen & Seaman, 2003). And that number as predicted, has grown exponentially ever since then. While institutions of higher education are embracing computer mediated communication as delivery method in conventional and distributed education, colleges and universities, faculty, academic leaders and even students are slow to imbibe the role of social media in this direction.

Clearly, there are many factors of computer mediated communication that cause it to be different from face to face communication, and it has been debated whether or not these differences render the communication more or less personal. Some of these aspects are the absence of context cues, the recordability of conversation, the rate of exchange, the level of formality, and the anonymity of the users. The main controversy surrounding computer mediated communication is whether these differences can help to improve learning and make it more personal, or whether they serve to diminish the level of intimacy that can be achieved.

The absence of social context cues, called the cues filtered out concept, is a major distinction that separates computer mediated communication from face to face communication. Because participants cannot see others' facial expressions, gestures, voice intonations, appearance, or physical adornments; it is harder to interpret statements and responses they might make (Walther & Burgoon, p.53).

1.2. Statement of Problem

Social media is a burgeoning phenomenon that characterizes many professional and nonprofessional environments and brings new opportunities of interaction and communication. As the corporate world integrates social media in their communication strategies, they strengthen and augment the quality of their interactions with their various publics. Today, these opportunities abound in almost all spheres of life but how far has higher education explored the prospects?

Communication researchers and media sociologists make serious academic incursions everyday into the role of the media in education and are giving new interpretations to the significance of computer information technology to teaching and learning in the 21st century. While copious literature exists on the media and education (Lester, 1988), few researchers have explored the construct of social media utilizing computer mediated communication for higher education (Maguire, 2005).

Renowned institutions of higher education globally, including the Ivy League Colleges, are utilizing computer mediated communication for the electronic delivery of courses or entire academic programs (Hanna, 2003). Some first world countries seeing the relevance of this to the future had taken steps ahead of the others, over a decade ago, to establish commissions on computer mediated communication and learning so as to harness the promise of the Internet for teaching and learning at all levels of scholarship.

1.3 Discussion

So, what is Social Media? Social media are media for communal interaction, using highly accessible and scalable publishing techniques. Using web-based technologies to turn communication into interactive dialogues, they are primarily Internet- and mobile-based tools for sharing and discussing information among human beings. Kaplan and Haenlein (2010) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, which allows the creation and exchange of user-generated content."

The tool for social media is the Web 2.0 through which many different forms of social media have emerged – internet forums, weblogs, social blogs, micro- blogging, wikis, podcasts, photographs or pictures, video, rating and social bookmarking. By applying a set of theories in the field of media research such as social presence, media richness and social processes like self-presentation, self-disclosure, Kaplan and Haenlein (2010) create a classification scheme for different social media types namely collaborative projects, blogs and micro- blogs, content communities, social networking sites, virtual game worlds, and virtual communities.

In Web 2.0 terms, a social media website will not just give you information, but interacts with you while giving you that information. This interaction can be as simple as asking for your comments or letting you vote on an article as the Facebook, or it can be as complex as Flixster recommending movies to you based on the ratings of other people with similar interests. Web 2.0 as a Social Web moves internet communications toward a more social, collaborative, interactive and responsive platform thus making a change in society as well as in the technology.

Armstrong (2009) is bothered that in the age of Web 2.0, students are not using social media in the classroom. According to Armstrong, if Twitter is the fastest way to find information on breaking news stories; blogs can be used to encourage creative writing and proper grammar skills and Cramster is a question and answer board site, he sees social media bringing together pupils of all ages to help each other with homework and research, which is not happening on expected scales yet.

For some researchers, their findings are not just a matter of engagement. Reid (2009) finds that social media dramatically alter the material contexts in which the academia makes decisions about how to organize people and information in higher learning. He says that the operation of social media, particularly the low costs of group formation and risk-taking, are difficult to accommodate within the traditional institutional structures of tertiary education. In his study that considers the pedagogical, disciplinary, and institutional implications of social media for higher education, he examines current theories on educational technology and social media in the context of specific social media (Second Life and iTunesU) used in pilot programs and concludes that the conversation of social media in higher education beyond the limited (though certainly significant) tasks of technical innovation and policy-making to recognize the larger institutional and disciplinary challenges and opportunities they represent.

But more recent studies are showing different results. Some professionals who stumble into social media sites started using them first as supplements for their stunted social life but soon learned that Facebook is also a place of professional learning and development. Wolpert-Gawron (2010) sites two examples as potent proofs in the United States of America. According to the author, Facebook is more than just a means to learn about friends, professionally and colleagues personally. It is also a way to publicize the issues that deserve advocacy and she uses a couple models of education advocacy on Facebook to buttress her position – *The Buffelgrass Shall Perish and Teachers' Letters to Obama* campaigns. Both social media campaigns brought positive results, one stopping a threat to the environment and the other bringing the plight of American teachers to the desk of the President of the United States thus exposing potency of Facebook.

A more encouraging study on Higher Education embracing social media comes from the University of Massachusetts at Dartmouth. Dr Nora Barnes and Eric Mattson, researchers at the Center for Marketing Research of the University explored the adoption of social media within the admission departments of some of the most important American universities and reports on the immediate consequences of such phenomenon in such environments. Reaching out to the admission departments of over 2,000 accredited four-year colleges and universities in America to learn how they were using these exciting new technologies, they found in a fascinating and statistically significant way that the use of social media in the "ivory tower" is outpacing even the business world (Barnes and Mattson 2009).

In their analysis that of detailed interviews with 453 admissions departments of private and public higher institutions like Duke, Carnegie Mellon, Vassar, Wesleyan, Arizona, Pennsylvania, Wisconsin and Massachusetts, they found that 61% of the respondents use at least one form of social media and that Blogging is the most common form with 33% of admissions departments using it (Barnes and Mattson 2009).

In all of these, only a few studies have delved into the realm of social media and entrepreneurship education. The concern is the idea that social media might transform the entirety of higher education. Reid (2007) says that for the first decade of the internet, it was largely possible to think of the online world as separate and separable from the face-to-face experience of conventional pedagogy that one could choose to include an online element or even teach an online course, but one could also keep the Web out of the classroom, even going so far as to forbid the use of "online sources."

Today, however, participatory media networks and wireless technology bring social media into every pedagogic context. The immediate nature of face-to- face instruction often leads us to imagine that the practice of such teaching is largely driven by the local interactions between students and faculty. However, drawing on actor-network theory (ANT), developed by sociologist Bruno Latour and others, one can map how local events are linked as nodes on extensive networks of materials, institutions, policies, and technologies. Latour (2005) offers some insight into the networked condition of face-to-face pedagogy in the following assessment of the lecture hall:

> This local site has been made to be a place by some locus through the now silent mediation of drawings, specifications, wood, concrete, steel, varnish, and paint; through the work of many workers and artisans who have now deserted the scene because they let objects carry their action in absentia; through the agency of alumni whose generous deeds might be rewarded by some bronze plaque. Locals are localized. Places are placed. And to remain so, myriads of people, behind the doors, have to keep up the premises so that you can remain, you along with your students, safely "in it." Latour (2005)

According to Reid (2007), there are a near inexhaustible list of nodes on the distributed network that supports the gathering of students and faculty into a classroom that the addition of social media alters the characteristics of Higher Education regardless of whether faculty choose to incorporate them or they are simply present because wireless access flows through the room. He thinks that social media have a different quality from these other nodes however because they dramatically reorient academia's relationship with the rest of the world, bringing a global participatory network into direct contact with the classroom.

With the escalating enrollments in web-based courses on the other hand, higher education faculty are increasingly being called on to enhance their courses with online materials or to deliver their courses partially or entirely online (Twigg, 2002). Faculties utilizing instructional technology for delivering their courses via the internet are also being called on to play diverse and demanding roles and function as change agents that experiment with technology and educational methods and continually upgrade their knowledge and skills (Allen & Seaman, 2003). This new culture of any-time, anywhere, web-based education coupled with rapidly increasing numbers of online courses and enrollments have created an exigent need for faculty who can effectively utilize Web-based learning technologies and learner-centered, constructivist approaches, which inform the use of electronic conferencing and collaborative media (Bonk & Dennen, 2003).

Entrepreneurship education is on the increase with courses and programs doubling every school year (US Department of Education, 2001). Fifty-six percent of all 2-year and 4-year colleges offered entrepreneurship education courses during the 12-month 2000–2001 academic year. The majority of these institutions (90 percent) reported that they offered Web-based courses using asynchronous computer-based instruction as a primary mode of instructional delivery. The estimated enrollments, in entrepreneurship education courses offered by these 2-year and 4-year institutions, were over three million (US Department of Education, 2003).

1.4. Purpose of Study

Colleges and universities jointly known as home of higher or tertiary learning are a mixture of powerful and often contradictory forces. The unlimited potential of young people, ever-increasing budget pressures, academia's love of new ideas, and strong traditions combine to create a culture that is simultaneously incredibly innovative and slow to change. The purpose of this study is to conduct exploratory qualitative research to investigate the place of social media higher education with particular reference to entrepreneurship education. To achieve this purpose, this research will explore higher education's rigid traditions and perceptions of elements that contribute or inhibit the possibilities of fully incorporating social media in teaching; the study will investigate the relationships among the elements that make or mar these possibilities; and the study will probe how to adopt social media within higher learning environments and the implications of such phenomenon in view

of what Rachel Reuben, of the State University of New York calls the new roles in higher education and communication (Reuben 2008).

1.5. Research Questions

Therefore, the key research question guiding this inquiry is:

How do universities utilize social media as teaching and research tools for entrepreneurship education in Nigeria?

In order to answer the main research question, this research will answer the sub-questions below:

1. What kinds of social media are students using in Nigeria and which opportunities and challenges do universities meet when utilizing them in teaching entrepreneurship education?

2. How do Social Media affect learning behavior, and how can universities take advantage of this in teaching entrepreneurship education in Nigeria?

3. What objectives, strategies and tactics can universities employ in teaching entrepreneurship education through social media in Nigeria?

4. What key performance indicators can universities use in measuring the impact of teaching entrepreneurship education through social media?

1.6. Statement of Potential Significance

This study will add to the understanding of the factors that contribute to the adoption or otherwise of the use of social media in higher education specifically entrepreneurship education in the rapidly expanding and changing computer mediated communication environments. The bulk of research on entrepreneurship education has been conducted on traditional courses i.e. totally teaching face-to-face and not much has been done on social media and entrepreneurship education in the new Web 2.0. The significance of the study also rests on the need to understand and explore what traditional higher education is doing about the inevitable new web-based learning environments of social media.

This study, therefore, will seek to understand and expand the current knowledge base by utilizing a Constructivist Grounded Theory approach of Charmaz, (2000) to identify elements and describe relationships among the elements that contribute to, or act as barriers to the adoption of social media entrepreneurship education. The benefits will include contributing to a better understanding of social media in higher education generally and the strong traditions that combine to create a culture that is simultaneously incredibly innovative and slow to adopting an inevitable change. It will create a platform for further discussions on how colleges and universities are responding to the new wave and global shift in education plus the intrinsic place of media economics in the discourse. In addition, this knowledge could help institutions, which are considering a marriage of social media and entrepreneurship education, to attract, train, and retain talented faculty (adjunct or full time) so that they can more effectively deal with what Vascellari (2009) terms a shift in education in a changing world that create the quest for more from a global student body.

1.7. Conceptual Framework

This study will revolve around the cues filtered out concept. Joseph Walther of Northwestern University explains this phenomenon by the Social Presence Theory, which contends that the personal nature of a relationship is determined by the salience of the participants. Because computer mediated communication has this lack of non-verbal elements or feedback cues, participants are less able to get to know the person with whom they are conversing, thus leading to a less personal conversation.

Also, according to this theory, people pay less attention to the other participants because their interest can be absorbed elsewhere without the presence of the other person to restrain them. Even when participants do become absorbed in the conversation, they are more likely to "flame" or insult other users, to focus more on themselves, and to equalize each other's status because of the lack of cues to show them what is appropriate (Walther & Burgoon, p.53).

This can produce a relationship in which intimacy is impeded and a basis of trust is more difficult to form, directing participants to the kind of impersonal communication that is expected of computer mediated communication (Walther & Burgoon, p.58 & 62).

However, according to many studies, these effects of the Cues Filtered Out Approach are restricted to only the beginning period of a computer mediated communication relationship. When studies are extended to examine longer amounts of time, it has been observed that many of these impersonal aspects disappear as participants exchange a greater number of messages. It seems that computer mediated communication groups can and do develop in relationally positive directions, as long as they are allotted sufficient time to mature (Walther & Burgoon, p.76-77).

It is important to take into consideration the rate of information exchange that is taking place in computer mediated communication. Obviously, when more messages are sent, the personal relation will increase as participants grow more comfortable with each other and interesting topics of conversation are brought up. In the same way, at the beginning stages of any relationship, whether it be computer mediated communication or face-to-face, the communication will be more formal and less personal. The premise that describes this phenomenon is called the Social Penetration Theory because as the communication spans a greater amount of time, more of a personal nature is able to penetrate to the other person (Walther & Burgoon, p.57).

In light of the fact that computer mediated communication can become more personal over time, it is interesting to note that this type of communication might start out even more personal than face to face interaction. People are less concerned about the impression they are making because of the inherent anonymity of the medium, and they are not as worried about proper turn taking or other formalities. Therefore, in its initial stages, computer mediated communication can be more intimate that face to face communication (Walther & Burgoon, p.60). Computer mediated communication may even initiate relationships that might never have begun if they required a face to face meeting. For instance, it is more likely that a student would approach a professor with a question over e-mail or some other form of computer mediated communication than to call him or her on the phone or arrange an appointment (Kiesler, Siegel, & McGuire, p.1127).

Another reason that computer mediated communication can foster more positive communication than face-to-face might support is that computer mediated communication allows for selective presentation of certain features of a participant's identity. Also, depending on the form of use, a writer is allowed more time to plan a response that shows off his or her better side (Walther & Burgoon, p.79). The anonymity encouraged here can eliminate a person's anxiety over how he or she will be judged based on his or her opinions, and it leads to a medium in which people feel more free to express themselves and to stand up for their rights (Spears & Lea, p.430).

Because there are networks in many businesses over which employees can converse with one another, computer mediated communication can help to develop lateral communication among teachers and learners, also leading to a more personal type of communication. Lateral communication refers to that which takes place between people of the same rank, rather than between teacher and learner. Some studies have shown that students are more likely to discuss different good or bad aspects of a particular course using these types of networks than they would in face to face settings because of fear that they will offend a superior (Spears & Lea, p.440).

1.8 Summary of Methodology

The electronic web-based email interviews will collect information on the respondents such as: contact details, discipline/degree program, gender, age, ethnic group, tenure status, teaching experience, computer use, instructional uses of technology, and teaching philosophy. The interview protocol will ask questions such as the participant's teaching experience, and number of years of involvement in entrepreneurship education; use and incorporation of social media. The interview protocol will also explore barriers to or facilitators of adopting social media in entrepreneurship education including: developing the course, technological aspects, professional development and social interactions. Participant's affinity for computer mediated communication plus all components of electronic education, course activities, and time requirements. The survey will conclude by asking and soliciting counsel from the participants for higher education faculties in entrepreneurship education who would want to adopt social media as tool.

1.9 Limitations of the Study

This study seeks to explore elements that contribute to or act as barriers to the adoption of social media within entrepreneurship education environments and the relationships among these elements. The future of entrepreneurship education, can be significantly influenced by the institutional setting in which it does or does not occur. For this reason, the phenomenon of computer mediated communication in education with particular focal point on social media and entrepreneurship education needs to be studied as it naturally occurs without manipulation or control of variables. Higher institutions are distinct and complex, as are the entrepreneurship education environments within these settings. Hence, the data gathered in each setting will be very dependent on these contexts. Therefore, the context of each case study will limit the generalizability of the findings. The qualitative researcher utilizes the case study format to provide a thick, rich description of the phenomena encountered in the process of research. This thick description allows the readers to judge the information and make their own decisions about whether or not the themes that emerge from the research can be transferred to their own situations (Alexander & Murphy 1994).

1.10 Definition of Key Terms

Social Media: Andreas Kaplan and Michael Haenlein define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content Kaplan and Haenlein (2010). This includes web sites and other online means of communication that are used by large groups of people to share information and to develop social and professional contacts. Many businesses are utilizing social media to generate sales.

Entrepreneurship Education: To the European Commission, entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage consumerist success in a variety of settings. Entrepreneurship education at the higher learning level has the primary purpose to develop capacity and mindset that is willing to take risks in order to make a profit (European Commission, 2004)

Pedagogical: Merriam-Webster Learning Dictionary (2012) defines pedagogical as pertaining to a pedagogue or pedagogy and delineates pedagogy as the function or work of a teacher; as teaching; as the art or science of teaching; education; as instructional methods; and as the principles, practice, or profession of teaching. Implications: Plural of implication is the conclusion that can be drawn from something, although it is not explicitly stated. Merriam-Webster - The Free Dictionary (2012). It is further defined as: a likely consequence of something e.g. "pedagogical implications."

Computer-Mediated Communication: Computer-mediated communication is any form of communication that occurs through the use of two or more networked computers. While the term has traditionally referred to communication via computer-mediated formats like instant messages, e-mails, chat rooms, it also been applies to other forms of text-based interaction such as text messaging.

Higher Learning: The Institute for the Advancement of University Learning, University of Oxford sees Higher Learning as education for the intellect to reason well in all matters, to reach out towards truth, and to grasp it. It is the post-secondary, tertiary, or third level education that occurs at universities, academies, colleges, seminaries, and institutes of technology. Higher learning also includes certain collegiate-level institutions, such as vocational schools, trade schools, and career colleges that award academic degrees or professional certifications Bakvis and Cameron (2000).

CHAPTER 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.0. REVIEW OF THE LITERATURE

2.1. Social Media

The following review of literature examines social media and education, particularly socialization of the teaching and learning, responses from traditional classroom, and implications and concerns.

With the advances in Internet capabilities and social networking sites, Internet users engage in more consumer-to-consumer content sharing. This development has led to the creation of personalized content recommendations through sites. Applying information overload and uses and gratifications theory, Liang, Lai, and Ku (2006) suggest that personalized content services increase user satisfaction when employed appropriately. They advocate providing content recommendations when users need specific information, as opposed to when consumers look at general websites.

Social media are an increasingly powerful force in mediated communication. However, research conducted to date has been primarily exploratory. Goldsborough (2009) examined several media trends and one of the foremost conclusions is the predicted decline of e-mail usage, which is attributed to younger people's preference for text messaging and communicating through social networks. In addition, the study cites the increasing number of social networking sites, introduction of professional social networking sites such as LinkedIn, and increase in micro-blogging using programs such as Twitter.

The evolution of social networks allows for personalized interactions between people. Although social networks were first adopted by teenagers, growing populations of 25- to 34-year-olds and white-collar professionals also use them, which demonstrates the applicability of social networks to everyday life (Kim 2008). This growing trend has vast implications for learning and education. However, without adequate knowledge of the effectiveness of these platforms, teachers and lecturers lose chances to create valuable interactions with students.

There is no doubt that traditional learning environments have been impacted by the Internet, social media, and smart phones. Traditional news classrooms now have to compete with independent bloggers and social media websites. Recent studies have provided insights on how the popularity of blogs, social media, and other user-generated content venues have impacted the way in which students are willing to learn. However, there has not been literature exploring how knowledge seekers are becoming the knowledge givers and if individuals feel more or less informed as a result.

Existing research concerning social networks remains mostly exploratory and focuses on impression management, friendship performance, networks and network structure, online/offline connections, and privacy issues (Boyd and Ellison, 2007). Little research has directly examined the applicability of social media for teaching purposes. This area of education research requires further examination to understand the effectiveness of social media programs on consumers.

Daugherty, Eastin, and Bright (2008) investigated consumers "motivations for creating social media sites such as MySpace, Facebook, YouTube, Flickr, and Twitter. Implementing an exploratory study with an online survey, the researchers analyzed user attitudes in regard to user- generated content. The authors define user-generated content for the purposes of their experiment as, "media content created or produced by the general public rather than by paid professionals and primarily distributed on the Internet" (Daugherty, Eastin, and Bright, 2008, p. 2). Results indicated consumers increased the amount of social media usage as their attitudes toward social media improved.

Implications of the study suggest that message creators such as teachers and advertisers com should place special interest in creating positive interactions between their target audience and social networks to improve attitudes toward the media. With a positive attitude, the target audience is more likely to interact with the social media platform and create their own content within the site. Such highly involved interactions between users ideally create positive experiences toward learning.

Businesses are already creating profiles and branding their products on social media sites in an effort to reach consumers (Kuhn & Burns, 2008). Within MySpace, Kuhn and Burns (2008) found brands present advertising, multimedia content and other features to allow consumer interactions with their brand. Many companies also connect offline and online promotions through these branded profiles, including exclusive online promotional offers to increase profile traffic.

Social media differ from traditional media because they operate by connecting individuals. This creation of additional communication channels allows for the sharing of content within established online networks, allowing messages to spread quickly in a word of mouth fashion. Social media foster the exchange of word of mouth messages by creating a virtual community for people to interact with each other (Goldenburg, Libai, and Muller, 2001). Social networks' ability to foster communication makes them unique platforms for marketing and communications, especially with increasing levels of online clutter.

One study attempts to create a methodology to study the social media platform, Facebook. Casteleyn, Mottart, and Rutten (2009) created a method to convert Facebook data into useable market research using the "dramastic pentad" theory (Burke, 1945). This critical technique called dramatism emphasized the role of guilt in human communication; the researchers used this theory to analyze the motivations of users interactions in Facebook. Their proposed technique involved selecting an artifact, like a specific Facebook Group, and monitoring the Facebook posts on the wall of that group. Posts could include text, pictures, or videos. Next, one must label the following items: agent, act, agency, scene, and purpose. In their study, the agent was group members, the act was the reason for the group creation, and the agency was the way the act was performed, or the specific comments about the group. The wall of the group was the scene.

In determining the purpose of the posting, Casteleyn, Mottart, and Rutten (2009), say "Purpose is what moves us to a particular act in a particular situation, whereas motive is the larger explanation of that same act. We could purchase a new item of clothing because the one that we had is torn (a purpose), but it could also be interpreted as us buying only designer clothing (a motive)." To create a useable understanding of the comments, ratios of relationships among the terms must be determined, such as scene–act ratio or agent–purpose ratio. These ratios help describe what was going on in the Facebook group and new areas of the new media where additional research was needed.

New media refers to information accessed via the Internet. Several newer technology developments are shaping new media. Social media sites and blogs have helped information become a social experience in fresh ways for the public. People use their social networks to filter, assess, and react to information ("State of the News Media," 2010). Americans access the news in multiple formats on multiple platforms on myriad devices. The ascent of mobile connectivity via smart phones has turned education and learning into some kind of anytime, anywhere affair for knowledge seekers. However, little research has been done specifically related to whether or not individuals believe they are better informed as a result of social media.

By way of dramatically changing the landscape of identity construction, Internet technology has mobilized people around the world to re-conceptualize their image. "We are moving from rooted identities based on place, and toward hybrid and flexible forms of identity" (Easthope, 2009). Where identity was once ascribed by family name and reputation, users now exert the utmost influence in shaping their virtual image to reflect both actual and ideal identities.

Interpersonal interactions mold the construction and perceptions of one's offline and online identity. However, Whang and Chang (2010) believe, "the development of online relationships differs from offline relationships because of the features of the internet. As an example, physical attractiveness plays a crucial role in the development of offline relationships but not in that of cyber- relationships." Social networking Websites (SNWs) provides a medium for users to express themselves beyond physical features and labels, to share experiences,

discuss interests, and influence one another in a selective network. In addition, social networking Websites are not constrained by the same geographic boundaries as real life networks; allowing users to make and develop relationships with individuals of similar interests around the world. Lastly, SNWs provide an optimal format for users to keep a "personal narrative going" in which they "integrate events which happen in the external world, and sort them into an 'ongoing' story about the self" (Marsh, 2005).

While impression management is not a new theme in social sciences research, the implications of constructing an omnipresent digital identity is one specific to the development of social networking Websites (SNWs). The first research on this topic alluded to identity in computer-mediated environments (CMEs). CMEs were the first to establish the trend of presenting an online identity to the public. According to Schau and Gilly (2003), "CMEs are virtual digital places that occupy neither space nor time". In CMEs, computer-savvy individuals create personal Websites which communicate their identity beyond 3D encounters. In recent years, SNWs have popularized the construction and presentation of personal identity online. Social networks provide a platform for communication and the extension of consumer influence. SNWs are "one of the fastest growing arenas of the World Wide Web" and Facebook, MySpace, and LinkedIn are currently among the most visited Websites in the United States of America (Trusov, Bucklin, Pauwels, 2009).

This study extends prior theory developed on the topics of identity creation through personal web pages on CMEs. The widespread availability of the Internet, at school, work, airports, and mobile devices makes Facebook accessible almost everywhere and provides a more connected, interactive experience than CMEs. The Facebook user experience includes joining groups, becoming a fan, updating a personal status, and games (e.g. Farmville and Sorority Life). These features are accompanied by the basic social networking elements of posting information, communicating with other users, uploading pictures, writing notes (blogs), and sending event invitations, all of which contribute to a more interactive Facebook experience. Recent statistics (2010) provided by Facebook reveal 50 percent of their active users log-in every day, and 35 million use the status feature to update their profiles daily (Hepburn, 2010).

The fundamental differences between CMEs and SNWs create a new platform for identity construction online. Facebook and personal Websites differ in three key areas, interactivity, standardization, and usability. Regarding interactivity, personal Website users tend to log-in and update their information less frequently. In the context of Facebook, 60 million status updates are posted each day (Hepburn, 2010). In addition, communication with Website viewers is also limited in personal Websites (CMEs). In contrast, half of Facebook's active users log-in daily, instantaneously responding to "pokes," friend requests, status updates, and comments. The uniform format of all Facebook profiles challenges users to be more expressive and strategic to distinguish their identity. Personal Websitesare unique by comparison; each personal Website is a reflection of the user's time, knowledge, and effort to enhance their site through graphics and various links. The last difference is ease of use.

The technology acceptance model "posits that perceived usefulness and perceived ease of use determine an individual's intention to use a system (Wade and Schneberger, 2006). The substantial learning curve associated with personal Websites makes them less common, as their use is restricted to more motivated or knowledgeable users. On the other hand, Young (2009) explains "that the interaction is not merely between individual and tool (computer that is) but rather a form of socialization that is underpinned by one's conscious decision to create an online identity that is accessible to others." Therefore when a person has the social motivation to join a networking site they work to overcome learning curves to participate in a fulfilling social experience. The lower learning curve of Facebook allows users of all ages and skills to actively socialize and participate with a minimal time investment to use the site.

Comparing contemporary SNWs and personal Websites, we see how Facebook has evolved and became a strong household presence with the development and availability of the Internet. In 1999, four million Americans posted personal Websites, and by 2001 this number slowly climbed to 11 million pages (Schau and Gilly, 2003). More recently, social networkers have been quicker to join Facebook, as the site increased their United States user base from 42 to 103 million in 2009 alone (Corbett, 2010). Thus Facebook is the ideal social networking site to use for a qualitative study that explores how most Americans construct their online identities.

The ease of use of today's leading SNWs has resulted in millions of people using these sites to connect with others. As in other social situations, users construct and present their identity through the profile. Peluchette and Karl (2010) explain that "Facebook provides a profile template which prompts for different kinds of personal information (e.g., favorite quotations, political affiliation, favorite music and education), [and] users have considerable freedom to provide such information or not and to post any other information or pictures of their choice."

As in personal Websites, Facebook participants use their creativity to define themselves through "digital collages using symbols and signs to represent and express their self-concepts" (Schau and Gilly, 2003).

The object of this study is to understand the process of how individuals define themselves, and what attributes of their identity they find most important to share with their network. Drawing upon the established theories of self-concept and social distance corollary, this research examines the routes users employ to identify themselves. Uncovering user self- perceptions and applying aspects of social comparison is an especially appropriate topic in the context of social networking. It is in this forum that users can obtain immediate feedback on their personal views, consumption, and thus their identity. Understanding how users construct identity in Facebook has implication for products, services, and advertising that is related to Facebook and other social networks.

Marketing scholars Schau and Gilly (2003) write that, "we may indeed be what we have self-presented, but we are also a great deal more" (p. 387). The research of this study explores the reasons why Facebook users are prone to emphasize particular aspects of their identity and "remove tags" from areas inconsistent with their constructed being.

Engaging in online identity construction allows users to define themselves by more than just their actual identity schemas, labels we place on ourselves (e.g. student, mother or husband). Instead, Facebook provides users the opportunity to share interests, ideas (blog), appealing images, and their identity among a public network. Users manage forums such as Facebook to produce their desired image by communicating through symbolic, digital stimuli. In what Schau and Gilly (2003) refer to as "authenticating acts or self-referential behaviors, users feel free to reveal their true self and frequently multiple selves."

In this manner, users select the best representations of themselves to strengthen the link between their actual and their ideal (desired) identity. Creating an online representation of oneself with linguistic content, imagery and brand associations, users consider their self-concept, "our mental conception of whom we are" (Hoyer and MacInnis, 2007, p.54). With their self-concept schema; users are prone to activate the ideal identity schema. This schema describes "how the identity we seek would be realized in its ideal form" (Hoyer and MacInnis, 2007, p.55). For users, these cognitive processes underlying self-concept schemas lay the foundation for the way Facebook users construct their identities.

In advertising, the social actions required for self-presentation are material- oriented and depend largely on individuals displaying signs, symbols, brands and practices to communicate a desired impression (Schau and Gilly, 2003). The deployment of the ideal identity schema causes users to select which consumption behaviors or labels best describe who they are, or desire to be. The social identity theory proposed by Hoyer and MacInnis offers that individuals "evaluate brandsin terms of their consistency with our individual identities" (Hoyer and MacInnis, 2007). By this context, we extend Hoyer and MacInnis' theory to include the behavior and status associations linked to the brands, which consumers appeal to. In other words, while users may not make direct brand associations, their behaviors operate in a manner consistent with brands, labels and behaviors presented on their profiles. This behavior further substantiates a user's identity and may facilitate social acceptance in their (desired) network.

The value of being able to continuously update one's profile is highly impacted by the theory of social comparison, in which social networkers use one another as a means to assess their own identities. Zhang and Daughtery (2009) claim that the social networking experience is "a platform for users to compare against each other, and confirm or even enhance their self- identity." Users are prone to use others as a yardstick to determine their social position, construct self-concepts, and acquire self-esteem, all the while making sense of themselves and their surroundings. The accessibility of networkers' photos, comment histories and videos provide a substantial amount of material to make judgments about others' identities. By processing the available signs and symbols, users themselves can become more critical of the image they project.

The internet and wireless communication allow people to connect with others more easily than ever before (Acar, 2008). Social networking sites allow people to connect with others who possess similar interests. Users can control what people see on their pages, and social media essentially allows people and businesses to easily create their own webpage (Acar, 2008). In the past few years, governments, schools and non-profit organizations have been establishing a presence on social media websites to better engage their constituents and social media has become a key part of the outreach strategy for many organizations (Dadashzadeh, 2010). Social media and "Web 2.0" have transformed the internet from solely a place with information to a place where users interact with each other and create content to share (Dadashzadeh, 2010). Many companies use social media as a way to engage customers, provide information, contribute to conversations, and even adopt user ideas for products (Dadashzadeh, 2010).

With the current state of the economy, Hensel (2010) discusses how it is imperative that entrepreneurs, businesses, and any organization with something to market learn how to utilize social media to advertise and promote the products or offerings of the organization. The traditional marketing methods are no longer as effective because of the changing consumer behaviors and the increased usability of the internet (Hensel, 2010). Traditionally, newspapers and television were important venues for advertising and marketing for organizations. However, with the increase in internet usage and more active seeking of consumer information (Shaver, 2007), the internet and more recently social media have become important marketing and outreach venues. These traditional media are either costly if placing a paid advertisement or unreliable if simply submitting a story because it is not guaranteed to be printed. Marketers or organizations that are trying to advertise must take into account the effects and impact that social media have the potential to bring (Barnes and Barnes, 2009). Extension shouldn't ignore the potential that social media has to reach out and connect with constituents via another medium. Social media new ways to network, collaborate, communicate, and connect to a numerous people with like needs and wants (Patton, 2009). Social media are becoming an integral component of the lives of many people across the world.

Many institutions have learned that people use social media because it is an enjoyable way to interact with friends and family (Hensel, 2010). When reaching out to or interacting with customers, social media are a unique and great way to do this because the customers or end users are engaged in an environment and activity they enjoy. Information, communications, and socializing are main gratifications when using social media (Chung & Austria, 2010), and as social media combines all three of these things, consumers are generally enjoy using social media and are gratified when doing so. In addition to identifying the gratification that people receive when using social media, Chung & Austria (2010) also found that the attitude towards the marketing messages themselves were higher when the gratification for the social media website was high. Theoretically, marketing is more effective and better received by consumers when the message is received through social media because of the gratification that accompanies it.

Interacting with others, sharing content, viewing photos, and finding out about events are all enjoyable activities that social media offers. The customer will probably be more likely to react or engage with the company or organization because the communication is on a platform the customer enjoys using. Online tools like social media websites can allow users and businesses to enhance their positions (Abbe, 2011). An important point to remember about
social media is that it is in addition to, not instead of, traditional outreach methods (Abbe, 2011).

Strategic use of internet technology can result in strong relationships with customers and constituents (Foster, 2010). It is important to keep in mind the motivations that people have as they use social networking sites to be better able to connect with and influence them. Most youth and young adults use social media websites for two reasons: to maintain social networks and keep in touch with others, and to share information (Foster, 2010). Cooperative Extension could tap into these uses as they join networks of people who use extension services. It can be a further medium of outreach to ensure extension is reaching the most people possible to inform them of programs and advertise events.

Effectiveness of social media should only increase with steady and continued usage over time (Hensel, 2010). An effective company or organization could use social media to increase brand recognition, increase consumer loyalty, and spread awareness about a company or its products. Effective posts will be targeted towards audiences that are known and understood (Hensel 2010). Benefits and drawbacks of social media are totally dependent on the organization and the posts, and poor quality posts (infrequent communication, low value updates) will take away from the effectiveness of social media (Hensel, 2010).

Das (2009) listed some of the advantages of using social media as low cost, increased credibility, and more connections with your audience. Some disadvantages were safety and privacy concerns, large amounts of time required to build rapport with the audience, and lack of anonymity (Hensel, 2010). However, some of these are not necessarily as harmful as they may seem. A perceived lack of privacy is a hurdle in initially establishing a presence on social media, and a lack of anonymity is not necessarily a bad thing from a company's point of view when they are trying to establish connections and market their product.

Facebook is convenient mostly because it is so popular. As visibility increases, businesses can see an increase in sales as well (Abbe, 2011). Social media websites give back and provide benefits equal to the time spent working with them (Abbe, 2011). When extension employees put a dedicated and real effort into connecting with constituents via social media, the results can be incredible. In one study among 4-H members, one girl stated that, "blogs are so 2004" because they don't carry the instant gratification that accompanies social media sites (Ashton, 2010, p. 3). Instead of blogging, teenagers and 4-H youth like to "layer" their communications by using instant messaging, texting, and social networking sites (Ashton, 2010, p. 3). The popularity of Facebook and other social media tools contributes to this. A platform is generally popular because it is probably fun or functional. Using new media to connect with youth and young adults is incredibly important and shouldn't be undervalued (Ashton, 2010). "Extension educators need to use new media to effectively engage Extension learners" (Ashton, 2010, p. 4).

Twitter and other "micro-blogging" websites shouldn't be a "be all and end all for communications" yet they are a critical component of social media outreach that allows small- to medium-sized enterprises to listen to or influence their constituents' opinions (Bulearca & Bulearca, 2010, p. 304). Social media presents many benefits, networking opportunities, relationship opportunities, and positive branding, yet these benefits can sometimes be equal to the negative repercussions from negative word of mouth (Bulearca & Bulearca, 2010). Word of mouth, and especially the electronic word of mouth that social media websites allow users to do, is one of the most effective forms of marketing (Bulearca & Bulearca, 2010). For businesses that do not currently use Twitter, it presents an "enormous untapped potential" for word of mouth purposes and company communications (Bulearca & Bulearca, 2010, p. 297). Use of Twitter is expanding at a rapid pace- its user numbers increased 949% between 2008 and 2009 (Bulearca & Bulearca, 2010). However, the main concerns holding many businesses from utilizing Twitter are its difficulty to understand the use and measure the results that come from it (Fisher, 2009).

While word of mouth is tough to measure and understand (Bulearca & Bulearca, 2010; Trusov, Bucklin, & Pauwels, 2009; Dellarocas, 2003; Godes and Mayzlin, 2004), electronic word of mouth is potentially even more impactful because of the rapidity, scale, and uniqueness of the internet and social media (Bulearca & Bulearca, 2010). Electronic word of mouth is more effective because of advocacy, positive reviews of programs or products by average people, and the quickness and cost effectiveness of the social media platform (Godes and Mayzlin, 2004; Dellarocas, 2003; Trusov et al., 2009; de Bruyn & Lilien, 2008; Jansen, Zhang, Sobel, & Chowdury, 2009; & Bulearca & Bulearca, 2010). Kozinets, de Valck, Wojnicki, & Wilner (2010) also discuss online word-of- mouth in depth. Kozinets et al. (2010) looked at how marketers using social media encounter coproduction of messages across many networks, and this offers four different communication strategies of evaluation, embracing, endorsement, and evaluating. Using electronic word-of-mouth can amplify and increase the messages being sent, but marketers must also learn how to embrace this electronic world because messages can be altered as well. Overall, electronic word-of-mouth marketing can offer tremendous advantages to organizations attempting to market their programs.

However, it should also be noted that electronic media and word of mouth can also spread negative views of programs or businesses at very quick rates because of the nature of the social media platform (Bulearca & Bulearca, 2010). Users of Twitter should be properly trained on how to best utilize it and take advantage of it (Fisher, 2009; Rusbridger, 2010; & Bulearca & Bulearca, 2010). Furthermore, while the cost of Twitter is free, it is important to remember that it takes employees time to "develop relationships, as well as commitment, people, finance, and management buy-in" (p. 300) which could possibly be difficult for small enterprises to commit to (Nettleton, 2010; Jacobs, 2009; & Bulearca & Bulearca, 2010). While Bulearca & Bulearca (2010) studied only Twitter and the micro-blogging component, the results can be applied to other social media platforms as most focus on short postings. Bulearca & Bulearca (2010) interviewed 4-5 small and medium-sized enterprises about how they utilize and perceive Twitter. Overall, Twitter allowed those enterprises to network better and have more effective marketing with only a commitment of time, consistency, and strategic implementation. Public tweets reach a wider business audience faster, and are one of Twitter's main benefits. Social media allows organizations to have effective electronic word-of-mouth.

Some people believe the benefits of social media for marketing purposes are overblown (Abbe, 2011). Yet for others, they value social media as necessary to their success (Abbe, 2011). Abbe (2011) compiled a variety of quotes about writers using social media to promote their work. Many said that social media allows users to be authentic and share the correct and right amount of information without going overboard. It requires finding a balance between what users need to hear or read yet not bombarding them with information (Abbe, 2011).

Finding a balance can be a delicate task. On one hand, organizations should strive to deliver a decent, regular amount of information to their followers (Ramsay, 2010). Yet on the other hand, too much information can potentially cause people to become disinterested in the posts. Ramsay (2010) mentions adopting a communication strategy for social media and having framework in place for the "who, where, what, and why" (p. 259) of posting. It is also necessary to maintain a balance between professional and personal social media accounts (Gunawardena 2009). This can be especially difficult in smaller organizations (like Extensions) where personal relationships are often forged between the employee and the person receiving the services.

Internet connectivity is often one of the largest barriers to social media use, especially in rural America. A mere 60% of rural households have broadband internet access and 28% of Americans do not use the internet at all (Severson, 2011). Only eight percent of adult internet users utilize Twitter (Smith, 2010). There is a technological disparity between urban, suburban, and rural areas, where two-thirds of rural residents use dial-up while only half of urban and suburban residents do, and suburban and urban residents are "much more likely" to use a cable modem than rural residents (Stern, Adams, & Elsasser, 2009).

In addition to connectivity, age may be a large barrier to constituents receiving information via social media. In 2009, just 38% of adults age 65 and over were using the internet (Lenhart, Purcell, Smith, & Zickuhr, 2010). However, this number has been steadily increasing as older adults realize the potential that the internet has. As this trend increases, reaching older adults using social media may become more realistic, but until then, there is a very small percentage of older adults who will see a message on social media.

One potential unrealized risk is the risk of not delving into social media at all and missing a younger (sometimes) and tech-savvy population (Pry, 2010). Many social media users expect an interactive environment as opposed to a typical static webpage employed by many companies and organizations. Pry (2010) discusses how social media is not like traditional media in the sense that information posted on social media oftentimes comes from many sources and goes to many different people. With this transfer of information, control is lost.

The opportunities one passes up by electing not to use social media are sometimes much larger than the risks presented. By supervising organization's social media sites, this is often enough to ensure content and reputation are being maintained. By responding where appropriate and removing offensive content, employees can ensure their social media is effective and under control (Pry, 2010).

Utilizing social media may seem like an additional time commitment on the part of entrepreneurship educators, yet social media can be easily integrated into the everyday activities and outreach that educators already perform (Rhoades, Thomas, & Davis 2009). With extension educators extremely busy, it is important to remember that this integration is easy to achieve and doesn't add a large amount of time to the duties of extension employees.

Some entrepreneurship educators believe that social media represent the next giant leap forward for entrepreneurship outreach (Langcuster, 2010). Formerly, extension outreach used face to face contact, newspapers and other printed media, and other forms of broadcast to get word out about programs, opportunities, and advice to interested constituents of entrepreneur's work. Now, entrepreneurship is competing with people and organizations around the world because of the ease of finding information online. To continue to educate the public about entrepreneurship programs and be the local source of information, one Extension educator believes Extension needs to be highly intuitive and accessible (Langcuster, 2010). To achieve this, entrepreneurship educators can turn to social media to provide information and connect with its clients. Social media is helping entrepreneurship education perform its outreach services in a more cost-effective and efficient manner (Langcuster, 2010).

Levine (1995) encourages extension educators to continue to make use of the newest possible technologies to "fulfill a person's desire to learn" (p.1). While Levine's article was written 15 years ago about purchasing CD's online, his advice to other entrepreneurship educators is still applicable today. Levine discusses how it is important to take advantage of new technology to "achieve an end that was not previously in reach" (p. 2) and how it is necessary to "creatively exploit the uses of the technology to better facilitate learning" (p. 2). Following Levine's advice, social media may be the newest technology for entrepreneurship educators to enhance the education of their constituents.

Twitter is one form of social media especially popular among young adults, minorities, and urban residents. Despite the relatively low number of adults using Twitter, its popularity among this younger demographic may be particularly important for entrepreneurship educators to connect with. There are possibly many people in this demographic who don't regularly use extension services and possibly don't even know about entrepreneurship in general. By utilizing Twitter, entrepreneurship education may be able to reach out to and connect with a new demographic of people.

Entrepreneurship education could use social media to its fullest extent by sharing pictures, videos, interesting content, and communicating with others. Some youth are already using it for these purposes. As Rhoades, Thomas, & Davis (2009) found, youth are also sharing information about their 4-H clubs and 4-H projects. There is great opportunity to harness the excitement that youth already have about sharing and promoting 4-H. When entrepreneurship educators create pages targeted towards youth or 4-H members, there is great potential to attract new members or at least spread the word about the 4-H club to youth and adults alike.

Kinsey (2010) writes that various forms of social media can "extend entrepreneurship's educational reach into the community". The author discusses various ways entrepreneurship education can utilize social media. Entrepreneurship educators will find social media "easy to use, readily available, free of charge and an interesting addition to the toolbox of dissemination strategies". Entrepreneurship educators should stay knowledgeable of the newest resources available to most effectively perform their job. However, time constraints prohibit educators from attending trainings or experimenting with various forms of social media. When exploring new social media outreach options, entrepreneurship educators should keep in mind the usefulness of the outreach, the ease of use, availability of technical assistance, and the connectivity of the audience (Kinsey, 2010). However, perhaps most importantly, "entrepreneurship educators can greatly expand their outreach by using free online networking tools" (Kinsey, 2010). Many people use social networks and extension can reach into a new audience by engaging people through social media. It is important to choose which outreach methods to utilize that reach a maximum audience in the minimum amount of time.

While Rhoades, Thomas & Davis (2009) provide some evidence for the use of social media within current entrepreneurship activities, there is little empirical research that explores how entrepreneurship educators across program areas are currently using social media. Therefore this study sought to examine how current extension educators were using social media, as well as what they perceived to be the key opportunities and barriers to incorporating social media into their outreach efforts.

2.2. Social Networks

Network theory came about due to the recognition that traditional approaches to studying entrepreneurs had failed adequately to account for the social or environmental context in which entrepreneurship takes place (Aldrich and Zimmer, 1986 in O'Donnell et al., 2001; Lounsbury & Glynn, 2001). According to Kragelund (2005: 319), "Network literature highlights institutional features that have national historical boundedness, such as conventions and standards, and which may have great importance for the private sector". Further, networks are a form of informal economic organisation which are formed from the social structure and represent a re-enactment of this structure (Jack, 2010: 130). The implications of this are that to get an understanding of how networks operate they must be explored in the context in which they are formed and utilized.

A network is fundamentally "a set of interconnected nodes" (Castells 1996 in Meagher, 2009:9). From a social science perspective, nodes can be replaced by actors and connections with social ties or bonds (Davern, 1997 in O'Donnell et al., 2001). The research on entrepreneurial networks has generally focused on two categories: in strategic management the theory focuses on formal networks between enterprises. Sociological theory generally departs from the notion that individual persons constitute the nodes of the network, and investigates the communication or information links between these actors; these are known as social networks. Social network theory views economic behaviour as being embedded in a social context, that is, a network of relationships (Slotte-Kock & Coviello, 2010). The embeddedness approach is predicated on the notion that partners are linked by embedded ties which are based on trust and personal relations (Granovetter, 1985). Economic action is thus embedded in ongoing social ties that sometimes facilitate exchange but may at other times constrain it (Ibid.). Networks can therefore be regarded as being embedded in both economic and social relationships.

The network approach highlights many aspects of networks. Firstly, networks are dynamic constructs and attention is focused on the linkages between units (Larson & Starr, 1993). Secondly, it emphasizes the exchange processes between the actors; 'networks exist in the recognition by people of sets of obligations in respect of certain other identified people. At times these special relations may be used for a specific purpose" (Mitchell, 1969:26 in Meagher, 2009). Thirdly, the approach views the actors in their environmental context (Aldrich and Zimmer, 1986 in O'Donnell et al., 2001).

Social networks have been linked to opportunity recognition (Hills et al., 1997 in Ardichvili et al., 2003). This argument is based on Granovetter's (1973) research on strong and weak network ties, and their differing uses for accessing information. Weak ties are those which are formed with more casual acquaintances and business associates, and which give access to information resources. Strong ties, are formed with family and friends, and are important because they provide the mental and social support that is necessary to spur entrepreneurial action (Ibid.). Weak ties are generally argued to be more important for business as they give access to unique information (Johannisson, 1988).

A study done by Hills et al. (1997) shows that those entrepreneurs who have extended networks identify significantly more opportunities than sole entrepreneurs (in Ardichvili et al., 2003: 115). Networks have been linked to the success of start-ups where the underlying assumption is that entrepreneurs use their network of personal and business contacts to acquire resources and information, which they would not be able to acquire on the market (Brüderl & Preisendörfer, 1998; Jenssen & Koenig, 2002; Witt, 2004). Furthermore, it is assumed that networks enable resources to be acquired at a lower cost than market value or simply without charge (maybe as a favour). This is, of course, dependent on to whom the entrepreneur has access in the network (Witt, 2004).

Networks may provide access to social capital and other resources that would otherwise have to be accessed in the market (Burt, 1993). Another way of addressing this is to look at the social capital incorporated in the network, where social capital is the resource available to people through their social connections (Aldrich & Kim, 2005). Social capital is a form of social infrastructure created by groups or individuals through their social ties (Unger, 1998 in Kuada, 2009). Bourdieu and Wacquant (1992:14) define social capital as "the sum of the resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (in Ellison, et al., 2007: 1145). From the standpoint of entrepreneurship therefore, social capital may facilitate access to economic resources, distribution networks, labour, expert advice, and information.

In general, the network literature has tended towards focussing on the positive aspects of networks. However, the advantages of the network approach to social capital is that it views both the positive and negative sides of social capital and examines both power and inequality through different combinations of bonding, bringing and linking social capital (Turner & Nguyen, 2005). Bonding social capital refers to closed networks of family, friends and homogeneous groups. This type of network can help people to 'get by' on a day-to-day basis. In contrast, bridging social capital refers to open networks that bridge different communities, and are therefore more heterogeneous (Putnam, 2000 in Turner & Nguyen, 2005:1695). However, "not all bridges (or network locations) lead to better information, influence, social credentials or reinforcement" (Lin 1999:36). Linking social capital refers to ties between different economic classes and those of different social status. Linking social capital can be viewed as a vertical dimension, that is, resources, ideas, and information which are gained from formal institutions beyond the immediate community, and which are particularly relevant for economic development (Turner & Nguyen, 2005:1696).

Much research has been focused on the content and quality of the ties that make up networks. In this regard social capital has been related to the concept of trust. Trust refers to the social attribute that creates a willingness among people in dyadic relations to sacrifice their short-term, individual self- interests for the attainment of joint goals or long-term objectives (Sabel, 1993 in Kuada, 2009). If people trust one other and believe that the relationship is worth sustaining, then high levels of loyalty and long-term collaboration may be attained through networks (Fukuyama, 1995 in Kuada, 2009).

In the past two decades there has been increasing interest in how online networks affect social capital. The Internet has been linked to both decreases and increases in social capital (Ellison et al., 2007). Putnam (1995:31) posited social capital to be decreasing in the US as a result of the increasing use of Internet which is 'privatizing' or 'individualizing' leisure time and disrupting opportunities for social capital formation. There is however, a lot of support among researchers for the opposing view, namely, that Internet usage, and specifically online social network sites (SNSs),6 lead to increased social capital (Ellison et al., 2007; Lin, 1999; Quan-Haase & Wellman, 2002; Wellman et al., 2001). Putnam is often critiqued for focusing on observable public spaces of groups and communities whilst failing to recognize new forms of communication in less accessible private homes (Wellman et al., 2001:437). Quan- Haase and Wellman (2002) argue that changes in how people socialize suggest that there is a need to develop new models for conceptualizing and measuring community, as "Communities have become embedded in digital networks rather than in traditional, geographic groups" (Ibid.p.5).

Online SNSs are used both for maintaining existing social ties and for forming new connections. Furthermore, the Internet facilitates new connections as it provides people with an alternative way to connect with others who share their interests or relational goals (Ellison et al., 2007). In a large survey, Ellison et al. (2007) found evidence of a strong association between the uses of the social network site, Facebook, and bridging social capital. This can be attributed to the fact that recently researchers have emphasized the importance of Internet-based linkages for the formation of weak ties. Bridging social capital is associated with weak ties and may therefore be augmented by SNSs, such as Facebook, which support loose social ties and allow people to create and maintain large networks of relationships from which they can potentially draw resources (Donath & Boyd, 2004). Further, Donath and Boyd (2004:80) hypothesise that SNSs are platforms from which individuals can maintain weak ties, cheaply and easily. Lin (1999:45) suggests that we are 'witnessing a revolutionary rise of social capital as represented by cyber-networks'. Lin refers to SNSs as cyber- networks, and posits that they represent 'a new era of democratic and entrepreneur networks and relations where resources flow and are shared by a large number of participants with new rules and practices…' (1999: 45).

It is apparent from the above review that network research is characterized by 'a loose federation of approaches' (Hoang & Antoncic, 2003), and therefore the term 'network' has been rather loosely applied in entrepreneurial research (Shaw, 1997 in O'Donnell et al., 2001). This has led to widespread disagreement among researchers as to what constitutes a network. Lastly, a Cooper et al. study (1991:179) determined that age and management experience were positively correlated with the use of personal ties for information helpful in starting a new business venture (in Hoang & Antoncic, 2003). They also found that the education level of the entrepreneur encouraged the use of professional advisors. In this sense, network development may be related to the characteristics of the entrepreneur, including his/her financial resources, level of education, and work experience (Ibid.). In conclusion, we believe that social network theory should play a large role in the entrepreneurship research especially in the context of the global South.

2.3. Entrepreneurship Education

The past two decades have witnessed significant growth in entrepreneurship education in most industrialized countries (Matlay & Carey, 2006). The number of entrepreneurship courses increased in the US tenfold in the period from 1979 to 2001 (Katz, 2008) and investment in entrepreneurship programmes is still on the increase (Gwynne, 2008). The growth "can be seen as indicative of widespread governmental belief in the positive impact that entrepreneurship can have on the socio-economic and political infrastructure of a nation" (Matlay, 2008: 382). Public policy makers recognize the importance of entrepreneurship as promoter of economic development and hence support instruments like entrepreneurship education to increase entrepreneurial activity (Fayolle, Gailly, & Lassas-Clerc, 2006). The European Commission, for example, endorses such support, noting that the "primary purpose of entrepreneurship education [at higher education level] is to develop entrepreneurial capacities and mindsets" (European Commission, 2008: 11) and recommends integrating entrepreneurship more fully into university curricula. The final report of the European Commission Expert Group for Entrepreneurship Education underlines that the "important role of education in promoting more entrepreneurial attitudes and behaviors,..., is widely recognized" (European Commission, 2008: 10).

These examples provide evidence of the widespread belief in a positive impact of entrepreneurship education. By offering new entrepreneurship education programmes, the initiators follow "conventional wisdom" (Souitaris, Zerbinati, & Al-Laham, 2007: 566): If you want to become an entrepreneur, you need to learn "how" first. Research has, to date, contributed to this belief and underlined the positive impact of entrepreneurship education (Chrisman, 1997; Peterman & Kennedy, 2003; Zhao, Seibert, & Hills, 2005). Out of 41 studies analysing the impact of entrepreneurship education, 39 indicated a positive or mixed result (Lorz, Müller, & Volery, 2011). Only recently did two studies find a negative impact of entrepreneurship education (Oosterbeek, van Praag, & Ijsselstein, 2010; von Graevenitz, Harhoff, & Weber, 2010).

At second glance, it appeared that most studies that had reported a positive impact of entrepreneurship education had significant methodological deficiencies, which strongly limited the validity of the results. Most of the studies are ex-post examinations that do not measure the direct impact of an entrepreneurship education programme (Kolvereid & Moen, 1997; Menzies & Paradi, 2002; Menzies & Paradi, 2003; Noel, 2001) or do not utilize control groups (Kruzic & Pavic, 2010; Lee, Chang, & Lim, 2005) or have small samples (Clouse, 1990; Fayolle et al., 2006; Jones, Jones, Packham, & Miller, 2008).

If one filters the impact studies by counting only studies utilizing an ex-ante, ex- post design with control groups and a sample size of n>100, then only four studies are left (Lorz et al., 2011): One study reporting positive results (Peterman et al., 2003), two reporting mixed or insignificant results (Olomi & Sinyamule, 2009; Souitaris et al., 2007) and one reporting significantly negative results (Oosterbeek et al., 2010). The overly positive picture is hence turned upside down and there is evidence of only a few studies with robust research designs. It thus comes as no surprise that many authors have called for more research into the impact of entrepreneurship education, especially with more robust research designs: Peterman et al. (2003: 130) state that although authors have acknowledged the positive effect from entrepreneurship education, "there has been little rigorous research on its effects". In their review of entrepreneurship education, Pittaway & Cope (2007) found that the link between entrepreneurship education and outcomes is under-researched (Pittaway & Cope, 2007). Fayolle (2006: 766) notes that "there is a lack of research regarding the outcomes of entrepreneurship education". Oosterbeek et al. (2010) call for more research into different variants of entrepreneurship education programmes, and von Graevenitz et al. (2010) state that "little is known at this point about the effect of these [entrepreneurship] courses" (von Graevenitz et al., 2010: 103)

If we consider the situation of research on the outcomes of entrepreneurship education at this point, we note that, on the one hand, there is a continuous effort to expand entrepreneurship education programme offerings. On the other hand, there is a lack of rigor in past research studies and ambiguous results regarding the impact of entrepreneurship education. Given this situation, it is of theoretical and practical relevance to research the impact of entrepreneurship education. Therefore, this dissertation study will deal with the impact of entrepreneurship education, and research questions are formulated accordingly.

The term entrepreneurship has a history that dates back to 1732, when the Irish economist Richard Cantillon used the word in reference to individuals with "a willingness to carry out forms of arbitrage involving the financial risk of a new venture" (Minniti & Lévesque, 2008: 603). The active form of entrepreneur, "entreprendre", can be translated as "to undertake or start something". Researchers and "economists such as Mill (1870), Say (1857), Knight (1921), Schumpeter

(1934), Kirzner (1973, 1997), Baumol (1990,2002) are among the most influential contributors to our understanding of entrepreneurial behaviour..." (Minniti et al., 2008: 603).

In general terms an entrepreneur is described as "one who organises, manages, and assumes the risks of a business or enterprise" (Woolf, 1980: 378). While this definition may seem plausible, many researchers argue that entrepreneurship as such is still a field with no clear boundaries and that it lacks a clear conceptual framework (Bruyat & Julien, 2001; Busenitz et al., 2003; Ireland & Webb, 2007; Shane & Venkataraman, 2000).

Shane et al. (2000) therefore propose three major sets of research questions: "(1) why, when, and how opportunities for the creation of goods and services come into existence; (2) why, when and how some people and not others discover and exploit these opportunities; and (3) why, when and how different modes of action are used to exploit entrepreneurial opportunities" (Shane et al., 2000: 218). Talking about entrepreneurship can thus be summarized as a two- level approach regarding the processes leading to becoming self-employed and the individual. The context of this dissertation can be positioned in the second subset of research questions concerning why people become entrepreneurs. The dissertation examines individuals who intend to become entrepreneurs and are potentially spurred and accelerated through entrepreneurship education.

When the first entrepreneurship course was offered in February 1947, 188 Harvard MBA students were enrolled. Approximately 50 years later, as many as 120,000 North American students are participating in entrepreneurship courses (Katz, 2003). Not only in the USA but also in German-speaking countries, strong growth in entrepreneurship courses and professorships can be observed (Klandt, 2004).

In the context of this dissertation entrepreneurship education programme (EEP) is defined: "... as any pedagogical programme or process of education for entrepreneurial attitudes and skills, which involves developing certain personal qualities. It is therefore not exclusively focused on the immediate creation of new businesses." (Fayolle et al., 2006: 702).

Linan (2004) found that there are four different kinds of entrepreneurship education programmes. The first, "Entrepreneurial Awareness Education", aims to increase knowledge about entrepreneurship and to influence attitudes that may impact intentions. The second category is described as "Education for Start- Up". These programmes are geared toward people who generally already have an entrepreneurial idea and need to solve practical questions about becoming self- employed. The third category, "Education for Entrepreneurial Dynamism", focuses on people who are already entrepreneurs and want to promote dynamic behaviours after the start-up phase. The last category "Continuing Education for Entrepreneurs" describes life-long learning programmes and focuses on experienced entrepreneurs. (Linan, 2004).

Along with the different types of entrepreneurship education, there are four research streams of entrepreneurship education research (Bechard & Gregoire, 2005). The first stream focuses on the role of entrepreneurship programmes on the individual and society. The second research stream is concerned with the systemization of entrepreneurship programmes, for example, the use of multimedia environments or curriculum development. The third stream researches the content and its delivery in entrepreneurship programmes, and the fourth stream concentrates on the needs of individual participants in entrepreneurship programmes (Bechard et al., 2005). According to this categorization, the context of this dissertation can be positioned in the first research stream, the analysis of the impact of an entrepreneurship programme.

2.3.1. Historical Perspectives

Katz (2003) developed the most comprehensive chronology of entrepreneurship education. While he included economic and agricultural literature and experiences dating back to 1876, and others have touted the Harvard courses taught in 1947, the reality of entrepreneurship education as a force in business schools began in the early 1970s. USC launched the first MBA concentration in entrepreneurship in 1971 followed by the first undergraduate concentration in 1972. From there, the field of entrepreneurship began to take root. By the early 80s over 300 universities were reporting courses in entrepreneurship and small business and by the 90s that number grew to 1,050 schools (Solomon, et al., 1994). Therefore, the real emergence of entrepreneurship education took place in the 1980's.

In 1987, Zeithaml & Rice reviewed some of the pioneering universities of entrepreneurship education in America. They concluded with several suggestions for the future of education and research in the entrepreneurship domain including:

> The opportunity now exists for entrepreneurship programs to evolve in a manner that is consistent with recent conceptualizations of entrepreneurship. A second, compatible direction some programs may wish to take would involve a heavy commitment to research. A third direction that appears

> reasonable would be research on the teaching methods commonly used in entrepreneurship programs. Finally, some evidence exists that entrepreneurship courses, programs, and centers may be a source of funds for the university or college. Zeithaml and Rice contended that education in entrepreneurship covered the entire scope of business administration, and as such was the closest approach to the original concept of management education available in universities at that time. With the continued increasing fragmentation of business education into narrow specializations, they believed that the a field of study that takes a broad, integrative, pragmatic, rational approach to business would find itself increasingly popular with those who aspire to be entrepreneurs, managers, and top executives.

Also in 1987, Ronstadt proposed that entrepreneurial programs should be designed so that potential entrepreneurs are aware of barriers to initiating their entrepreneurial careers and can devise ways to overcome them. Ronstadt (1987) proposed a two-continuum model of curricular design for entrepreneurship education. His "structured-unstructured" continuum addressed various methods of transferring information and expertise. Among the methods he discussed were lectures, case studies, and feasibility plans. He labeled his second continuum "entrepreneurial know-how/entrepreneurial know-who." This continuum represented the belief that success in entrepreneurship is dependent not only on knowledge but the network of individuals with whom the entrepreneur is connected. Ronstadt contended that an effective program must show students "how" to behave entrepreneurially and should also introduce them to people who might be able to facilitate their success.

Four years later, Robinson & Haynes (1991) conducted a survey of universities with enrollments of at least 10,000 students to determine the extent of the growth in entrepreneurship education. While significant growth was cited, several challenges were pointed out including:

> The challenge that lies in developing existing programs and personnel, thus improving the quality of the field. There are several obstacles that need to be overcome to facilitate the development of quality in the field. At the heart may be the lack of good solid theoretical bases upon which to build pedagogical models and methods. Another obstacle is the lack of formal academic programs, representing a lack of commitment on the part of institutions. A third obstacle is the maintenance of student interest in the academic programs. Robinson and Haynes believed that entrepreneurship education had come a long way in the past 20 years, yet there were several weak points in the field that were identified through their research. Of primary concern is the lack of depth of most of the programs that were then started. Further growth would depend upon how new programs were integrated with and nurtured by the established entrepreneurship education system.

2.3.2. Influence of Entrepreneurship Education

If you ask a self-made entrepreneur whether entrepreneurship can be taught, he will most probably answer "No". If you ask the 5000+ entrepreneurship professors worldwide and the millions of students who join their entrepreneurship classes, you will most probably receive a different answer (Katz, 2007).

Education in general is confirmed to have a positive impact on entrepreneurship (Robinson & Sexton, 1994). Robinson et al. (1994) found in their study that there is a strong relationship between education and the probability of becoming an entrepreneur and the probability of having success as an entrepreneur. However, they did not differentiate between the various kinds of education and disregarded the possibility of specifically designed entrepreneurship education programmes.

The overview of impact studies in entrepreneurship education strongly indicates a positive impact of entrepreneurship education, with 33 studies reporting a positive impact, six with mixed results, and only two reporting a negative impact of entrepreneurship education. The positive impact of entrepreneurship education is further complemented by meta-studies of entrepreneurship education (Bechard et al.,2005; Dickson, Solomon, & Weaver, 2008;

"Entrepreneurship is a dynamic process of vision, change, and creation. It requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions. Essential ingredients include the willingness to take calculated risksin terms of time, equity, or career; the ability to formulate an effective venture team; the creative skill to marshal needed resources; and fundamental skill of building solid business plan; and finally, the vision to recognize opportunity where others see chaos, contradiction, and confusion." (Kuratko & Hodgetts, 2004, p. 30).

Entrepreneurship is more than the mere creation of business. Although that is certainly as important aspect, it's not the complete picture. The characteristics of seeking opportunities, taking risks beyond security, and having the tenacity to push an idea through to reality combine into a special perspective that permeates entrepreneurs. An "entrepreneurial perspective" can be developed in individuals. This perspective can be exhibited inside or outside an organization, in profit or not-for-profit enterprises, and in business or non-business activities for the purpose of bringing forth creative ideas. Thus, entrepreneurship is an integrated concept that permeates an individual's business in an innovative manner. It is this perspective that has revolutionized the way business is conducted at every level and in every country. Inc. magazine reported on the cover of one issue some time ago that "America is once again becoming a nation of risk takers and the way we do business will never be the same." So it is. The revolution has begun in an economic sense, and the entrepreneurial perspective is the dominant force.

The past decade has witnessed the powerful emergence of entrepreneurial activity in the United States. Many statistics illustrate this fact. For example, during the past ten years, new business incorporations averaged 600,000 per year. Although many of these incorporations may have previously been sole proprietorships or partnerships, the trend still demonstrates the popularity of venture activity, whether it was through start-ups, expansions, or development. More specifically, 807,000 new small firms were established in 1995, an all-time record. Since 1980, Fortune 500 companies have lost more than 5 million jobs, but more than 34 million new jobs have been created. In 1996, small business created 1.6 million new jobs. Fifteen percent of the fastest-growing new firms (that is , "gazelles") accounted for 94 percent of the net job creation, and less than one-third of these gazelles were involved in high technology. Small businesses (that is, those with fewer than 500 employees) employ 53 percent of the private work force and account for 47 percent of sales and 51 percent of private sector gross domestic product (GDP). Sixteen percent of all U.S. firms have been in existence for less than one year. Sixty- seven percent of all new inventions are created by smaller firms (Reynolds, Hay, and Camp, 1999).

Given these findings, it would seem safe to assume that new firms with employees may number more than 600,000 in a given year, and that another couple of million new business entities in the form of self-employment may also come into being each year. Approximately one new firm with employees is established every year for every 300 adults in the United States. As the typical new firm has at least two owners-managers, one of every 150 adults participates in the founding of a new firm each year. Substantially more one in 12 are involved in trying to launch a new firm. The net result, then, is that the United States has a very robust level of firm creation. Among the 6 million establishments (single- and multi-site firms) with employees, approximately 600,000 to 800,000 are added each year. That translates into an annual birth rate of 14 to 16 per 100 existing establishments (Reynolds, Hay, and Camp, 2000).

The United States has achieved its highest economic performance during the last ten years by fostering and promoting entrepreneurial activity. According to Kuratko & Hodgetts (2004) the U.S. success has at least three entrepreneurial components. First, large firms that existed in mature industries have adapted, downsized, restructured, and reinvented themselves during the 1990s and are now thriving. Large businesses have adopted and learned and become more entrepreneurial. As large firms have become learner, their sales and profits have increased sharply. For example, General Electric cut its work force by 40 percent, from more than 400,000 20 years ago to fewer than 240,000 workers in 1996, while sales increased fourfold, from less than $20 billion to nearly $80 billion over the same period. This goal was accomplished in many cases by returning to the firm's "core competencies" and by contracting out functions formerly done in-house to small firms.

Second, while these large companies have been transforming themselves, new entrepreneurial companies have been blossoming. Twenty years ago, Nucor Steel was a small steel manufacturer with a few hundred employees. It embraced a new technology called thin slab casting, allowing it to thrive while other steel companies were stumbling. Nucor grew to 59,000 employees, with sales of $3.4 billion and a net income of $274 million. Newer entrepreneurial companies some of which did not exist 25 years ago have collectively created 1.4 million new jobs during the past decade.

Third, thousands of smaller firms have been founded, including many established by women, minorities, and immigrants. These new companies have come from every sector of the economy and every part of the country. Together these small firms make a formidable contribution to the economy, as many firms have hired one or two employees together to create more than 1 million net new jobs during the decade of the 1990s.

Entrepreneurial firms make indispensable contributions to the U.S. economy. They are an integral part of the renewal process that pervades and defines market economies. Entrepreneurial firms play a crucial role in the innovations that lead to technological change and productivity growth. In short, they are about change and competition because they change market structure. The U.S. economy is a dynamic organic entity always in the process of "becoming," rather than an established one that has already arrived. It is about prospects for the future, not about the inheritance of the past (Kuratko & Hodgetts, 2004).

Entrepreneurial firms are the essential mechanism by which millions enter the economic and social mainstream of American society. Small businesses enable millions of people, including women, minorities, and immigrants, to access the American Dream. The greatest source the U.S. strength has always been the American Dream of economic growth, equal opportunities, and upward mobility. In this evolutionary process, entrepreneurship plays the crucial and indispensable role of providing the "social glue" that binds together both high- tech and "Main Street" activities (Small Business Administration, 1998). Yet, Stevenson (2000) warned, "with benefits of hindsight, the opportunity of the last twenty years is evident. An entrepreneurial revolution has occurred. Some of the early volunteers have had a most exciting time. The danger lies in presuming that the future is without challenge."

2.3.3. Themes of Entrepreneurship Education

As entrepreneurship education grows, it is important to note that research and educational developments that have occurred over the past few years. The major themes that characterize recent research about entrepreneurs and new-venture creation can be summarized as follows:

1. The entrepreneurial and managerial domains are not mutually exclusive but overlap to a certain extent. The former is more opportunity-driven, and the latter is more resource- and "conversation" – driven (Stewart, et al., 1999).

2. Venture financing, including both venture capital and angel capital financing as well as other innovative financing techniques, emerged in the 1990s with

unprecedented strength, fueling another decade of entrepreneurship (Shepherd & Zacharakis, 2001 & 2003).

3. Intrapreneurship (corporate entrepreneurship) and the need for entrepreneurial cultures have gained much attention during the past few years (Zahra, Kuratko, & Jennings, 1999; Kuratko, Ireland, & Hornsby, 2001; Morris & Kuratko, 2000).

4. Entrepreneurial strategies have been identified that show some important common denominators, issues, and trade-offs between entrepreneurship and strategy (Hitt, Ireland, Camp, & Sexton, 2001).

5. The great variety among types of entrepreneurs and the methods they have used to achieve success have motivated research on the psychological aspects that can predict future success (Kickul & Gundry, 2002).

6. The risks and trade-offs of an entrepreneurial career—particularly its demanding and stressful nature—have been subject of keen research interest relevant to would-be and practicing entrepreneurs alike (McGrath, et al., 1992).

7. Women and minority entrepreneurs have emerged in unprecedented numbers. They appear to face obstacles and difficulties different from those that other entrepreneurs face (Gundry & Welsch, 2001; Chaganti & Greene, 2002; and Greene, P.G, Hart, M.M., Gatewood, E.J., Brush, C.G., & Carter, N.M, 2003.).

8. The entrepreneurial spirit is universal, judging by the enormous growth of interest in entrepreneurship around the world in the past few years (Peng, 2001; and McDougall, P.P., & Oviatt, B.M., 2003).

9. The economic and social contributions of entrepreneurs, new companies, and family businesses have been shown to make immensely disproportionate contributions to job creation, innovation, and economic renewal, compared with the contributions that the 500 or so largest companies make (Upton, Teal, & Felan, 2001; and Chrisman, J.J., Chua, J.H., & Sharma, P., 2003).

10. Entrepreneurial education has become one of the hottest topics at U.S. business and engineering schools. The number of schools teaching a new- venture or similar course has grown from a few as two dozen 20 years ago to more than 1,600 at this time (Solomon, et al., 2002; Katz, 2003).

Additionally, a number of major academic institutions have developed programs in entrepreneurial research, and every year Babson College conducts a symposium titled "Frontiers in Entrepreneurship Research" on one of the campuses. Since 1981 the conference has provided an outlet for the latest developments in entrepreneurship. In 2000, the National Consortium of Entrepreneurship Centers (NCEC) was founded for the purpose of continued collaboration among the established entrepreneurship centers, as well as the newer emerging centers, to work together to share information, develop special projects, and assist each other in advancing and improving their centers' impact. The consortium also established the 21st Century Entrepreneurship Research Fellows.

This growing collection of scholars in the field of entrepreneurship have developed a mission to identify leading edge research issues and domains and develop high profile research initiatives that demonstrate the highest level of scholarship to entrepreneurship centers and the academic community at large. The consortium has become the focal point for the Entrepreneurship Centers across the United States to continue the advancement of entrepreneurial excellence. Most of the university centers for entrepreneurship have focused on three major areas: (1) entrepreneurial education, (2) outreach activities with entrepreneurs, and (3) entrepreneurial research. These centers have been and will most likely continue to be the leaders in developing entrepreneurial research. Today, the trend in most universities is to develop or expand entrepreneurship programs and design unique and challenging curricula specifically designed for entrepreneurship students, more significantly, national recognition is now being given to the top entrepreneurial schools through awards such as the USASBE National Model Programs and the national rankings such as those done by U.S. News and World Report and Entrepreneur Magazine. With all of those factors in mind, we now examine the emergence of entrepreneurship education.

Today's current younger generation is sometimes referred to as Generation X because they feel "X-ed" out of traditional opportunities. This generation of the twenty-first century should become known, however, as Generation E because they are becoming the most entrepreneurial generation since the Industrial Revolution. As many as 5.6 million Americans younger than age 34 are actively trying to start their own businesses today. One-third of new entrepreneurs are younger than age 30, more than 60 percent of 18- to 29-year-olds say they want to own their own businesses, and nearly 80 percent of would-be entrepreneurs in the United States are between the ages of 18 and 34! (Ernst & Young, 2000).

With those explosive numbers have come similar increases in the field of entrepreneurship education. The recent growth and development in the curricula and programs devoted to entrepreneurship and new venture creation has been remarkable. The number of colleges and universities that offer courses related to entrepreneurship has grown from a handful in the 1970s to 1,600 in 2003 (Katz, 2003). In the midst of this huge expansion of courses remains the challenge of teaching entrepreneurship more effectively.

It is becoming clear that entrepreneurship, or certain facets of it, can be taught. Business educators and professionals have evolved beyond the myth that entrepreneurs are born, not made. Peter Drucker, recognized as one of the leading management thinkers of our time, has said, "The entrepreneurial mystique? It's not magic, it's not mysterious, and is has nothing to do with the genes. It's a discipline. And, like any discipline, it can be learned" (Drucker 1985). Additional support for this view comes from a ten-year (1985-1994) literature review of enterprise, entrepreneurship and small business management education that reported "…most of the empirical studies surveyed indicated that entrepreneurship can be taught, or at least encouraged, by entrepreneurship education" (Gorman, Hanlon, & King, 1997, p. 63).

Given the widely accepted notion that entrepreneurial ventures are the key to innovation, productivity, and effective competition (Plaschka and Welsch, 1990); the question of whether entrepreneurship can be taught is obsolete. Ronstadt (1987) posed the more relevant question regarding entrepreneurial education: what should be taught and how should it be taught?

2.3.4. Entrepreneurship Education Today

Today entrepreneurship education in America has exploded to more than 2,200 courses at over 1,600 schools, 277 endowed positions, 44 refereed academic journals, mainstream management journals devoting more issues (some special issues) to entrepreneurship, and over 100 established and funded centers. The discipline's accumulated "wealth" has grown to exceed $440 million with over 75 percent of those funds accruing since 1987 (Katz, 2003).

Solomon, Duffy and Tarabishy (2002) conducted one of the most comprehensive empirical analyses on entrepreneurship education. In their review of entrepreneurship pedagogy, they stated, "A core objective of entrepreneurship education is that it differentiates from typical business education. Business entry is fundamentally a different activity than managing a business (Gartner and Vesper, 1994); entrepreneurial education must address the equivocal nature of business entry (Gartner, Bird, and Star, 1992). To this end, entrepreneurial education must include skill building courses in negotiation, leadership, new product development, creative thinking and exposure to technological innovation (McMullen and Long, 1987; Vesper and McMullen, 1988)

Other areas identified as important for entrepreneurial education included awareness of entrepreneur career options (Hill, 1988; Donckels, 1991); sources of venture capital (Vesper and McMullan, 1988; Zeithaml and Rice, 1987); idea protection (Vesper and McMullan, 1988); ambiguity tolerance (Ronstadt, 1987); the characteristics that define the entrepreneurial personality (Hills, 1988; Scott and Twomey, 1988; Hood and Young, 1993) and the challenges associated with each stage of venture development (McMullan and Long, 1987; Plaschka and Welsch, 1990)." More specifically they found "experiential learning" widespread and diverse in its application from the literature. The reported types of learning tools included: business plans (Hills, 1988; Vesper and McMullan, 1988; Preshing, 1991; Gartner and Vesper, 1994; Gormal et al., 1997); student business start-ups (Hills, 1988; Truell et al., 1998); consultation with practicing entrepreneurs (Klatt, 1988; Solomon et al., 1994); computer simulations (Brawer, 1997); behavioral simulations (Stempf, et al., 1991); interviews with entrepreneurs, environmental scans (Solomon, et al., 1994); "live" cases (Gartner and Vesper, 1994); field trips, and the use of video and films (Klatt, 1988). Pedagogy is changing based on a broadening market interest in entrepreneurial education.

New interdisciplinary programs use faculty teams to develop programs for the non-business student and there is a growing trend in courses specifically designed for art, engineering and science students. In addition to courses focused on preparing the future entrepreneur, instructional methodologies are being developed for those who manage entrepreneurs in organizations; potential resource people (accountants, lawyers, consultants) used by entrepreneurs; and top managers who provide vision and leadership for corporations which must innovate in order to survive (Block and Stumpf, 1992). Educators are challenged with designing effective learning opportunities for entrepreneurship students. Sexton and Upton (1984) suggested that programs for entrepreneurship students should emphasize individual activities over group activities, be relatively unstructured, and present problems that require a "novel solution under conditions of ambiguity and risk." Students must be prepared to thrive in the "unstructured and uncertain nature of entrepreneurial environments" (Ronstadt, 1990).

This kind of experience is offered to students in innovative entrepreneurship programs recognized by the United States Association for Small Business and Entrepreneurship (USASBE). Highlights of these programs can be found in Appendix A. These awarded model programs include undergraduate major and concentrations, graduate-level programs, innovative pedagogy, and specialized programs. All of these universities have produced entrepreneurship education that has had real impact on students and a lasting impact on the entrepreneurship field. However, Vesper (1999) warned that there was "unfinished business" left from the 20th Century. He saw this in terms of legitimacy, paradigms, content, and balance of research, autonomy, and permanence. While it can be argued that legitimacy has been attained in the current state of entrepreneurship education, there are critical challenges that lie ahead.

2.3.5. The Challenges

Stevenson (2000) stated, "Entrepreneurial educators must be more than cheerleaders. We can no longer simply say 'entrepreneurship is different.' Entrepreneurship is now a part of the mainstream. Perhaps the greatest danger of all is that the hardy band of entrepreneurial scholars will become like many successful businesses. Business and scholars fail by not valuing change. Guarding the past, espousing orthodoxy and refusing to see the wisdom inherent in the challenges of the young and inexperienced will lead to the same problems in education as in business."

With that thought in mind, this research examines the current challenges confronting entrepreneurship education. Using Solomon, et al., (2002) and Katz's (2003) research studies, five specific issues appear on the forefront.

1 Maturity of the Field in U.S. Business Schools

Katz (2003) argues that the presence of entrepreneurship courses in all AACSB business schools as well as over 1,000 non-accredited schools points to a maturing of the entrepreneurship field. He adds the infrastructure numbers of 300 endowed positions, 100 centers, 44 academic journals, and the "legitimization" of the field by the mainstream media (Business Week and U.S. News & World Report). This is all true and I agree that it points to legitimization but I respectfully disagree about maturity. The skirmishes and small battles are being won in business schools because of the sheer power of the already mentioned numbers and the tenacity and passion of individual faculty members. However, the "real war" continues to wage for complete respectability and leadership. How many full departments of entrepreneurship exist? How many young faculty are being granted tenure purely for their research and teaching in entrepreneurship? How many deans are rising from the ranks of entrepreneurship faculty? How many business schools are ranking the pure entrepreneurship journals on their "A" list? Please, legitimacy—yes; maturity—no! This is the time for all of those questions to be answered in the positive. Real maturity of the entrepreneurship field has yet to be experienced.

2. Research/Publications Dilemma

Katz (2003) poses the dual problems of a publications glut—too many journals (44) chasing too few quality articles; and the push for leading-edge entrepreneurship researchers to publish in the "mainstream management journals." I agree with both of these points, however, I see them as opportunities rather than problems. First, it is indeed gratifying to see Academy of Management Journal, Academy of Management Review, Academy of Management Executive, Strategic Management Journal, and the Journal of Management publishing more entrepreneurship research. I believe that trend should be encouraged to continue. The larger issue centers around business schools counting and respecting the mainstream entrepreneurship journals. While it is beginning to happen, this process is slow and agonizing for our faculty.

Yet, this challenge may be the "linking pin" to the publication's dilemma. If we, as entrepreneurship faculty, push for the ranking of our respected journals— Journal of Business Venturing, Entrepreneurship Theory &Practice, Journal of Small Business Management, etc.—then more quality research venues will be open for young faculty to legitimately pursue. The careers of young faculty may very well ride on this challenge. There exists the simple fact that research drives business schools. Therefore, research in entrepreneurship should be an accepted and respected part of this drive. We are beyond legitimacy D it is time for leadership.

3. The Faculty Pipeline Shortage

Again, Katz (2003) points to two simultaneous problems. First, is the shortage of entrepreneurship faculty at every academic rank, and second, the lack of PhD programs to provide pure entrepreneurship faculty. It is true that we need more business schools to develop sound PhD programs in entrepreneurship. Taking the lead from Colorado, Indiana, Georgia, and Case-Western Reserve, more of our leading business schools need to establish programs. However, until more programs develop, faculty can be trained ("retreaded") if we make the effort. For years, Babson College has produced the SEE program to develop faculty. Dr. Mike Morris at Syracuse University has developed an "Experiential Classroom" for entrepreneurship education. It has produced remarkable results in helping faculty move into this field. These programs must be continued, supported, and enhanced. Organizations such as USASBE, the National Consortium of Entrepreneurship Centers, and the Academy of Management's Entrepreneurship Division, along with the Coleman Foundation and the Kauffman Foundation need to support this effort as part of their mission. If the business schools will not develop the PhD programs then the entrepreneurship faculty must develop the needed education themselves. We have pioneered an entire academic field that has grown exponentially in thirty years! Why should we stop short now?

The other issue, however, is the lack of faculty at every rank. This challenge relates back to the respectability of entrepreneurship research and journals at our business schools. Resolve that issue and more entrepreneurship faculty will receive tenure and promotion. Thus, the ranks will grow in number rather than shrink. Once again, entrepreneurship is legitimized but not respected. It is time for the entrepreneurship field to move into a leadership position within our business schools.

4. The Failure to Apply Technology

Solomon, et al., (2002) found a negative trend with regards to technology in their national survey on entrepreneurship education:

> "A surprising trend emerged from the data regarding entrepreneurship education and the use of technology. Of those that responded to the survey only 49 percent indicated that they offer information on the web regarding entrepreneurship and new venture creation to students and entrepreneurs. Also, only 30 percent of those who responded indicated that they offer on-line management and technical assistance for students and entrepreneurs. Finally, 21 percent of the respondents indicated they use distance-learning technologies in their entrepreneurship education courses or concentrations."

Entrepreneurship cannot be a field that succumbs to stagnation. It must recognize and apply technologies in the educational setting. In many respects entrepreneurship education may actually transform the educational setting. For example, some universities are applying unique technological applications such as the George Washington University. They developed a software tool entitled, "Prometheus." In addition to offering students and teachers the opportunity to interact via e-mail, bulletin boards and live discussion formats, Prometheus and other course management programs also integrate multimedia options into the course. Students can access a course site, download a posted journal article, watch an instructional video or DVD and return a completed assignment from any Internet connections. Educators can follow up with individualized online coaching and feedback to students.

Another example is Ball State University's award winning MBA in Entrepreneurship via television (Kuratko, 1996). The entrepreneurship classes are taught in a state-of-the-art television studio. Students on campus attend class in the studio while off-campus students attend class at designated reception sites. A television signal is transmitted by satellite to sites in Indiana, Kentucky, and New Jersey. This closed-circuit television network is called the Indiana Higher Education Telecommunications System (IHETS). Some businesses are reception sites for distance classes allowing employees to work full-time at their jobs by day and part-time toward an MBA degree at night and early morning. Both the on-campus and the distance learning MBA programs are fully accredited by AACSB International-The American Assembly of Collegiate Schools of Business. Through interactive technologies the entrepreneurship degree is delivered at convenient locations and at times conducive to working professionals. One of the first universities to offer an MBA degree by distance education, Ball State University is a leader in using an innovative approach in delivering a degree to those seeking to learn and advance in the contemporary business environment. There is no question that this mode of delivering entrepreneurship education will continue to expand in the 21st century.

5. *Avoiding Stagnation Due to Complacency*

Katz (2003) contends that because the field has matured, there is now a danger of being "complacent with success." He argues that as entrepreneurship educators, we may be forgetting our earlier "lean and mean" mindset that helped fuel the tremendous growth of our field. There is truth albeit without proof there was ever a "lean and mean" mindset.

2.3.6. The Future

"Clearly, for entrepreneurship education to embrace the 21st century, professors must become more competent in the use of academic technology and also expand their pedagogies to include new and innovative approaches to the teaching of entrepreneurship. For example, the use of video conferencing and streaming of video case studies show promise as viable uses of educational technology. The ability to bring new 'live' perspectives from different geographic locations and schools will add to the richness of the educational experience. Cyberspace has virtually erased time and distance transforming the theory of education into the practice of implementation" (Solomon, Duffy, Tarabishy, 2002, pp. 82-83).

Entrepreneurship is the new academy and it's about continual innovation and creativity. It is the future of business schools and it should begin to move into a leadership role. Today, the words used to describe the new innovation regime of the 21st Century are: Dream, Create, Explore, Invent, Pioneer, and Imagine! Kevin Kelly in his article "New Rules for the New Economy," stated, "Wealth in the new regime flows directly from innovation, not optimization; that is, wealth is not gained by perfecting the known, but by imperfectly seizing the unknown."

Entrepreneurship educators must have the same innovative drive that is expected from entrepreneurship students. Vesper (1999) made us think out of the box when he stated, "Entrepreneurship in universities has so far been developed as an add-on to business education, first as an elective course, then more courses, and finally as a concentration, major or program. So far it has largely been tucked in and around the existing core. Its teachers presently must be approved by established faculty from other fields. Its courses currently must fit into the existing curriculum, grading system, and calendar. It serves the students who, for the most part, apply for a conventional business education. But what might be different if we had started first with a school of entrepreneurship and then added a few courses for a concentration or major in middle management?" An interesting thought and certainly a way to think about the entrepreneurship discipline in a different way. The noted author on creativity, Dale Dauten, once said, "different is not always better, but better is always different!"

Meyer (2001) stated, "There can be no lethargy if we are to move the entrepreneurship cause to the next level. The skeptics are still alive and well. Renewed energy is needed to stimulate institutional reform and continue to establish entrepreneurship education legitimacy. We need to attract and develop the next generation of teachers. The war is not over. Vigilance and persistence are still the order of the day. And it is worth the effort."

From a development perspective entrepreneurship has recently come to be seen as a viable alternative to formal employment in Africa. Much development aid is therefore being focused on the ways in which to unleash the potential of the African youth through entrepreneurship, which it is believed will lead to private sector-led growth and improve the competitiveness of the African economies (see for example, the African Commission, 2009; UNDP, 2004). Young people are regarded as an abundant resource in Africa and "By 2010 youth will account for 28 percent of the population, making Sub-Saharan Africa the 'youngest' region in the world" (Garcia & Fares, 2008). However, estimates indicate that youths comprise as much as 40-65 % of the urban unemployment in many African countries (Chigunta et al., 2005).

2.3.7. Entrepreneurship Education in Africa

Chigunta et al. (2005:15) argue that "there is little empirical data on how far the perceived benefits of youth entrepreneurship are realized in reality in Africa … it is not clear what form of youth entrepreneurship governments seek to promote". Further, to date there have been few previous attempts to view entrepreneurship from a youth perspective and therefore in- depth research and concrete data is lacking, especially in relation to the ways in which youths are creating employment through entrepreneurship, or the constraints that they face in doing so (Schoof, 2006). From a development perspective therefore it is imperative to address the specific problem of creating employment for youth through entrepreneurship.

In a comparative study on entrepreneurship in Ghana, Kenya, and Nigeria, Benzing and Chu (2009) argue that individuals face greater pressure from 'push' factors than 'pull' factors in their motivation for becoming entrepreneurs. In terms of 'push' factors, an individual can be 'pushed' into starting a business due to external negative conditions such as unemployment and retrenchment, a low-paying job with little upward mobility and /or in order to avoid supervision (Curran & Blackburn, 2001). On the other hand, 'pull' factors, such as the desire to be one's own boss, to increase personal wealth or to use one's experience and knowledge, can also attract an individual to entrepreneurship (Birley & Westhead, 1994; Burke, et al., 2002). Similarly, research from the Global Entrepreneurship Monitor (GEM), shows that although countries in the global South exhibit high entrepreneurial activity, a larger number of individuals become entrepreneurs because they are pushed into it due to a lack of employment opportunities elsewhere (necessity entrepreneurship) and not because there is an obvious business opportunity that they want to explore (opportunity entrepreneurship) (Bosma et al., 2008).

Olomi (2009) presents another way of addressing the dichotomy between necessity and opportunity entrepreneurs in his study of small enterprises in Tanzania. Olomi (2009) argues that one can distinguish between two reasons for starting an enterprise, that is, enterprises are started out of economic necessity or as a career choice. When an enterprise is started out of economic necessity, the typical owner-managers are neither committed to the business nor to an entrepreneurial career, and are therefore categorized as hangers-on. The second category consists of those who have started enterprises for the purpose of doing business, and are referred to as tied to a business. In this case the owner-manager is devoted to the business but not to an entrepreneurial career; such a person is likely to have another occupation or be looking for another career. Movement between categories is possible and if a person who is tied to a business leaves his/her job to commit fully to the enterprise, then that person becomes tied to an entrepreneurial career. In the latter category some people devote themselves to an entrepreneurial career even before they have established an enterprise; they have decided to pursue a career as an entrepreneur and are not necessarily fixed on a particular business. Olomi (2009) further notes that the transition phase from hanging on to entrepreneurship for economic reasons to being fully committed to the business, and later the entrepreneurial career depends on the ability of the owner- manager proactively to seek growth. It is therefore only a person who is continuously seeking growth that can be regarded as an entrepreneur (Olomi 2009).

Rather than addressing only one aspect of entrepreneurship, such as the traits of individual entrepreneurs, or concentrating on what entrepreneurs do, or determining whether they are opportunity or necessity entrepreneurs, Shane and Venkataraman (2000) posit entrepreneurship to be the nexus of two phenomena, namely, the presence of opportunities and of enterprising individuals. The following section will therefore address entrepreneurial opportunity.

In recent years there has been a trend in the entrepreneurship literature for positing opportunity as a fundamental aspect of entrepreneurship (Gartner, et al., 2003; Shane & Venkataraman, 2000; Short et al., 2010). Overall, the literature draws attention to two popular schools of thought, the first contends that opportunities are discovered, and the latter that they are created (Alvarez & Barney, 2007; Short et al., 2010). According to Scott (1992:141) the controversy among researchers basically centres on how opportunities should be studied, and this is essentially determined by whether environments are best understood employing subjective or objective measures (in Gartner et al., 2003). Economic approaches generally refer to a priori opportunities waiting to be discovered by the entrepreneur. According to the second school of thought opportunities are created. Dimov (2007b:561) argues that nowadays it is commonly accepted in the research community that entrepreneurial opportunities do not simply "jump out" in a final ready-made form but emerge in an iterative process of shaping and development.

Economic approaches generally refer to entrepreneurial opportunities as largely exogenous (Foss et al., 2008) objective phenomena existing in time and space, and which may not be known to all people at all times (Shane & Venkataraman, 2000). Broadly defined opportunity discovery is 'the chance to meet a market need (or interest or want) through a creative combination of resources to deliver superior value' (Schumpeter, 1934; Kirzner, 1973 in Ardichvili et al., 2003). According to Kirzner (1997) opportunity discovery is based on surprise or luck and relies on alertness (in Patel & Fiet, 2009; Shane and Venkataraman, 2000).

Alertness presupposes that discovery of opportunities cannot be anticipated and must therefore occur accidentally (Kirzner, 1997 in Fiet and Patel, 2009). However, Kirzner (1973) argues that in order for opportunities to be known they must first be recognised by alert (or knowledgeable and attuned) individuals (in Companys & McMullen, 2007:304). Although opportunities exist a priori their discovery is reliant to a certain extent on the interpretation framework of the entrepreneur, opportunity recognition is thus largely a process of discovering something already formed. Ardichvili et al. (2003:115) argue that "People do not search for opportunities, but, rather happen to recognise the value of new information, which they happen to receive". Discovery may be the result of a heightened awareness of the entrepreneur or a 'state of passive search' (Ibid). According to Fiet and Patel (2009:503) Kirzner's argument for alertness is "primarily an argument against systematic search" as discovery depends on being alert which is typically interpreted as to "notice without search" and implies that deliberate search is impossible.

With reference to opportunities as created, Ardichvili et al. (2003:109) build on Kirzner's thoughts of discovering something already formed and argue that an understanding of opportunity discovery as a development process, as a continuous, proactive process is essential to the formation of a business. Ardichvili et al. (2003), posit that opportunity development does not happen by "accident" but is rather a process of actively searching for opportunities, and hereafter developing a particular opportunity further. This process is dependent on the entrepreneur's traits, social networks and prior knowledge (which precede or) are necessary for entrepreneurial alertness to opportunities, and so while "elements of opportunities may be recognized, opportunities are made, not found" (Ardichvili et al., 2003:106). Dimov (2007a) posits that opportunities are "creative ideas that have been vetted through an evaluative process" this illustrates that opportunity development involves creativity and evaluation, and therefore the importance of prior knowledge and learning cannot be underestimated. The ability to recognise opportunity is dependent on cognitive processes or stocks of information because new information or knowledge requires complementary resources such as prior knowledge in order to be useful (Sarasvathy, et al., 2003) as "People tend to notice information that is related to information they already know" (Von Hippel, 1994 in Ardichvili et al., 2003:114). Therefore prior knowledge is a facilitator of absorptive capacity, which is necessary for an individual to make sense of new information (Cohen and Levinthal, 1990 in Sarasvathy et al., 2003; Shane, 2000).

The concept of prior knowledge is given much weight in the literature on opportunity discovery. Ardichvili et al. (2003), refer to prior knowledge as, prior knowledge of markets, prior knowledge of ways to serve markets, and prior knowledge of customer problems. Sigrist (1999) introduces two domains of prior knowledge (in Ardichvili et al., 2003). Domain 1 refers to knowledge accumulated from a special interest where the entrepreneur has spent significant time and effort engaging in autodidactic learning that advances and deepens his or her capabilities of the topic of interest. Domain 2 refers to knowledge accrued over the years while working in a certain job. Although prior knowledge is an important facilitator of opportunity development, Dimov (2007b) argues that prior knowledge may influence the generation and nature of one's ideas, however it may not in itself be a sufficient condition for explaining the further development of an individual's opportunity ideas. There are other factors influencing such a development since the entrepreneur must guess about the prospect of a variety of things and is therefore forced to form expectations based on hunches, intuition, and on limited information.

Fiet et al. (2005), argue that systematic search replaces the search for unknown ideas with the search of known information channels. Systematic search is based on the idea that cognitive barriers, such as prior knowledge and bounded rationality constrain effective search (Fiet & Patel, 2009:503, Shane and Venkataraman 2000). However, these same barriers may also shape what can be known, and how to search for information. The rationale for the approach is that "discovery depends on a fit5 between an entrepreneur's prior, specific knowledge and a particular venture idea, which may be discovered through systematic search" (Fiet & Patel, 2009: 503). This approach is based on informational economics and concerned with a constrained, systematic search within a known domain (Fiet & Patel, 2009). Fiet and Patel (2008) distinguish between specific knowledge and general knowledge. The former refers to knowledge that an individual has and which is linked to occupational knowledge, and knowledge that can be accessed through networks and the social capital embedded in these. The latter refers to knowledge widely available and which can be acquired at less cost from the Internet or newspapers, for example.

The challenge for entrepreneurs is to capitalize on specific knowledge, whilst spending less time and money on identifying general information. In a study of opportunity discovery two groups of graduate students in entrepreneurship where selected, the one group had to apply a systematic search and the other group had to rely on alertness (Ibid.). The results show that the group which applied a systematic search "tended to recognize a problem that existed in the market as a first step in making a discovery". Further, this group also "tended to consider ideas that were an extension of an existing product or service" (Fiet & Patel, 2008: 224). The other group which relied on alertness, tended to "recognize a problem that they personally encountered as a first step in making a discovery" (Ibid.). This group founded ideas based on personal problems and ideas that were not market driven, but rather motivated by problems in their personal experience.

It is apparent from the above review that there exists a whole range of different arguments about opportunities, that is, opportunities simply exist out there waiting to be found, or they must be found through a creative process which includes an active search and planning process. However, according to Short et al. (2010) a middle ground position is gaining ground in the entrepreneurship literature where it is contended that some opportunities are discovered whereas others are created. This is also the viewpoint adopted in this thesis. Moreover, whether the search for opportunities is systematic or not (that is, accidental) the argument is that it is influenced by cognitive processes or stocks of information because new information or knowledge requires complementary resources such as prior knowledge in order to be useful (Sarasvathy, et al., 2003). Further, opportunities are also influenced by an individual's ability to develop social capital (De Carolis & Saparito, 2006). Many entrepreneurs have stated that their network contacts were a key source of information, or provided the initial idea for the very opportunity being pursued

(Hoang & Young, 2000 in Hoang & Antoncic, 2003). The following section will therefore address how networks play a role in opportunity development.

There are differing opinions on the role of education in entrepreneurship. In general, two schools of thought can be distinguished; the first group argues that education can foster creativity, curiosity and good interpersonal skills (Olomi, 2009), and entrepreneurial skills can be taught. The second group argues somewhat differently, positing that formal education may stifle creativity and that, therefore, its focus should be on cultural conditioning. Advocates of the former view argue that a propensity for, or inclination towards, entrepreneurship, is associated with the personal characteristics of individuals but that these can be influenced by a formal programme of education (Gorman, et al., 1997). Drucker (1985) argues that "entrepreneurship is a discipline and like any other discipline it can be learnt" (in Kuratko, 2005: 580). Further, Olomi (2009) posits that individuals are not necessarily be born with specific competencies but that these may be acquired through formal and informal socialization in various contexts, such as community, school, and work which may either enhance or stifle the development of any behaviour or competence, including enterprising behaviour. Ronstadt (1990) states that there are high indications that entrepreneurial education will produce more and better entrepreneurs since they will know better when, how and where to start their new ventures. Nevertheless, a review of the research in the area of entrepreneurial education indicates only that entrepreneurship can be taught, or at least, encouraged (Gorman et al., 1997).

In contrast to the above, the second group posits that formal education can be an impediment to entrepreneurship; "Too much domain knowledge may in fact impede one's ability to come up with unusual, outside-the-box solutions" (Frensch

& Sternberg, 1989 in Dimov, 2007a:716). Singh (1990) takes this stance and argues that in the case of developing countries, education may actually inhibit entrepreneurship and that there is a need for school systems to be reoriented to emphasise and value entrepreneurship so that an enterprise culture can be cultivated (in Gorman et al., 1997). Likewise Gupta (1992) argues that the focus should preferably be on cultural conditioning and family conditioning, as these are more important than formal education in shaping entrepreneurial attitudes, and that the primary benefit of formal education is to increase self-confidence (Ibid.).

Schoof (2006:24) postulates that "a cultural environment in which entrepreneurship is respected and valued, and in which business failure is treated as a useful learning experience rather than a source of stigma, will generally be more conductive to entrepreneurship". The perceptions of young entrepreneurs depend, among other things, on their personal environment (family and friends), and the general reputation of entrepreneurs in society. In this matter, education has a particularly important role to play in raising the awareness and attractiveness of the characteristics and attributes of entrepreneurship. As mentioned in the introduction, young entrepreneurs may not be taken seriously as they have not been able to accumulate the economic resources needed to attain adulthood in Ghana and therefore this aspect of education in promoting entrepreneurship is paramount. Gorman et al. (1997) posit that there is a need for a broader support network for entrepreneurship education, which includes educators, financial intermediaries, counsellors and advisors, as this has been overlooked.

Olomi (2009) states that entrepreneurial education and training generally has two main objectives. Firstly, learning for entrepreneurship entails developing the skills, attitudes and knowledge as to how to behave in an entrepreneurial manner.

Secondly, learning about entrepreneurship, which means understanding the context and concept of entrepreneurship, for example, the history, theories, and the factors that facilitate it. According to Olomi (2009), this necessitates advocating three main areas for entrepreneurship: firstly, entrepreneurial values, such as a strong belief in one's own abilities, independence and willingness to accept risk. Secondly, entrepreneurial skills, including how to identify opportunities, take decisions in difficult circumstances and how to address creative problem-solving. Thirdly, promoting entrepreneurial motivation, since entrepreneurship in some cultures might be looked down upon as a career choice because more secure wage employment is favoured. It is therefore important to promote an entrepreneurial career choice as something that is perceived as attractive and usable.

Regarding the identification of opportunities, we may distinguish between systematic searches and non-systematic searches. When it comes to opportunity development in entrepreneurship education, some researchers, for example, Akpomi (2008), posit that one must guard against traditional assumptions and perspectives about how things ought to be, since such thinking can restrain creativity, that is, a systematic search for opportunities is not necessarily always a good approach. In the same vein Ronstadt (1990) argues that although opportunity identification skills are regarded as necessary in entrepreneurial education, learning how to identify opportunities can hamper the underlying creative process the entrepreneur possesses. There is therefore a need to be flexible and creative, and not to dwell too much on detail. For example, a systematic approach in identifying opportunities in the market space may not identify the most profitable opportunities, in contrast to those opportunities that appear more accidentally (Teach et al., 1989 in Ardichvili et al., 2003).

In relation to entrepreneurial education offerings, it is relevant briefly to address business plan writing. Universities and Business schools around the world teach students in entrepreneurship classes about the importance of preparing and writing business plans. Indeed business plan competitions are regarded as important in fostering entrepreneurship in many countries (Russell et al., 2008; Lange et al., 2007 in Brinkmann et al., 2010). In fact, leading entrepreneurship professors rate the development of a business plan as the most important element of entrepreneurship courses. However, the value of business planning for the performance of firms is a matter of some controversy in the entrepreneurship literature (Brinkmann et al., 2010; Bygrave, 2007), and Brinkmann et al. (2010) posit there is a 'planning euphoria' in the entrepreneurship domain.

Researchers generally distinguish between two schools of thought, the planning school and the learning school. The former advocates that a systematic prediction-oriented planning approach fosters the development of firms, as decision speed is increased and resources are used more effectively (Delmar and Shane, 2003 in Brinkmann et al., 2010). Further, according to Shane and Venkataraman (2000), planning is a means by which to exploit opportunities. The latter opposing group argues that planning is time-consuming and time should preferably be dedicated to acquiring resources and building the enterprise (Bhide, 2000 in Brinkmann et al., 2010). The focus must be on placed on learning and strategic flexibility, especially when facing high degrees of uncertainty (Brinkmann et al., 2010). Furthermore, planning may lead to cognitive rigidities, organizational inertia, and limited strategic flexibility (Vesper, 1993 in Brinkmann et al., 2010). Brinkmann et al. (2010) posit that business planning has a positive effect on the success of enterprises. However, the effect on performance in new enterprises is limited. Therefore, basic planning may be sufficient at this stage as resources should preferably be allocated to enable the complementary activities of information gathering and learning which would lead to better business planning activities in the long run, and therefore more resources could be allocated to the business planning process later on.

In a recent study Karlsson and Honig (2009) oppose this view, arguing that the value of business plans is explained mainly by their function as signaling or formal-legitimating written documentation to deal with external actors or institutional pressures rather than as management tools. Indeed, many of the most successful entrepreneurs may never write a business plan at all (Bygrave, 2007). Nevertheless, business plans are necessary if entrepreneurs are hoping to obtain funding from banks or venture capital providers. Karlsson and Honig (2009) argue that entrepreneurs write business plans even though they rarely refer to the plans or plan to use them, and only loosely couple their plans to their actual ventures. They posit that; "much of the advice and business plan education is based on taken-for-granted presumptions about the local environment, rather than by empirically supported effective business practices. Future scholarship regarding the use of written business plans in new organizations needs to be aware of these implications" (Ibid. p. 42).

Olomi (2009) posits that people with formal education who enter the field of entrepreneurship are likely to do better than those without. Further, in a study of small African enterprises, Mead (1999) states that lower level education makes little difference to enterprise profitability but that going beyond a certain threshold (for example, primary school), is associated with substantial differences in enterprise profitability (in Kiggundu, 2002:244). In many African countries, entrepreneurship is looked down upon as a risky choice of livelihood (Olomi, 2009) and naturally this causes obstacles for young graduates who want to become entrepreneurs, since they have to deal with the added burden of prejudice in their immediate environment.

CHAPTER 3
METHODOLOGY

3.0. Introduction

In this chapter, the research methods and reasons for the choice of methods will be discussed. The first part discusses the chosen research methods and provides the motivation for this. Both the interviewees of the study as well as the general structure of the interviews will be presented. The collection of data has been divided into primary and secondary data, which both will be explained.

3.1. Research Style

This section sets out the purpose of the research, including the research strategy, philosophy of science, and the research design that guides this thesis.

3.2. Research Intentions

The dissertation aims to fill a research gap on pedagogical inferences of applying computer mediated communication in higher learning in Africa social media and entrepreneurship education. The Research identifies both an empirical and a theoretical research gap, corresponding to the concrete–abstract research method proposed by Andrew Sayer (1992: 236). With regard to the empirical research gap, we contribute primary data on opportunity development among young entrepreneurs. The theoretical research gap relates to a new perspective, which focuses on the interaction between education and social networks and whether these variables influence learning for university students. The thesis aims at gaining new insights into existing theories of entrepreneurial opportunities rather than developing a new theory or generalizing the findings to the wider population.

The research hopes to make a small contribution to the concept of distributed learning, with specific emphasis on entrepreneurship education in Africa using Nigeria as model. In this respect, the research findings may be of interest to researchers who want to take this study further by testing the interaction of the proposed variables on a larger sample (Sayer, 1992:249), in order to deepen the complexity of understanding and the dynamics involved (Jeppesen, 2005b). Furthermore, this thesis may be of interest to colleges in the global North, the donor communities that are providing entrepreneurial education, or wish to do so in the future. If entrepreneurial training can be targeted specifically for the needs of young people and budding entrepreneurs employing social media then it may help them to build faculty skills needed to operate and sustain teaching and learning applying this platform.

3.3. Research Population

Nigeria has over 130 registered universities with more in the process of being registered. Every year the National University Commission, NUC – the body charged with approval for the establishment of all higher educational institutions granting approval for all academic programmes run in Nigerian universities, ranks universities in Nigeria according to their performance and meeting the requirement of a standard school. All Nigerian universities form the population for this study.

3.4. Research Sample Selection Criteria

Of the number of accredited universities in Nigeria the recently ranked top 100 universities formed the population from which four universities were selected for the study. The topmost universities – federal, state and private and the university that is topmost in size. These are the University of Ibadan, the Lagos State University, Covenant University and Ahmadu Bello University. The first and the best, University of Ibadan is the oldest Nigerian university, and is located five miles from the center of the major city of Ibadan in Western Nigeria. It has over 12,000 students. The highest ranking state-owned college, Lagos State University was established in 1983 by the enabling Law of Lagos State of Nigeria. The best adjudged private university by the NUC in terms performance is Covenant University located in Ota, Ogun State in Nigeria. Ahmadu Bello University is the largest university in Nigeria and second largest in Africa, second only to Cairo University, Egypt. It is situated in Zaria. It was founded in 1962 as the University of Northern Nigeria (NUC, 2013). To get practicable results, these four universities represent the sample of this study.

3.5. Research Stratagem

The research draws on concrete research in order to answer the research question and the guiding sub-questions. The research method is thus founded on concrete research and, according to Sayer (1992), this presupposes that all social action is the result of certain structures and mechanisms, that there is a cause for everything, and whether or not causal powers are activated depending on external factors. This work, therefore, predominantly employs concrete research (Sayer, 1992: 236), since the focus is on tools and approaches as 'unities of diverse determinations', each of which we have isolated through abstract research. In order to uncover, the researcher have constructed a framework, in which we posit a causal relationship existing between the variables education and technology, as well as between social networks and entrepreneurial development. It recognizes that young people in colleges are not operating in a closed system and therefore concrete research will aid an analysis of the underlying structures and mechanisms that may affect the interplay between the variables in the framework.

The research strategy addresses the role of theory versus data, or the abstract and concrete, to use the terminology of Sayer (1992). The research therefore commenced by reviewing and critiquing the literature. Thereafter it identified the variables relevant to entrepreneurial development, which are prior knowledge and social networks. However, for the purposes of this dissertation, prior knowledge (as defined in Ardichvili et al.,2003) was later re-conceptualized to include a specific focus on education. In taking this approach the research followed the advice of Yeung (1997), who posits that an explanatory study which takes critical realism as its point of departure should commence with a critique of existing work, which should be followed by re-conceptualization. The research collected empirical data by conducting semi-structured interviews with university lecturers in four recognized and well-ranked colleges in Nigeria. We chose semi-structured interviews in order to place importance on the perspectives and actions of the subjects studied (Bryman, 1989 in Alvesson & Sköldberg, 2009: 7). This data confirmed the need to re-conceptualize prior knowledge as education, and this variable was subsequently addressed in the literature review. This finally led to the development of The Framework in explaining the hypothesized relationship social media, social networks and learning.

Further, as the research does not seek to measure but rather to understand and explain complex social phenomena, a qualitative approach was deemed appropriate. The method employed in this thesis commenced with deduction; and here the research refers to the initial phase of reviewing the literature and determining which variables were important to social media and entrepreneurship education. In the latter half of the thesis retroduction is used. Retroduction is a mode of inference in which events are explained by postulating (and identifying) mechanisms which are capable of producing them (Sayer, 1992:107), and to this end the research proposes the framework. Moreover, as stated by Sayer (2000:26); "we need to know not only what the main strategies were of actors, but what it was about the context which enabled them to be successful or otherwise".

Therefore it is necessary to include the Nigerian context in the framework, as the research needed to understand and investigate how social media can be employed for entrepreneurship education in Africa. Concrete research is "a scientific philosophy that celebrates the existence of reality independent of human consciousness. Concrete research thus emanates from realism and recognizes social conditions (such as class and wealth) as having real consequences, whether or not they are observed and labeled by social scientists; but it also recognizes that concepts are human constructions (Easterby-Smith, et al., 2008).

Ontologically, the basic understanding of concrete research is that the world exists independent of our knowledge of it and that our knowledge of that world is fallible and theory-laden (Sayer, 1992: 5-6). Further, social phenomena such as actions, texts and institutions are concept-dependent and therefore we must explain their production and material effects as well as understanding, reading or interpreting what they mean (Sayer, 1992). These social phenomena must be interpreted starting from the researcher's own frame of meaning, bearing in mind, however, that they exist regardless of researchers' interpretations of them. With regard to interviewees, Sayer (2000:35) states that although they "… give us answers which are influenced by our research framework ... it does not follow from this that when they go back to their normal lives, they think and act differently, though that of course is a possibility...".

Concrete research also aims to take a critical stance towards its object and therefore the researcher must evaluate social phenomena critically if she/he wants to be able to explain and understand these. Nevertheless, concrete research also recognizes the importance of understanding people's socially constructed interpretations and meanings. It claims that we can go 'behind' language, purify words of their ideological content and reach the objective truths that are hidden in the real (Bitsch-Olsen & Pedersen, 2005). The benefits of applying a critical realist approach in this thesis have been twofold. On the one hand, it prevents the researcher from falling into the trap of ethnocentrism (Jeppesen, 2005b) since it is an approach that is sensitive to the context. The application of Concrete research also enables this research to move beyond "the ontological grids of positivism, which systematically misrepresent society by presenting such phenomena as reducible to independent individuals or atoms" (Sayer, 2000: 13).

3.6. Research Design

Generally, research in relatively new fields, such as social media and education, has to move through various phases, starting with explorative studies and proceeding to descriptive, explanatory, analytical ones and, finally, to prescriptive studies (Jeppesen, 2005b). There is little research in the area covered by this thesis, and this means that its design is both exploratory and descriptive. The first half of this thesis is exploratory, in the sense that it seeks to target and investigate the under-researched area of how social media can be employed for entrepreneurship education in Africa. This is done through the collection of qualitative data in Nigeria. The specific focus on ranked Nigerian universities is relevant because little known about ranking of Nigerian Universities in Africa or how this plays out for opportunities for entrepreneurship education. The second half of the dissertation, starting at the analysis and discussion, are descriptive.

Concrete research advocates two approaches to research. These are: intensive and extensive research. Extensive research deals with discovering some of the common properties and general patterns of a population as a whole. However, this thesis takes an intensive research approach where the primary research questions concern how some causal processes work out in a particular case (Sayer, 1992). Typical methods for this type of research involve the study of individual agents in their causal context, interactive interviews, and qualitative analysis. The limitations of this research approach are that the actual concrete patterns and contingent relations are unlikely to be representative, average or generalizable (Sayer, 2000: 21).

The main objective of the thesis is to explore and understand the relationship between social media and education, computer mediated communication and pedagogy. A qualitative approach, or intensive research, is suitable when "dealing with soft issues, which are not amenable to quantification, searching for the meanings which lie behind actions (Hammersley, 1992 in Jack & Anderson, 2002: 473). The intensive research design employed here consists of semi-structured interviews distributed by email, as well as participant observations and field notes which were made during field trips to delineated colleges in separate occasions during 2012 and 2013. In relation to the use of semi-structured interviews in research, Robson (2002) states that semi-structured interviews are appropriate if the aim is to "find out what is happening and to seek new insights" (in Saunders, et al., 2003:248). Furthermore, the advantages of semi-structured interviews are that they give a sense of order and structure and allow the researcher to prepare questions for the interview, as the main aspects to be studied are predetermined (Jones, 1985 in Easterby-Smith et al., 2008).

Concrete research acknowledges that the researcher may influence the social world that is under study but maintains that this influence is insignificant. What is important is that the researcher practices reflexivity, which, it is argued, is vital to ensure objectivity, as “we are always in some position or other in relation to our objects; the important thing is to consider whether that influence is benign or malign” (Sayer, 2000:53). Certain aspects must therefore be given special attention when doing qualitative studies in Nigeria and interviewing teachers and opinion molders. This is because the latter are given a unique position in society and the power relationship between the researched and the researcher may thus be described as equal. This work argues that the use of semi-structured interviews affords the interviewees the opportunity to put forward their own point of view. This is in line with Sayer (1992:245), who states that structured interviews disregard the differences in types of respondents in the context which is causally relevant to them and make comparisons meaningless.

Another decision regarding the research design is to compare and contrast primary data from three different groups of university teachers, and hence engage in a comparison of how social media are consumed by different teachers in their different locations.

3.7. Data and Data Collection

This section elaborates on the method used to collect the primary data obtained from online/email interviews during an excruciating four-month period and a couple of field trips to campuses in 2012 and 2013, and includes data from secondary sources.

3.8. Data Pooling Method

Interviewees were selected using purposive sampling. Purposive sampling is employed to "seek out groups, settings and individuals where…the processes being studied are most likely to occur" (Denzin and Lincoln, 1994:202 in Silverman, 2010). The universities were put together using information from the National Universities Commission.

According to Jeppesen (2005b), when doing fieldwork in a different context, the origin of the researcher poses several challenges in the form of language, cultural sensitivity and personal contacts. This is one reason the researcher came home to Africa and home to his environment to avoid the minuses of language, cultural sensitivity and personal contacts.

3.9. Primary Data

200 semi-structured interviews emailed to lecturers using coordinating contacts in the four universities and these comprise the primary data upon which this thesis is based. Each interview email was started with a short introduction, in which the researcher elaborated upon the research and stated that it was an independent, academic inquiry and the independent researcher was not affiliated with any organization. Further, the researcher made it clear that he could not facilitate contact with any organization,

nor would we be paying for any interviews. The interviews were intended to obtain information on the variables identified in the literature review; however room was left for the interviewees to put forward issues which they considered important in relation to applying computer-based communication in teaching and learning in Nigeria (with specific relation to entrepreneurship education). A notebook was carried to record observations or information on the spot during the tours which ran concurrently. Short summaries detailing specific observations were typed out at the end of every visit in order to retain the impressions and observations made and to match it with the email interviews thus supplementing the information from both sources, a procedure recommended by Overå (2007) and Saunders et al. (2003).

3.10. Secondary Data

Updated and accurate statistical data for Nigeria is difficult to obtain. Liedholm (2002) argues that information about internet connectivity, computer in classrooms, teachers' capacity to employ computer mediated communication in teaching and particularly entrepreneurship education is far larger than that reported in most official statistics which are often seen only for the universities that are on the internet.

3.11. Research Method Validity

Again, the aim of this study is to do a research for Company Xon computer mediated communication and pedagogy. The methodology us e d in this study is qualitative, with a focus on four case universities – the University of Ibadan, the Lagos State University, Covenant University and Ahmadu Bello University. The first and the best, is the highest ranking Federal University called the University of Ibadan and then the highest ranking State University, the Lagos State University the best adjudged private university by the NUC in terms performance is Covenant University, Ota, Ogun State in Nigeria. The fourth institution in the sampling is Ahmadu Bello University, the largest university in Nigeria and second largest in Africa. The approach in this is study is exploratory. The reason for choosing case study as a study method in this study is the desire to examine complex and special subject in detail. Case studies are particular useful where one needs to understand one particular problem or situation in great depth, and where one can identify cases rich in information. (Noor, 2008) As a method it is applicable to real business situations and it focus on investigating a contemporary phenomenon within its real-life context (Soy 1997).

The real-life context is distinct from laboratory experiments, which isolate the phenomena from their context (Eisenhardt and Grabner 2007, 25). According to Naumes (2006) case study provides the basis for analysis of the decision-making process under variety of conditions and then opportunity to practice the findings. (Naumes 2006, 4-5). Multiple cases enable comparisons that clarify whether an emergent finding is simply distinctive to a single case or consistently. Multiple cases also create more robust theory because the propositions are more deeply grounded in varied empirical evidence. They also enable broader exploration of research questions and theoretical elaboration. Adding three cases to a single-case study is modest in terms of numbers, but presents four times the analytic power. (Eisenhardt and Grabner 2007, 27). The purpose with this multiple case study is to provide a holistic picture and an insight in concrete about the subject.

Although both quantitative and qualitative data collection methods are used in case studies, this study uses qualitative methods. The use of qualitative methods in management research has increased in response to the failure of quantitative techniques to address new theory development (Fillis 2006, 200). According to Cassell (2006) qualitative methods have a long history and tradition within business and management research, and have a well- established pedigree. Qualitative methods have been used in various types of management research field ranging from organizational analysis to traditionally more quantitative areas of accounting. Cassell (2006) refers to various authors like Boje (2001), Crompton and Jones (1988), and Prasad and Prasad (2002), who have highlighted the considerable contribution that qualitative research can make to the field, suggesting that utilizing qualitative techniques can provide rich insights in to the issues that interest both management practitioners and researchers. (Cassell 2006, 290-291.) This type of content analysis tends to be more subjective and less explicit about the processes by which interpretation of the target material occurs. The emphasis is on meaning rather than on quantification. (Brewerton and Millward 2001, 151.)

Data Gathering

Yin (1994) argues for the accuracy of case studies that use several sources. For that reason this study is based on different sources of data. The current work experience and personal involvement of the researcher in college teaching in Nigeria and a savvy of the entrepreneurship education requirements and programme contents in the country as the Directory of the Ibrahim Badamasi Babangida University offers also a source of information. This data is further complemented with initial/background interviews of lecturers from researcher's own university who are involved with social media and entrepreneurship education. Moreover, this data is complemented with interviews with lecturers from four ranked universities in Nigeria namely: University of Ibadan, the Lagos State University, Covenant University and Ahmadu Bello University.

Eisenhart (2009, 28) argues for that case studies can accommodate a rich variety of data sources, including interviews, archival data, survey data, ethnographies, and observations. In this research e-mail interviews are the main mechanism for collecting the primary data. Face-to-face interview are considered data collection method but due to the requests from the interviewees and limited time resources that method will be applied sparingly and the outcomes will be used for validation purpose only. The-email interview is able to yield a good quality data, providing often rich material which is quite specific. Moreover the e-mail interview requires considerably less investment of time in setting up and conducting the interview.

A considerable advantage is also that the interview will not have to be conducted in real time. The interviewer needs only to send the questions and the interviewee can choose the most suitable time for the interview. A potential problem related to the e-mail interview experience is that it carries a risk of misinterpretation. The emotional tone of an e-mail can be hard to read. People responding to e-mailed question have also tendency to use abbreviations, or list the information rather than describe it fully. With their agreement such responses can be expanded in order to make them more readable. Despite the various drawback associated the e-mail interview, this method had two over- riding advantages, the speed and the flexibility of the form. (Gillham, 2005, 107-111.)

The interviews will be semi-structured. This type of interview type incorporates elements of both quantifiable, fixed-choice responding and the facility to explore, and probe in more depth certain areas of interest. Semi-structured interviews are generally easy to analyze, qualify and compare, but allowing interviews to explain their responses and to provide more in depth information where necessary. The temptation to spend too long on peripheral subjects, the danger of losing control to interviewee, and the reduction in the reliability when using non-standardized approaches to interview each respondent are some of the disadvantages of semi-structured interview. (Brewerton and Millward 2001, 70.)

CHAPTER FOUR
RESULTS

4.0. Introduction

The email interviews were conducted during 2012 and 2013. The interviewees included respondents – faculties – from University of Ibadan, the Lagos State University, Covenant University and Ahmadu Bello University. The interviewees from a fifth college are colleagues of the researcher who use Social Media and who teach entrepreneurship education. Using a pre-identified on- campus coordinator, it was easy to manage the 50-per-university number. Common for all the interviewees was the experience from social media, entrepreneurship education and social networking.

Secondary data, in other words secondary analysis, is best known as a methodology for doing research using pre-existing statistical data (Heaton 2004, 13). It is a research strategy using pre-existing quantitative or qualitative research data for the reasons of investigating new questions or verifying previous studies (Heaton 2004, 16). In order to widen the understanding of the case universities context, both inside and outside documentation was investigated to complement the interview material. The secondary data was collected from National Universities Commission (NUC) Reports and materials from on local social media use and the future. Social media, entrepreneurship education and social networking related material were gathered. Furthermore, secondary data was collected from different scientific articles, journals, books, and Internet sites. This data is assisting in clarifying what was found.

4.1. Data Analysis Method

The analysis of qualitative data is particularly different from statistical analysis, as the data as such does not exist in a quantitative form. While analyzing the interviews, the researcher desisted as much as possible from assigning numerical descriptions to answers. Analysis of the data gathered from interviews, reports, internet pages, and other sources are based on systematic combining. Systematic combining means that the researcher was constantly going back and forth between theory and empirical observations. This activity expanded the researcher's understanding of both theory and empirical phenomena in the study. As the theory is compared with data from interviews and internet pages form the four case universities, the theory is being investigated through the empirical observation and vice versa. (Dubois & Gadde 2002, 555)

4.2. The Findings

From the research, the opportunities, risks, and barriers of employing social media in for teaching entrepreneurship in Nigerian universities have been broken down into several sub- categories based on our initial research questions and the emergent themes from the data analysis. The key perceived opportunities and barriers are summarized in the Table below:

Key Opportunities & Barriers of Social Media for Entrepreneurship Education

Perceived Advantages of Using Social Media for Entrepreneurship Education in Nigerian Universities	**Perceived Disadvantages of Using Social Media for Entrepreneurship Education in Nigerian Universities**
• Expansive reach • Increased interactivity and connections with audience • Increased awareness of social media use in teaching and learning • Increased speed of communication • Low costs for communication and outreach • Increased control knowledge	• Decreased control over information that students access • Lack of training and technological expertise among lecturers • Lack of internet connectivity • Increased time commitment to learn and maintain • High costs for equipment • Decreased personal connections

4.3. Advantages of Employing Social Media

4.3.1. Expansive Reach

Nearly all interviewed entrepreneurship education lecturers in the four universities mentioned the large breadth of audience that it is possible to reach by utilizing social media (24 of 27). From influential lawmakers to sheer numbers of different people within the sites, most recognized that social media can reach tremendous numbers of people within a very short timeframe. It can be amazing how within a couple hours that some entrepreneurship education lecturers had 80 people that had been on the site. They were not sure they were people who didn't know they existed.

Many lecturers are amazed at how quickly people notice and subscribe to their social media profiles. Many had substantial numbers of followers within just a few hours or days of establishing a social media presence. Lecturers also recognized the wide breadth of people who have a presence on social media and the potential to connect with them. The next people who are you going to be on your wall posting away, be your students, and be your protégées and the lecturer can reach them because that's where they are.

Some lecturers recognize the potential social media has to connect with the next generation of people who will be utilizing the resources offered by social networking in education. Most participants mentioned the large breadth and variety of people that they were able to interact with and connect with through social media. Even if the participants hadn't used social media yet, they recognized and acknowledged the different audience that uses social media and commented on the opportunities of interacting with new people who didn't yet know about or take advantage of social networking in education.

4.3.2. Interactivity

In the minds of the lecturer-respondents, interactivity was also one of the largest opportunities social media offers, with 19 of 27 participants bringing up this point. Word of mouth interaction is important for entrepreneurship education, and social media offer an easy way for many people to hear a message. As people reply to posts or repost updates, more people can see a message. Also, social media allows people to share content easily.

Most of the lecturers say it's pretty successful because other people, for instance on Facebook they're able to like an article or a report that we post and that then goes to all of their friends, their friends see and then we're able to get more friends because of that.

Some respondents enjoy the interactivity opportunities that Facebook offer. Most of them enjoy when people liked or reposted something that Entrepreneurship education had posted because then it went to that person's friends and was reaching a greater number of people than Entrepreneurship education was originally impacting. Thus interactivity was not just defined as lecturers interacting with students through social media, but students interacting with each other about entrepreneurship education matters and content. This interactivity and the ease of disseminating information was a key opportunity mentioned by many participants.

4.3.3. Increased Awareness of Entrepreneurship Education

Related to interactivity, another opportunity commonly expressed by lecturers was that social media offer a powerful platform through which lecturers can show the public exactly who they are and what they do. Twenty-two of 27 participants suggested that people can easily learn about entrepreneurship education and become more aware of the programs and opportunities available.

LASU lecturers think the biggest opportunity is increased awareness of what entrepreneurship education is and what it can offer, and getting the word out about the opportunities.

These lecturers commented on the opportunity of increasing entrepreneurship education's audience and awareness after using social media. Many participants commented on the larger numbers of people who would be seeing entrepreneurship

education's information, events, and postings, and some commented that it would be new people being exposed to what entrepreneurship education does. Participants who were already using social media noted that a
larger number of people were aware of entrepreneurship education's programs and what it had to offer.

4.3.4. Real Time

Immediacy is seen as another important factor unique to social media. Fifteen of 27 lecturers mentioned the importance of disseminating information quickly to a large number of people through social media, instead of waiting for a press release to be published or a newsletter to be mailed.

The updating quickly, getting information out relatively fast to a large number of people. When something comes through, like a food safety issue, or now the dietary guidelines were just released, I could release it the day it came out.

These entrepreneurship education lecturers gave examples of how important the immediacy factor of social media was to them. Instead of having a few days of turnaround time with some traditional forms of classroom teaching, lecturers can get whatever information they want disseminated to their students whenever they wanted to. As social media is constantly updating itself and changing, users could see new content posted by entrepreneurship education as soon as it is submitted.

4.3.5. Finances

Some lecturers (12 of 27) suggested that social media are a good opportunity for entrepreneurship education because they are a financially free platform to connect and communicate with people. Indeed some lecturers in this study have begun to utilize social media as a way to reduce printing and mailing costs.

Others mention the value social media provides simply because it is a free communication tool.

It's so expensive, with limited resources, to put out and print and send everything. First of all it takes a long time; second of all it costs a lot of money. Conventional entrepreneurship education lecturers have such limited resources at this point that they just can't afford to waste any of those resources.

ABU respondents compared the cost of using social media with the cost of printing and mailing information to students. Some lecturers mentioned that they were cutting back on mailing information to save money. They found that utilizing social media was free and provided similar benefits of reaching a great number of people. Other lecturers didn't cut back on mailings, but still added social media into their communication strategy simply because it was free and could reach many more people and a different audience.

4.3.6. Control of Information

Control of information is often identified as a risk that lecturers are concerned about, however, eight lecturers at CU thought social media could actually enhance rather than limit control of information and be viewed as an opportunity. These eight lecturers suggested that social media allows entrepreneurship educators to be in control of when information is released, instead of waiting for classroom meetings or a newspaper to publish something. These lecturers also felt that social media allows them more control over the content of their messages than classroom methods. With Facebook, they get to choose what's on there. With other media, because they send it as releases, they get to decide.

UI lecturers spoke about knowing exactly what is online and available for students and always being able to access and control the teaching material they are working with. Some entrepreneurship education lecturers saw the benefits of being able to control the information on the social media page as one of its most important features.

4.4.0. Disadvantages of Employing Social Media

There were several sub-categories of risks and barriers that were revealed in the coding of data. The most relevant or meaningful quotations have been included within each section that they correspond to.

4.4.1. Checks, Confidentiality and Responsibility

Control, privacy, and liability issues were among the largest risks or barriers that lecturers mentioned in their response to the interview question on what is holding them back from using social media or what they are scared about on their already-established social media pages. Over three quarters of the lecturers in two of the four universities – University of Ibadan (UI) and Ahmadu Bello University (ABU) (13 out of 17) mentioned this, while nearly every person (9 out of 10) interviewed from Lagos State University (LASU) and Covenant University (CU) did. It is one of the largest perceived risks/barriers associated with utilizing social media entrepreneurship education.

Some of the concerns in terms of how do you monitor it, how do you control it, how do you make sure that the students are really involved and that there are enough controls in place, that there's no information exchange or detrimental information exchange.

There's concern about having control over the page to ensure postings are representing entrepreneurship education well. Most of the lecturers in the study mentioned control issues as one of their largest concerns. Some were unaware of the settings available to control the information on the wall, while others had just heard stories and/or news reports about social media that made them cautious about using it. A majority of lecturers mentioned control issues stemming from people posting bad comments on the profiles that represent entrepreneurship education. Some concerns are about what they post. It is a little hard to regulate what they post. Teachers rarely can go back and delete things afterwards, but if someone posts something mean or defamatory or foul language on a wall and it is not picked it up right away, all of a sudden that's up there and with the user innovation, and that is a huge risk.

Lecturers at CU, a Christian University, expressed concerns about what people post on entrepreneurship education profile. Lecturers are hesitant of using social media if the entrepreneurship education department would be held liable for anything bad that was written on their page. Many were also scared about their profiles simply being unprofessional because "anybody can post anything" and perceived the Facebook content to be out of the control of the lecturer moderating the page. As entrepreneurship education profile on social media websites is the sole way they are represented, lecturers are concerned about the postings and repercussions of any negative interaction on their profiles.

Lecturers are concerned about the privacy and confidentiality of the information that was posted on entrepreneurship education social media page. Privacy was a large issue for all the lecturers in the four universities, as they are dealing with the public and, in the case of young people in institutions of higher learning.

Entrepreneurship education is also supported by the universities so they need to be careful how they represent themselves.

Lecturers are concerned about who would be able to see information that was posted or commented on profiles and how they would use it to harm entrepreneurship education image. As some lecturers didn't understand what privacy controls were available, it was understandable that they would be concerned about who had access to the information posted.

4.4.2. Time

The perceived issue of the time it takes to work with social media was a concern expressed by many entrepreneurship education lecturers. Indeed, it was mentioned by 10 out of 17 lecturers in UI and mentioned by 3 out of 10 lecturers in ABU. Many lecturers are hesitant to think about adding another responsibility in their career when they are already extremely busy. Others discussed how it is difficult to keep already established social media pages up to date or give them the attention they deserve to keep students engaged. One lecturer perceived that Facebook was a way to waste time and implied that it was an unimportant thing to do throughout the day. Lecturers at LASU say that their colleagues are too busy and they have important things to do and they can't be wasting their time on Facebook.

LASU participant's views about lecturers being too busy for social media were reflected in interviews with many other respondents as well. As budgets shrink and lecturers in charge of entrepreneurship education take on additional responsibilities, the thought of incorporating social media into lecturers' wide variety of tasks was intimidating and perceived as something that would take up a great deal of time. Also, once lecturers established a presence on a social media site, they were concerned about the level of work that it would take to continually attract and engage the followers of the site. Some lecturers expressed that it was more important to have a plan on how to engage and continually connect with their followers that to not have a social media presence at all. Many lecturers did not see a value from using social media as compared to the amount of time that they perceived they would need to spend on it to ensure its success.

A few lecturers were concerned about the quick changes that the internet brings. Knowing how quickly social media sites become popular and then fade away, they didn't want to commit to a site only to have to change soon after. They were worried that time spent to develop a social media presence would be wasted as social media evolves. Other lecturers weren't sure of the total value that social media would achieve in the long run. As lecturers are busy, they were concerned about the quality of the end result of using social media as compared to the time spent in creating an online presence.

4.4.3. Cost

Money was not often considered a barrier to social media use. Nevertheless, 3 of the 27 participants mentioned the financial barriers of social media. It is important to realize the beliefs that some entrepreneurship education lecturers have towards social media and the costs that some perceive it to have. What are the cost savings of using social media, because that's oftentimes how they make decisions of what's valuable is how much money is saved. Lecturers at UI say they don't know if money is saved because has to be invested in the equipment and have the right kinds of stuff installed on your machines.

UI lecturers have a perception that social media cost money, either through using the service itself, installing programs on existing computers, or upgrading equipment. A few lecturers had the perception that social media cost money, perhaps like creating a website, and they deemed this a barrier to successfully implementing social media in their county.

4.4.4. Know-How/Capacity Building

Capacity building in the use of social media is another relatively frequent concern that lecturers expressed. This was important to the majority of the interviewed Lecturers, with 17 of 27 lecturers mentioning training. Many would be more confident or feel better about using social media if there was training offered that taught them how to use it and what makes a quality post. Some lecturers expressed interest in social media, yet they felt they did not have the knowledge or confidence to use it.

At UI, a majority claim they are yet to find a good training ground where they sit down and somebody said shows them the ropes on how to use Facebook. And this they say includes showing them how to log on, how to upload, etc. They have not seen that kind of capacity building opportunity.

Without training, some lecturers at ABU simply lack the confidence to begin using various social media platforms to promote their work as they didn't know how to begin, where to start, or what constituted a good post that people would read and remember. Many requested that opportunities for training be offered. Even if they were already using social media, some lecturers mentioned that they could always improve their use of it, and in turn their ability to promote entrepreneurship education and their programs to the audience that uses social media.

4.4.5. Connectivity

Concern about internet access and connectivity was another important barrier to social media use by entrepreneurship education lecturers, more so in ABU and UI than in LASU and CU. In ABU, 8 out of 17 lecturers mentioned connectivity, while 9 out of 10 in LASU lecturers mentioned this. Because both universities have large campuses, ABU is located in a place without adequate high speed internet access. High speed internet access is consistently less available in non- metropolitan areas compared to rural areas; in the metropolis, 93.5% of people have access to internet with a speed of 10 megabytes per second while only 55.7% of non-metropolitan residents have this speed (Broadband Statistics Report, 2011). Lecturers from these non-metropolitan areas are concerned about putting time and effort into social media when students might not be able to access it easily. It is interesting to note that concerns about connectivity were almost double in UI as compared to LASU.

This may be due to the fact that in UI, many entrepreneurship education lecturers only have access when they are on campus and thus subject to the campus rules which often block access many social media sites at work. Thus their connectivity to social media is severely limited. Even if the students could access the social media sites, the entrepreneurship education lecturers do not have easy access to update them. In some parts of the city where they spend most of their time, they have pockets of broadband use difficulty. They say they simply can't access it. They have Libraries on campus where their IT rules don't allow them use YouTube and Facebook as an instructional methodology.

Many other lecturers stress that internet connectivity for some students as well as lecturers themselves were barriers to the implementation of social media. Because high- speed internet is not prevalent in some rural areas, there were concerns about exerting time and energy into creating a social media presence if constituent access wasn't reliable or fast.

4.4.6. Pertinence to Target

About half of lecturers who emailed their interview responses back mentioned social media relevancy to their audience as being a potential problem, with 13 of 27 lecturers in LASU including this in their response. These lecturers tend to have not yet established a social media presence to see how many people actually would take interest. Lecturers do not believe that their audience is using social media and even if entrepreneurship education had a presence it wouldn't be relevant to the students in their university. They were concerned about how many people would actually benefit from social media or how many people would find value in the pages. Most lecturers who discussed concerns about relevancy didn't think the end result would be worth the perceived staff time and effort that it would take to establish and maintain a social media presence.

They say that if they have a Facebook account and nobody does Facebook, it doesn't make any sense. Lecturers say that even with the greatest page in the world replete with all the information in the world will but if it's not where they're going, it's not what they are going to do. Respondents are concerned that nobody would be on Facebook, and the efforts of their work wouldn't be worthwhile because of a lack of readership.

4.4.7. Cues Filtered Out

The important personal connections that lecturers have with students was also deemed at risk by some lecturers in this study who thought social media could actually harm the relationship they have with their students. Eight of 27 lecturers mentioned this concern.

Sometimes lecturers expressed hesitation to delve into social media because they felt it may come at the expense of their face to face relationships. Social media is less personal. It's not developing the relationships with people. When someone comes into the classrooms, you meet them. You're eye‑to‑eye with them and there's rapport.

Respondents thought that social media seemed less personal than seeing people in person at the classrooms and are concerned that social media does not create the deep relationships like interacting face to face with someone does. They don't like that social media made entrepreneurship education seem distant and less personal. Most lecturers who expressed this concern suggested that a focus on social media outreach may come at the expense of face-time and personal communication, rather than a supplement to such efforts.

4.4.8. Peer Influence

While not clearly a barrier or an opportunity, almost half of lecturers (12 of 27) felt pressure to use social media as part of their work. Many lecturers discussed how they thought they would be left behind if they did not engage students via social networks. Participants who mentioned this pressure recognized that large numbers of people are using social media to communicate, interact with others, and receive information, yet they were concerned about entrepreneurship education itself using it for the same purposes. They knew that many people were using social media and in turn felt pressured to have a presence on the social media sites because that's where the audience is.

Some say that if they don't get on the bandwagon they were going to be behind the trend because if everybody else is communicating in those ways, and they don't, they have lost that whole entire audience. Participants recognized the potential that social media could possibly have, yet some were hesitant to begin using it to reach that audience. Some lecturers are reactive in using social media and only did so because they felt enough pressure to begin to connect with people in new ways.

4.4.9. One of Many

The majority of lecturers (15 of 27) suggested that social media is just one component of a broad outreach plan that entrepreneurship education lecturers should have. These lecturers suggest that social media can be a good tool to reach people who don't utilize other media (i.e., newspapers) and it can be good reinforcement for people to see the entrepreneurship education message or advertising in another area. There's always going to be some groups that won't care for social media or don't even have internet. Just like there are people who don't read the newspaper. You're always going to have to find a way to communicate with them.

Many participants identified social media as an additional platform to communicate with and distribute information to students. Even those participants who were most enthusiastic about using social media for outreach acknowledged that social media does not reach everyone. As such it should not necessarily replace current forms of teaching entrepreneurship education, but be considered a supplement to other methods of teaching, efforts and potentially allowed them to communicate with a new audience.

CHAPTER 5: INTERPRETATION, CONCLUSION AND RECOMMENDATION

5.0. Introduction

As the literature on social media, entrepreneurship education and computer mediated communication in higher learning in Africa by this dissertation, broadens and deepens, it becomes clearer that the future depends on the pedagogical implications of this research. Social media has the potential to affect entrepreneurship education in tremendous ways. As a free, interactive platform with millions of users and a diverse audience, entrepreneurship education can utilize social media for pedagogy as a way to connect with students, share course outlines and programs for free, establish stronger ties and connections with current users, and increase overall awareness of entrepreneurship education and the opportunities and resources it provides. Hereunder are the researcher's interpretations of the research findings with conclusion and recommendations.

5.1. Interpretation

Social media has the potential to affect entrepreneurship education in tremendous ways. As a free, interactive platform with millions of users and a diverse audience, entrepreneurship education can utilize social media for pedagogy as a way to connect with students, share course outlines and programs for free, establish stronger ties and connections with current users, and increase overall awareness of entrepreneurship education and the opportunities and resources it provides.

A variety of aspects of social media emerged as interesting results of this research. The wide-ranging perceptions that lecturers had highlighted how little some people understand about utilizing this resource. Some of the barriers of utilizing social media that were perceived by Entrepreneurship education lecturers actually stemmed from misunderstanding the platform or not having knowledge or training about the service. For example, while some respondents mention privacy and control of information as barriers, some lecturers actually viewed these as positives. On one hand, lecturers were concerned about postings on their wall and where their information would go, yet on the other hand some participants viewed this lack of control as a form of positive electronic word of mouth instead, where an lecturer could post something on the wall and it could be shared among a variety of people while simultaneously spreading entrepreneurship education's name.

An example of this was highlighted in the various tensions regarding time versus benefits that lecturers had. Typically, lecturers who had not used social media or were not familiar with the features of social media were apprehensive of the time that it would take out of a busy lecturer's day. Some lecturers are not even considering implementing it. However, respondents who had implemented social media praised the little amount of time it takes to update and reach large amounts of people. Some lecturers believe it is the best form of outreach for the least amount of time. A wide variety of lecturers expressed a wide variety of opinions about social media, but overall results suggest that social media can be a positive, innovative, supplemental, and interactive form of outreach that can help entrepreneurship education expand its programs and connect with new students.

Entrepreneurship education lecturers are extremely busy. With universities dealing with one line budgets, many lecturers are taking on more and more responsibilities within their career. Some lecturers expressed concern that social media would be yet another additional task that they would be responsible for managing. Most stated they couldn't deal with an additional responsibility and perceived that managing social media accounts would take a large amount of time. However, many lecturers who had already implemented social media expressed how little time it takes to update and reply to people they are connected with. Some stated that they don't produce any new content solely for their social media sites; instead they use social media as a supplemental avenue for teaching. Posting already created materials only takes a few additional minutes to do. Some lecturers discussed how social media provides them with the most reach because social media reaches a wide variety of students compared to the amount of time it takes to post something. While it may take time initially to establish a social media presence, time shouldn't be a large concern for lecturers thinking about beginning to work with social media.

A perceived risk of social media is a lack of control on social media platforms. Some entrepreneurship education lecturers are mainly worried about harmful or damaging posts on their social media site. Some expressed that they were scared information would get into the wrong hands or that they would post something wrong and it would be on the social media site for the world to see. However, what some lecturers didn't realize was how privacy and content controls available on social media works. With the click of a button, incorrect or damaging posts can be easily removed from the social networking site. Some lecturers who had already established a social media presence had their privacy setting set so they need to approve each comment that was made. Others let any friend or follower post freely. Regardless of their social media practices, no lecturers in this study indicated they had ever had a problem with any harmful or negative posts on their social media website. While there is the perceived risk by some that something damaging could happen through social media, nothing had happened to our participants. Not only are there preventative control measures available through the site, but administrators of the sites can remove or edit all postings associated with a group.

Many lecturers express the true need for capacity building in how to use social media. Some lecturers had no idea where to begin and desired thorough training. Others want lessons on what makes a good post. Some simply needed the confidence or while others needed permission to access use social media within a professional setting. Overall, training is one of the best recommendations that can be made from this study: with a training offered by entrepreneurship education about what social media is and the best ways to use it, many lecturers would feel more comfortable and confident beginning social media campaigns in their own counties to reach the students who utilize social media. Sharing best practices among lecturers would also benefit those who are already utilizing social media as part of their outreach.

Internet connectivity of entrepreneurship education students and lecturers remains an imperative barrier. Many lecturers teaching in in semi-rural areas such as UI and ABU say that their high speed internet access can be spotty in these campuses. Lecturers are unsure if a social media presence would to worthwhile or relevant to students if they aren't able to access them in the first place. However, some lecturers mentioned that some social media sites actually load quicker on dial-up internet accounts than some larger websites.

Furthermore, a few lecturers suggested that as mobile phones are becoming more widespread in Nigeria, more and more students are checking and updating social media accounts from the ease of their mobile phone. While high speed internet access may continue to present problems for some universities, people can still have ways to access social media and take advantage of information posted by entrepreneurship education lecturers. However, if there are serious infrastructural issues with a lack high speed internet and mobile phone service, social media might not be right for some universities at this point in time.

5.2. Conclusion

Many lecturers recognized the benefits from having a presence within social media. The target (students) on social media sites is perceived as different from the students who read newspapers or listen to the radio (some of the more traditional forms of entrepreneurship education sources), thus lecturers have found that they are able to reach new people and expose them to the programs and opportunities available through entrepreneurship education. Through electronic word of mouth or referrals by friends, it is incredibly easy for people to find entrepreneurship education's social media pages through simple, everyday browsing of the social media site. Few outreach methods provide the opportunities for audience awareness that social media does: new people can find Entrepreneurship education, learn about their programs, and instantly become permanently connected to receive updates.

One of the largest benefits cited by lecturers is the interactive nature of social media. When a lecturer posts a comment, photos, or any other sort of information, everyone else following the page has an opportunity to publicly post questions, comments, or anything else they desire. These comments are visible to others following the page as well. It creates an atmosphere where everyone can learn from others and valuable, continuous, and interactive dialogue about entrepreneurship education programs can take place.

Social media is instant. Through posts, conversations, and other features, everything is in real time. Followers of the page are able to immediately see the information and then respond with questions or comments or RSVP to events. Also, lecturers have the freedom to post whatever and whenever they desire. With traditional classroom and media such as a newspaper, it sometimes takes one week for information to be printed and then it might be a few days before it is delivered to the student or the student has time to see the material or article. Also, there is no guarantee that a media source will print information sent to them. With the immediate nature of social media, a lecturer can control what is posted, when it is posted, and have updates immediately sent to all of that university's followers.

Social media is a financially free form of outreach. The only investment necessary is that of lecturer/student's time and effort, and possible training. Social media can be updated from any device that can connect to the internet. Some lecturers have found a significant enough following on social media that they've been able to reduce costs by eliminating some students from the mailing list. A few participants in the study referred to social media as the outreach method that provides the most benefits for the smallest amount of resources. Overall, social media cannot hurt because it doesn't cost anything to establish or use in the first place. Utilizing social media is not expensive and provides large amounts of benefits for minimal cost.

In conclusion, therefore, there are wide variety of perceived opportunities, risks, and barriers among entrepreneurship education lecturers in regards to implementing and using social media for entrepreneurship education in Nigeria. While some lecturers in this study are not interested in utilizing social media to connect with students, a majority of lecturers in the different universities are interested in the technology or would be interested in the technology if they were trained to use it. Most respondents believe that social media would be a unique and beneficial supplement to their other teaching strategies. Many respondents also suggested that keeping up with technology is a crucial way to ensure entrepreneurship education is not left behind as students find new and different ways to communicate. Social media was perceived as a way to provide entrepreneurship education with an interactive, controlled, and immediate way of communicating and disseminating information. Additionally, social media was perceived as extending and supplementing traditional teaching strategies in order to spread entrepreneurship education to as many students as possible, rather than replacing these traditional teaching efforts. With training, some lecturers believe they will be more knowledgeable and confident about using social media. This study suggests that social media has the potential to become an integral component of entrepreneurship education and could provide numerous opportunities to strengthen entrepreneurship education's communication efforts.

5.3. Recommendation

There are a few limitations to this research study. First, only entrepreneurship education lecturers in certain universities in Nigeria were interviewed. In the future, it may be beneficial to interview lecturers from every college and university within the country of choice to be able to make more generalizable claims about entrepreneurship education's use of and views on social media in higher institutions in the country. While respondents included those who both used and did not use social media as part of their entrepreneurship education work, this study only interviewed lecturers from universities with active entrepreneurship education programs in the country. Though there is little indication from the current study, it is possible that lecturers from universities not interviewed think about and use social media differently than those in our study.

Another restraint is that the research only collated views from entrepreneurship education lecturers who replied the email survey interview questions sent out by the researcher. This means that the research collated data from lecturers who were able to email back answers from their universities. Different insights may have been gained had the research only had data from a sample of the population.

Considering the incredible opportunities for future research looking at using social media within entrepreneurship education realm, it is recommended that it would be beneficial to interview and gain the perspective from students of entrepreneurship education. Gaining viewpoints from the people who benefit from entrepreneurship education would allow for better understanding of the value of entrepreneurship education's social media use. By gaining perspectives only from lecturers with Entrepreneurship Education the research did not analyze the actual opportunities or barriers by students; it only analyzed the perceived opportunities, risks, and barriers from entrepreneurship education lecturers' point of view.

A further recommendation for the next research would be to perform a more quantitative study to isolate and measures to the various risks and barriers identified in this study, which could be sent to all the universities offering entrepreneurship education to get more generalizable data regarding usage and impact. Instead of performing interviews with an open set of questions, the next survey could be developed to try to quantify the impact of social media for entrepreneurship education lecturers and students.

And more research is suggested to delve into the 'Role and Effectiveness of Global Hybrid Training Classes utilizing the Classroom and Blackboard Learn with Professors' Narrations/Lectures on the PowerPoint Slides."

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ANNEX

MENTOR'S QUOTES

- Education is one of the key drivers to success for individuals and a nation as a whole.
- Education is pivotal and opens the door to freedom, with a path to possibilities.
- A society without education is a society without knowledge, which can never be independent.

…Shamir Andrew Ally, Ph.D., MBA, FAIA (UK), DTM