ISSN: 5392 - 3369
Volume 8, Number 2, 2022
International of Journal of Innovations in Accounting, Management and Social Sciences

INNOVATIVE ENTREPRENEURSHIP AND APPRENTICESHIP PROGRAM OF UNIVERSITY STUDENTS IN RIVERS STATE

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ABSTRACT

This study examined the relationship between entrepreneurship education programmes and apprenticeship programme of University Innovative students in Rivers State. The result of the study revealed that entrepreneurship education programmes have a significant relationship with career mindset of students. The study also revealed that the dimensions of entrepreneurship education programmes of scalable start-up entrepreneurship, innovation entrepreneurship and social entrepreneurship significantly correlated with career mindset of business education students. The study further showed that team cooperation significantly moderated the influence of the relationship between entrepreneurship education programmes and career mindset of business education students. The study therefore, concluded that entrepreneurship education programmes enhances career mindset of business education students of universities in Rivers State. It was recommended that universities should initiate entrepreneurship education programmes in order to create and enhance career mindset of business education students and others in Universities.

Keywords: Innovative Entrepreneurship, Apprenticeship Programme, University Students

INTRODUCTION

Innovation Entrepreneurship

According to Dabic and Potocan (2012), we are living in a fickle world of systematic turbulences characterized by swift dramatic changes. This is also a world of great opportunities. Through permanent changes and confrontations with countless antitheses, the inherently conflicting development of contemporary societies coerces governments, individuals and enterprises to take the extreme opposing positions with a number of fluid transitions. One group comprises prudent voices that recognise the "crisis curse"' which is introduced into their activities by development and which tears the existing systems and ideologies and probes the notion of future as well as their own personal existences. The other group is made up of optimistic voices that even in the fiercest of crises see opportunities for change and progress. Having transformed the fascination with the future and its implicit contradictions into personal professional challenge (and the awareness of implicit contradictions it carries a long) and a quest for developmental limitations, they have not been able to shun emersion into the complexity of issues enhanced by innovative development based on knowledge accumulation and its transformation into capital. Entrepreneurship and innovations have facilitated introducing changes into our lives as well as participating in the society that is entitled to expectations and that needs us. The answer to questions, such as how to protect oneself from ignorance, from knowledge obsolescence, from harmful activities of the ignorants, lies somewhere between innovation and entrepreneurship.

The 21stcentury is the age of knowledge and information, the age characterized by the capacity to regenerate, develop, employ and protect new and innovative ideas, which particularly comes into play with those industries that base their competitive advantages on advanced technologies. Under the said impacts sciences 'change': information, innovation and time have become the new factors of development, thus positioning themselves as the source of competitive advantage in a society that depends on the quality of people, their education and creative potentials (Pasaro et al., 2017).

Knowledge transfer attainable today by innovation transfer is exceptionally significant for overcoming the development and technology gap. The development of electronic technologies shifts the knowledge gravity centre from manufacturing processes and products to management, information processing and to the development of artificial intelligence. Over two thirds of the total scientific insights that mankind has at disposal have been created since the first electronic computer was manufactured The first economic revolution promoted the worker as its holder, the second technological revolution brings to light the expert, while the third Technological revolution endorses the computer technician/IT expert as the promoter of development in The area of electronics, microprocessors and telematics. The emerging initial phase of the fourth technological revolution, which is symbolized by fotonicsatom fusion, bio chip, artificial raw materials, and artificial intelligence, will highlight innovators and great investments that will result in opening up many new areas of human activity.
Real knowledge accumulation processes and the related diversifications of innovation have inexorably led to dislocating the paradigms firstly in the entrepreneurs' consciousness's and then in the governing administrative structures. The growth of 'strategic' and 'entrepreneurial' thinking is marked by the synthesis of experience and many relevant data from the market. The basic assumption is that knowledge is composed of two components: that which can be codified and that which is tacit. The former comprises information, a patented blueprint, innovation and other coded knowledge. The latter is implied and involves skills, routine, and procedures arising from the learning process (people and their knowledge and experience) that yet needs to be created and enriched. Consequently, knowledge is both contextual and independent, i.e. enterprises have equal capabilities for transforming that knowledge into production capacities (Souitaris et al., 2007).

Time continuity of entrepreneurship, (Passaro, et al.,2017) which are significantly founded on researching innovation or technological development as the inventive importance of past experiences, are the starting point for the present day acumen of the value of innovation and entrepreneurship. That is what differentiates the long run high performers from the low-performing and even unsuccessful enterprises - thus paving the way to accepting new tasks. To connect and intertwine the attracting parts or to adapt the existing components of an already created artistry with the aim to make a new achievement or to redesign the existing task with the aim to raise efficiencies while realizing it all at lower cost - all that is just a part of the many challenges entrepreneurs are faced with.

Capitalist economies force business enterprises to innovate or die by establishing a competitive marketplace in which the prime weapon of competition is not price but innovation. The European Commission (2020) on innovation defines innovation as "the successful production, assimilation and exploitation of novelty in the economic and social spheres". In order to identify the innovative models an innovation hyper cube model is used as a form of innovation clustering, particularly within the system/chain of values which are thus reinterpreted as innovation systems/chains of values. The innovation hyper cube (Afuah & Bahrain, 1992) is based on frequent categorization of innovation as a radical, incremental,architectural modular, and c innovation niches founded on effects they have on competences, other products and investment: decisions of the innovating entity. This breakdown is usually appended by another division into productive (object) and process innovation. In addition, it is necessary to differentiate between macro innovation, fundamental innovation improvement innovation as the foothold for differentiating between macro and incremental innovations, between fundamental and improvement innovations, between product and process innovations, and, finally, between technology and cosmetic innovations. The hyper cube innovation concept, is mostly applied to products, and is particularly effective when analysing more complex products which generate positive network externalities (Fukuda &Watende, 2008).

Thomas et al (2015) observed systematic approach which introduces new elements into the theory of innovation as there is no longer a unified knowledge base for warn key technologies.In other words, technologies are developed as 'systems built by system builders (product manufacturers are turned into system managers whose competencies are mostly reliant on the ability to specify the different inputs); while enterprises are limited by their own knowledge horizons, their *areas of* current or technological skills and knowledge constrained by experience and resources intended for research Innovation according to Constable and Somerville (2003) is the factor influencing the majority of development aspects of an enterprise, and its impact should be respected in all phases of the strategic process in an enterprise (creation, implementation, control). The impact of innovation is essential for strategic orientation, as well as in the period of implementing strategic segmentation, i.e. when strategic business units are identified and installed. True competitive advantage can only be gained if the focus is placed on developing never-before-seen products which provide consumers with completely new perceived benefits(Fukuda and Wadanabe, 2008).

Summarily, Dabic and Potocan (2012), argued that innovation makes an impact on the values adhered to by given groups in an enterprise and eventually on the entire corporate culture as well as on the key forces that form the competition structure. These innovations become prominent as the obvious significance factor in moulding an enterprise's competitive advantage. The technology and innovation base, and particularly innovative competencies as a part of an enterprise's carrying competencies essential for it's sustain ability, growth and development, play the most radical role in those enterprises whose development (Constable and Somerville (2003) is explicitly based on innovative trajectory and whose development strategy is identified by technology clusters. Thus, innovation influences the whole environment of business operations (Lindsary &Hokins, 2010).

Apprenticeship Program

Apprenticeship is a temporary position is employment preparing for clerical and expert professions (Schaper, and Volery, 2004). Temporary positions for master callings are equivalent in some ways to deal with apprenticeships for trade and expert occupations, however the absence of systematization and oversight leaves the term open to expansive understanding. Assistants might be school or university students, secondary school - students, or post-graduate grown-ups. These positions might be paid or unpaid and are generally professional. For the most part, an entry level position comprises of a trade of administrations for experience between the understudy and an association. Students can likewise utilize a temporary job to figure out whether the\ have an interest for a specific vocation, to make a system of contacts, or to pick up school credit. Some assistants discover lasting, paid business with the associations for which they endless supply of the entry level position. This can be a critical advantage to the business as experienced assistants frequently require next to zero preparing when they start consistent job (Schaper, &Volery, 2004).

The learning procedure of entrepreneurship have to restrict just to the classroom examinations as well as the communication with today's active business environment is fundamental due to 'basic entrepreneurial abilities must be created and refined on the off possibility that they are rehearsed' (Mailay &Westhead, 2005). This is to empower students to pick up hands-on experience by seeing, touching and feeling about the business world (Schaper, & Volery, 2004; Matlay &Westhead, 2005). Hence, entrepreneurial entry level position is seen as a decent system to furnish students with such a learning background in a genuine business setting (Venkatachalam & Waqif. 2005). Temporary position as per (Brown 1999) seems to be by and large low maintenance field encounters and includes a more extensive assortment of scholastic controls and hierarchical settings with its principle objective to in the end lead students to end up independently employed (Henry,2003), Brown(1999). Highlight the objective of having temporary position venture is to open students to the perspectives of industry even minded and it's Inclination of work practices. It is a planning method that progressions exploratory figuring out how to application and develops individuals' functioning aptitudes in honest to good business world (Postigo & Tamborini, 2002).

Point out that the students' pastime plan/ work experience undertakings are to a great degree basic for students as it revealed and prepares an understudy for the real working information and as an external optional learning development. Having the entrepreneurial passage level position programs offer a significant measure of Inclination for schools, affiliations and what's more students (Hlady-Rispal &Jouisson-Laffittle, 2014).

Case in point, students with entrepreneurial entry level position experience tend to show lower work disappointment than those without temporary job experience (Keat-Selvarajah & Meyer. 2011). A study by Watson and Gavin, (2009) likewise justify that assistants who have taken an interest for the section level position programs tend to have higher job arranging about their occupations and bigger measure of regular and extra prizes achievements. Thusly, getting appropriate entrepreneurial experience has a positive association with individual's desire and accessibility in journey for business opportunities in perspective of their underlying presentation to business circumstances (Batool etal.,2015). In whole, taking a gander at the banquet of entry level position projects to students, numerous specialists recommended that entrepreneurial temporary job projects ought to wind up an obligatory part of students' instructive structure (Zainal and Grigga, 1995). This, thus, has made entry level position programs turn into an vital basic part of today's instructive educational modules in get ready university students towards entrepreneurial profession. At the end of the date, having a decent entrepreneurial short-term job projects will greatly affect more university students to ha\ e higher interest for entrepreneurship project.

Knowledge Building Development

Knowledge Building as a theoretical, pedagogical, and technological innovation focuses on the 21st century need to work creatively with knowledge. The team now advancing Knowledge Building spans multiple disciplines, sectors, and cultural contexts. Several teacher-researcher-government partnerships have formed to bring about the systemic changes required to accommodate pedagogical innovations that range from elementary to tertiary education and require new forms of teacher education. The evolution of Knowledge Building, starting with research on "knowledge transforming intentional learning," and other processes leading to the development of expertise is critical in developing entrepreneurial mindsets. It provides an account of how the first networked collaborative learning environment was developed to support such processes and next-generation research and development to advance education for innovation and knowledge creation.

Although the term "knowledge building" is currently used in about half a million Web documents, the term is seldom defined and its uses are far from consistent. For many educational writers it appears to be merely a way of adding a constructivist flourish to the term learning. When used in a business context, the term seems to refer to knowledge creation and additions to an organization's "knowledge capital. This is actually closer to our own sense of the term, which applies equally to educational and knowledge work contexts. Knowledge Building has several characteristics not shared by constructivist learning in general, although common to organizational knowledge building. These according to Scardmatia and beriter (2007) include:

Intentionality. Most of learning is unconscious, and a constructivist view of learning does not alter this fact. However, people engaged in Knowledge Building know they are doing it and advances are purposeful.

Community knowledge. Learning is a personal matter, but Knowledge Building is done for the benefit of the community.

As suggested by Scardamalia, (2003), noone can claim to own the term "knowledge building' and there are now several different groups doing sustained work on knowledge building and developing the concept in their own ways. To distinguish "knowledge building" in its broad and varied senses from "Knowledge Building" in the more specific sense used in our own research and that of contributors to this Special Issues. This focuses on constructivism,

Constructivism as aspect of knowledge building became known to educators mainly through the work of Piaget (1971). The importance of social processes related to constructivism can be traced to Vygotsky, who emphasized culture and human interaction in learning. While Piaget tended to focus on developmental processes of individual learners he was fully conscious that the growth of knowledge in the sciences and the growth of knowledge in the child are at bottom the same process (Piaget, 1971). However, what was picked up in education was the psychological aspect, which holds that individual knowledge growth is a constructive process. This is at least an implicit premise of all cognitive theories, and so by itself a statement like "learners construct their own knowledge" does nothing but identify the speaker as assuming a cognitive stance (Vuyk, 1981). There is also a radical philosophical constructivism, asserting in effect that socially constructed beliefs are all we have and that there is no possibility of matching knowledge constructs against an external reality (Boudourides, 2003). An important point about the concept of Knowledge Building as we understand it is that it does not imply any particular position, pro or con, on this controversial issue. That is, as long as you accept that theories, histories, and the like are human constructions, you can hold any epistemological position you wish concerning the truth or foundation of such constructions.

The concept of Knowledge Building did not emerge full-blown. It progressed through several stages. The following is a rough chronology, based on a succession of research programs:This was a period of wide-ranging research on processes of written composition. The information processing demands of writing appeared to be very high, and so one goal was to explain how children cope with these demands (Scardarnalia, 1981). The solution arrived at was something called the "knowledge-telling strategy. This strategy consists of telling what one knows, in more-or-less the order it comes to mind, with genre constraints and preceding text as the principal retrieval cues. This is a highly efficient strategy that enables young writers to quickly and easily complete writing assignments that more mature writers labour over. The more mature writers employed a more complex strategy, "knowledge transforming which involves a cycling between writing concerns and concerns about knowledge and belief. Although less efficient in getting the job done, the more mature strategy has the important benefit that the writer's knowledge and beliefs undergo development through the composing process, whereas "knowledge telling" has little or no effect on the writer's knowledge. The distinction between these ways of dealing with knowledge becomes increasingly relevant with the advent of technologies which are frequently heralded as environments supporting knowledge building, although the technology itself can as readily be used for knowledge telling as for knowledge transforming, depending on the goals of the writers and the socio-cognitive context. The focus of our applied research shifted from trying to improve students' writing to supporting more active knowledge processes in writing (Scardamalia, et al 1984) and designing technology to provide such support.Experimental trial of an intentional learning environment gave direction to technology development. The learning environment was CSILE— Computer Supported Intentional Learning Environment (Scardamalia, et al 1989). Intentional cognition is "something more than 'self-regulated learning/ more like the active pursuit of a mental life" (Bereiter &Scardamalia, 2002,). "Self-regulated learning" is usually thought of as a set of study skills and learning to intentional learning, entailed several ideas that pointed in the direction of Knowledge Building (Scardamaiia &Bereiter, 1985).

Empirical Review

Several scholars have investigated empirically into various areas of entrepreneurship education programme and career mindset of business education students in universities. This section will deals with those empirical researches conducted by other researchers. Boldureanu (2019) conducted a research on entrepreneurship education through successful entrepreneurial models in higher education institutions. The study ran a pilot experiment with 80 students enrolled in a business creation course using qualitative and quantitative measures content and statistical

analysis. Analysis was carried out to examine differences in student entrepreneurial intentions and attitudes towards entrepreneurship. The study revealed that entrepreneurship education based on successful entrepreneurial models positively influence the entrepreneurial attitudes and intentions of students and lead to higher orientation of students perception towards social benefits of entrepreneurship. The study also revealed that if educators want to improve the efficiency of education focused on developing entrepreneurial skills, graduate programmes should be designed differently for business and non-business students, since studying successful entrepreneurial studies impact these two groups differently. This findings of this studies in in line with the present study. The differences lies in their methodologies. While the study in referent adopted quantitative approach, the present study adopted quantitative method.

Baloch et al (2017) carried out a study on entrepreneurial capacity building and students entrepreneurial inclination. The data were gathered from the graduate and undergraduate students of university of Agriculture Peshawar. The study revealed a significant positive effect of entrepreneurial education apprenticeship programme, university training and coaching on university student's entrepreneurial inclination and entrepreneurial education. Apprenticeship programme, University training and coaching increases the propensity of entrepreneurship among the university students. This findings is also evidenced in the present study. While our study adopted quantitative analysis, Baloch et al (2017) used a wide range of literature review in their study.

Rodrigues and Lieber (2020) in their research on relationship between entrepreneurship education, entrepreneurial mindset, and career readiness in secondary students, using a quasi-experimental design. The study revealed that students in entrepreneurship education showed an overall statistically significant increase in entrepreneurial mindset. Specifically in communication and collaboration, opportunely recognition, and critical thinking and problem-solving. There was also a positive and significant association between entrepreneurial mindset gains and perception or of future career success. This finding has supported the view Baloch et al (2017) and also aligned with the findings of our study on entrepreneurship education and career mindset of business education students. The difference lies in their methodology. While Rodrigaw and Liebu (2020) adopted quasi-experimental approach the present study adopted correlational approach.

In her study, Oseni (2017) on the relevance of entrepreneurship education to the development of Micro, small and medium enterprises in Nigeria adopted Kruskal Wallis test. The study revealed positive and significant correlation between the existing Nigerian educational system where entrepreneurship education is optional and restricted only to tertiary institutions and entrepreneurship development, and the withdrawal of entrepreneurship from nation's tertiary educational curriculum would be of little or no effect on the effort of developing entrepreneurial spirit in Nigeria. The study suggested entrepreneurship education to be incorporated into the country's educational system right from secondary school. This findings are in line with our current work that entrepreneurship education has contributed to economic development and prepares students towards becoming future entrepreneurs while Oseni (2017) used Kruskal Wallis test method, this study adopted spearman's rank-order correlational coefficient.

Grci and Denes (2017) carried out a study on the benefits of entrepreneurship education and training for engineering students in Lucian Blaga University, Romania. The study revealed that entrepreneurial education and training provide individuals with the ability to recognize commercial opportunities, self-esteem, knowledge and skills to act on them. The findings of this study collaborated the findings of Baloch et al (2017) Oseni (2017), Greciu and Deves (2017) and is also evidenced in this present study through this study used descriptive statistics. This present study adopted bivariate and multivariate analysis.

Osakwe (2015) carried out a study on entrepreneurship education in Delta state tertiary institutions as a means of achieving national growth and development, using the population of 1898 academic staff in eight tertiary institutions in the states. The sample for the study was 800 lecturers using multi stage and stratified random sampling techniques. The analysis of the data was done using descriptive statistics of means and standard deviation. The result showed that entrepreneurship

education is beneficial to national development despite its challenges in tertiary institutions. The finding of this study is in line with the presence study. But the methodologies are difference.

CONCLUSION

Based on the data analysis and the discussion of findings, the study concluded that entrepreneurship education programmes enhance career mindset of business education students. The dimensions for entrepreneurship education programmes such as scalable start-up entrepreneurship, innovation entrepreneurship and social entrepreneurship influence measures of career mindset of business education students such as capacity of students, innovative skills and knowledge building development. Also, team cooperation moderated the relationship between entrepreneurship education programmes and career mindset of business education students .Universities whose students are not exposed to entrepreneurship education programmes tend to exhibit low career mindset in the field of entrepreneurship. Therefore, entrepreneurship education programmes enhance, capacity of students, innovative skills and knowledge building development.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations were made:

1. Universities should initiate entrepreneurship education programmes in order to create career mindset in business education students and other students in their universities.
2. All stakeholders in the field of education should team up to design polices and effective curriculum in entrepreneurial studies that enhance the study effective entrepreneurship.
3. Scalable start-up entrepreneurship, innovation entrepreneurship and social entrepreneurship should be adopted by universities for enhancement of career mindset of students.

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