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UNDERSTANDING ENTREPRENEURSHIP EDUCATION IN THE CONTEXT OF THE ENTREPRENEURIAL UNIVERSITY

Observing that the two phenomena have evolved separately amidst misunderstandings, this article set out to provide clarity on the 'entrepreneurial university' concept and university 'entrepreneurship education'. The analyses are theory-driven from a desktop review of scholarships on both concepts and data from a study on universities in economic development and poverty reduction. As a point of departure, the author adopts the 'entrepreneurial university' concept to analyze the institutional attributes and portray their links and missing links. Although the two practices have evolved in a parallel manner, entrepreneurship education at the basic unit does not operate in a vacuum and could reflect and correlate to institutional characteristics. Action in one element (or inaction) could affect the other. In point of fact, an entrepreneurial university could also correlate to be a university that is highly engaged in entrepreneurship education. We conclude that an integrated framework is necessary as a director of attention and evaluation for strategic planning of university entrepreneurship and at the least, stimulate discussions and policies thereof.

Keywords: *Entrepreneurship, Entrepreneurial, University, Education, economic development.*

1.0 Introduction

More than ever before, universities, the world over, are undergoing a second revolution of a third mission of economic development which includes participation in poverty reduction in the case of developing countries. In the first revolution that dates as recent as the 18th Century, research was added as a companion to teaching, main mission of the university for over 700 years before. In the second revolution of economic development largely attributed to be a 20th and more especially, 21st Century phenomenon with the advent of the knowledge economy, universities are called upon to be actively engaged in the related countries' economic growth,

employability of graduates as well as direct links with industries. Unlike before when this responsibility was taken for granted as being indirect, this economic development role is clearly articulated and emphasised in the Economic Development and Poverty Reduction Strategy Papers of many African countries (see Doh 2012). This economic development orientation seems to dominantly give rise to the prominence of entrepreneurship in most universities. In the first instance, many universities want to become leading entrepreneurial universities. In the second, they want to be leading engaged institutions of entrepreneurship education.

Although the strength of a university's entrepreneurship education might be influenced by or related to the institutional structures, cultures, incentives and even system's policies, these two concepts which admittedly carry different meanings and focus have evolved conceptually and practically separate in the university entrepreneurship literature and policy making. In this article, one postulates that an integrated multi level framework that provides an overall picture of university entrepreneurship from the institutional perspective and entrepreneurship education at the basic unit will render the university and units more entrepreneurial. Observably the two concepts have been subject to a lot of misunderstanding in the sense where university entrepreneurship may be usually misconstrued for the 'entrepreneurial university' or vice versa where the latter is used to describe entrepreneurship education. Although an entrepreneurial university could also correlate to be one highly engaged in entrepreneurship education one of the objectives of this paper is to sharpen the conceptual and focal difference between the two. The article portrays how the former embraces the latter and vice versa, and how they could be connected to strengthen university entrepreneurship.

2.0 Methods

The article is composed from a desktop review of different dimensions of university entrepreneurship and related empirical data from a qualitatively conducted study on the roles of the university in economic development and poverty reduction (Doh 2012). In response to the quest on a possibly framework depicting how universities actively participate in economic development, Doh (2012) identified that the 'Entrepreneurial University' (Clark 1998; 2004) concept, amidst its external income generation connotation, remains one of the main frameworks for studying the role of the university in economic development. The study examined the links and missing links between the entrepreneurial university concept and pathways with

the practices of the universities. One of the main thrusts and innovation in the current paper is the additional component of entrepreneurship education. In terms of approach, the article (as per the previous study) is theory driven from the perspective where the theoretical and conceptual issues are important in propelling the analyses and conclusions (Marshall and Rossman 1999). It is based on the related concepts that an integrated and multilevel framework is built.

3.0 The entrepreneurial university and entrepreneurship education

University entrepreneurship splits into two interrelated but separately and largely misunderstood concepts of the 'entrepreneurial university' and 'entrepreneurship education'. As seen from below, the former refers to the governance and management, structural and cultural aspects as to how the university becomes entrepreneurial as an institution. The latter refers to the entrepreneurship educational practices that take place at the basic units of the universities, as inculcated, embodied and practiced by teachers and students.

In the early 2000, university entrepreneurship policies in most of the OCDE was inspired by the "Entrepreneurial University", concept (see Clark 1998; 2004) which developed the five pathways as to how universities become entrepreneurial. Clark (1998) identifies a strong sense of financial autonomy and second and third stream funding from non government sources especially industries to define the entrepreneurial university. Ezkowitz and Zhou (2008) added that it is a university that is actively influential in economic development strategies. Such a university is quick to stimulate collaboration with industry, commerce and development actors and agencies (Ezkowitz and Zhou 2008, 629). This sums up to explain the entrepreneurial university as one generating significant incomes from second and third stream incomes while participating actively and influentially in economic development. In point of fact a strong sense of autonomy was associated to the entrepreneurial university where it is one "typically breaking out of the constraints of funding regimes or traditions of state-run higher education systems" (Clark 1998).

The second concept of 'entrepreneurship education' embodies all the teaching-learning and coaching processes aimed at stimulating an entrepreneurship mindset and spirit amongst staff and students in view of propelling the university to a significantly influence and impact the related country's entrepreneurship cultures

and economic growth. This calls for significant staff capacity building to the effect. Boohene (2016) observes that entrepreneurship education in the African university aims at encouraging innovation and job generation among university graduates. From this perspective, the African university case of Ghana actively promotes entrepreneurship as an attractive and a viable career option among African graduate students. According to another perspective) universities should not only aim at providing skills and competences that facilitate the job market insertion of the students and coaching for professional life (in which case, it will be professionalization) it should be able to train, couch and orientate the students to be able to set up and manage their own enterprises and businesses (Doh 2012). Doh (2012) stresses on the aspect of training that does not only aims at creating jobs and enterprises but also on how to maintain the jobs and enterprises. In any of the approaches the ultimate goal must be to train, steer and couch the students on how to participate in and create new wealth with implications on the country's economic performance.

Entrepreneurship education could involve innovative and flexible pedagogic approaches which engage students to learn how to learn and to be able to confront complex problems which they can solve through their own learning competences; pedagogy that blends theory and entrepreneurship practices. Doh (2012) identified that entrepreneurship education is very relevant for countries in any development context because unlike Clark (1998) it touches on direct student economic development, employment, small business and job creation and the poverty reduction role of higher education. However, the author argues that on the contrary African universities like everywhere, mostly go after big industries whereas, most of the African economies are informal and comprise of small and medium size industries. Observing these tendencies of universities mostly going after big companies, Doh (2012) recommends that entrepreneurship education in the African Universities could require the American type of funding programmes such as the Small Business Innovation Research (SBIR) and the Small Business Technology Transfer (SBTT) Programmes. These programmes help universities to do business and technology transfer with all segments of the economy, including small poverty reduction business. The main conclusion that can be made of the two concepts is that whereas 'the entrepreneurial university' is an institutional characteristic embodying management patterns, structures, cultures and incentives entrepreneurship education is a main and major process of the entrepreneurial university.

3.1 The links and missing links

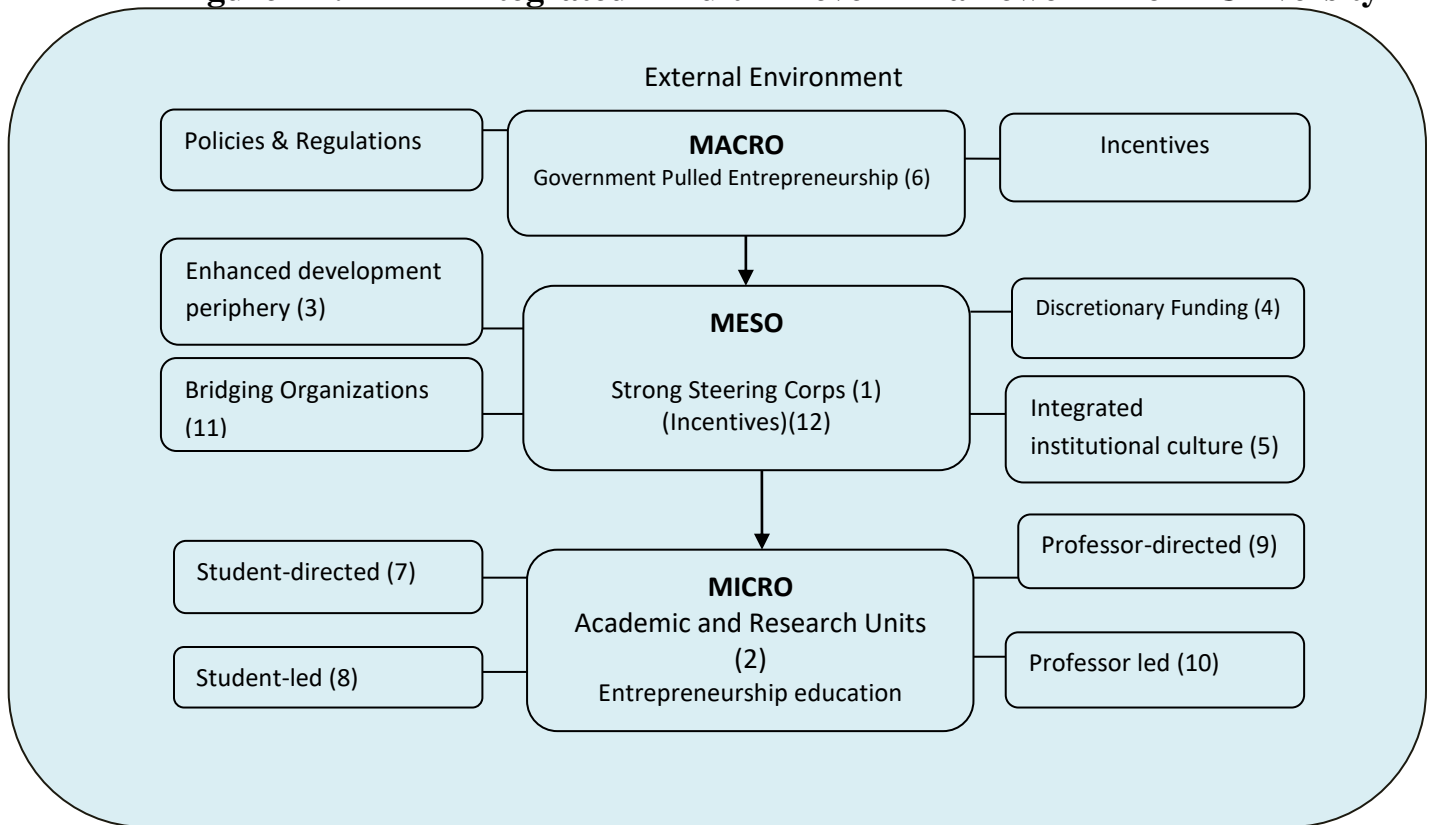
At the heart of the entrepreneurial university, as per Clark (1998) is a strong and expedient *steering corps* (1) which is focused, highly flexible and quick to react to the changing demands in the environment. There is the importance of a nontraditional multidisciplinary unit, called *Enhanced Developmental periphery* (EDP) (2) which connects different disciplines. It works on knowledge transfer, makes industrial contacts, implements intellectual property, follows up continuing education, fund raising and alumni affairs. There is importance of *discretionary funding* (DF) (3) which enables the university to be innovative and be able to seize new opportunities. The fourth is a *strong academic corps* (heartland) (4) which develops a work culture that embraces change. The last is *integrated entrepreneurial culture* that cuts across the university (ibid.) (5).

Clark (1998) was however criticized for viewing entrepreneurship merely as an institutional characteristic and neither did it take into consideration that entrepreneurship could be stimulated from an upper layer of the university and that indeed entrepreneurship is in micro units (Azele 2008). Clark's framework seemed to have been complemented with the concept of "*Government pulled*" (6) entrepreneurship (Etzkowitz and Zhou 2008). This government pulled entrepreneurship refers to the macro policy dimensions of how universities may contribute to economic and social development thus suggesting that government, the ministry and related agencies could be influential in university entrepreneurship. This extra layer above the university could also be extended to include continental organizations such as the European Commission, African Union and continental associations which despite their weak legitimacy are very active and influential in stimulating university entrepreneurship policies. An important point to be driven home is that entrepreneurship education at the basic unit could be related a particular funding scheme or policy designed beyond the basic unit and beyond the university and vice versa where the policies are designed on the basis of the entrepreneurship education practices at the basic unit. Doh (2012, 169) raises the notion of *entrepreneurship governance* which does not certainly take place at the basic unit where entrepreneurship education takes place but at an upper layer. This refers for instance, to ministry and system wide entrepreneurship enforcement mechanisms which ensure for instance that curriculum is designed in such a way that it integrates and illustrates entrepreneurship, without which, the programme is not approved. According to this perspective, programmes do not have to come up only with the teaching conditions and only around the disciplinary and scientific path discipline, without

looking at the practical entrepreneurial environment in which the discipline should operate (Doh 2012, 170).

Both Clark’s and Ezkowitz and Zhou’s (2008) pathways did not connect to the entrepreneurship education that take place in the basic units and classroom teaching and innovative pedagogies to the effect. In point of fact it can be observed that entrepreneurship education strategies in the case of many European Universities has been developed separately from the institutional aspect, the latter still to be institutionalised in most, if not, all the cases and contexts as follows:

Figure 1: An Integrated Multi Level Framework for University



Within the entrepreneurship education literature is what Doh (2012) coins as *student-Directed* (7) and *student-led* entrepreneurship (8) as well as *teacher-researcher* directed and *teacher-researcher* led (term *scientist-led*) entrepreneurship (See Goktepe-Hulten 2008 for Scientist-Led Entrepreneurship). The student-directed entrepreneurship embodies all the coaching, competences and skills to enable the student to qualify for the job market, set up, manage and maintain their jobs and own enterprises. The *student-led* entrepreneurship presupposes that students are very

important actors and agents of university entrepreneurship. The *teacher-researcher-directed* (9) entrepreneurship (ibid) suggests various kinds of coaching and innovative and flexible pedagogic skills which the university teacher receives to be able to be entrepreneurial and to guide students: additional skills in grantsmanship, business plan writing, project design, application writing and various cooperation and communication tools.

The *teacher-researcher led* entrepreneurship (10) brings into lime light the importance of the professors in initiating and leading entrepreneurial ventures of the university. Rooted in the concept of intrapreneurship as to how individuals innovate within large organizations, it suggests that the professors leading research groups, laboratories and incubators are indispensable in shaping the entrepreneurial cultures in the university. They imprint their entrepreneurial behaviors on the individuals in the group and help nurture the entrepreneurial spirit, serve as models, influence and institutionalize their behaviors, create connections and various communication networks between the scientists, research groups, and technology offices. They are the ones who mostly initiate the projects (Goktepe Hulten 2008, 657-658). Using the example where Swedish Universities' connection to major companies like Ericsson and Volvo, Goktepe Hulten points out that most of university knowledge transfer projects with industries start with informal processes by individual professors (ibid.). Bridging organizations (11) are important in nowadays university connection to economic operations because they typically compensate for the lack of consulting structures and limited human and time resources. They could be useful in reducing search costs between the two organizations. Doh (2012) also noted that most intellectual property laws of the African universities are still to appropriately recognize and provide enough *incentives* (12) for the individuals who generate and lead in university entrepreneurship. What may be important as a point of convergence is that both the Entrepreneurial University concept and entrepreneurship education literature conclude on the importance of innovation, flexibility, adaptability, risk-taking, opportunism, self reliance, fast decision-making and being proactive (Clark 1998, 2004; Gjerding et al. 2006. 94).

4.0 Conclusion

This article has attempted to sharpen the differences between the entrepreneurial university as a concept and university entrepreneurship education which may be subjected to various misunderstandings in higher education practice and policy-

making. While also articulating their points of convergence, the article presented an integrated multilevel framework for designing and analyzing university entrepreneurship. The author argues that without a framework linking the different dimensions and levels the whole picture is often missed out. Such a framework would serve as a director of attention for designing university entrepreneurship strategies as well as evaluating the effectiveness the designs. Through a holistic framework and picture, one aspect can be employed to connect and strengthen the other. Although the two concepts have evolved differently in the university entrepreneurship literature and practice they are connected and could be most effective if they are developed in consideration of each. The point being driven home is that entrepreneurship education which takes place at the basic units of the universities does not operate in a vacuum and could be more effective if linked. An action in one of the dimensions strengthens the other, the absence of which could weaken the other. Therefore an overall picture and thorough understanding of the conceptual differences, different actors and structures as well as linkages is important. The effectiveness of entrepreneurship at the basic unit could be related to the state of the university as an entrepreneurial university and even the system in terms of university and system wide policies, cultures, and structures and funding. For instance drawn on Doh (2012, 169) the article evokes the notion of *entrepreneurship governance* in the university which does not certainly and not mostly take place at the basic unit where entrepreneurship education takes but which is essential in orientating entrepreneurship education. The above framework would be significant for strategic planning of university entrepreneurship taking into conscious consideration an understanding of the different concepts, incentives, actors, cultures and structures from the macro and micro levels of the university.

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РОЗУМІННЯ ПІДПРИЄМНИЦЬКОЇ ОСВІТИ В КОНТЕКСТІ ПІДПРИЄМНИЦЬКОГО УНІВЕРСИТЕТУ

Анотація

Автор статті робить спробу внести ясність у трактування понять «підприємницький університет» і «підприємницька освіта», виходячи з розуміння того, що обидва ці поняття розвивалися окремо і часто розумілися неоднозначно.

Дослідження ґрунтується на використанні теоретичних підходів до понять, що розглядаються, і результатів досліджень ролі університетів у розвитку економіки та боротьбі з бідністю.

Відправною точкою дослідження є введення поняття «підприємницький університет» з метою подальшого аналізу його якісних характеристик, а також ідентифікації їх існуючих зв'язків та відсутніх ланок.

Робиться висновок про необхідність комплексної парадигми як засобу стратегічного планування університетського підприємництва, а також стимулювання подальшої дискусії з даної тематики.

Ключові слова: *підприємництво, підприємницький університет, освіта, економічний розвиток.*

Дох Паскаль

ПОНИМАНИЕ ПРЕДПРИНИМАТЕЛЬСКОГО ОБРАЗОВАНИЯ В КОНТЕКСТЕ ПРЕДПРИНИМАТЕЛЬСКОГО УНИВЕРСИТЕТА

Аннотация

Автор статьи делает попытку внести ясность в трактовку понятий «предпринимательский университет» и «предпринимательское образование», исходя из понимания того, что оба эти понятия развивались отдельно и часто понимались неоднозначно.

Исследование основывается на использовании теоретических подходов к рассматриваемым понятиям и результатов исследований роли университетов в развитии экономики и борьбе с бедностью.

Отправной точкой исследования является введение понятия «предпринимательский университет» с целью дальнейшего анализа его качественных характеристик, а также идентификации их существующих связей и отсутствующих звеньев.

Делается вывод о необходимости комплексной парадигмы в качестве средства стратегического планирования университетского предпринимательства, а также стимулирования дальнейшей дискуссии по данной тематике.

Ключевые слова: *предпринимательство, предпринимательский университет, образование, экономическое развитие.*