Convergence between 21st Century Skills and Entrepreneurship Education in Higher Education Institutes

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Abstract

The aim of this study is to explore the extent to which 21st century skills assume "a priori" as an integral part of entrepreneurship education with the intent of producing graduates who are not just primarily driven to start new ventures but also empowered and enabled to create entrepreneurial impact within organizations. In elucidating this argument the author undertook social constructionist approach, in order to develop an empirical understanding of the role of entrepreneurship education in developing 21st century skills from the perspective and experiences of undergraduate students majoring in Innovation & Entrepreneurship undergraduate program. Findings of this study suggest that teaching detailed and nuanced industry knowledge is arguably beyond the scope of entrepreneurship education systems, but to an extent, it is of paramount importance that students are exposed to the organic industry knowledge through interaction and experiential experiences. Within such interaction, the development of convergent 21st century skills such as social relationships, leadership, creativity and critical thinking further nurture entrepreneurial intents among students. In so doing, this study provides avenues for further development of entrepreneurship education, particularly the integration of 21st century skills.

Keywords: 21st century skills, entrepreneurship education, creativity, human capital, Higher Education Institutes

1. Introduction

Higher Education Institutes (HEIs hereafter) are the main catalyst in fostering entrepreneurial spirit by offering major courses on Innovation & Entrepreneurship. Teaching and developing 21st century skills tend to be associated as a by-product of innovation & entrepreneurship courses taught at HEIs. The traditional approach of teaching innovation & entrepreneurship is focused on stimulating entrepreneurial intentions leading potential new start-ups. Entrepreneurship education, particularly relevant to innovation & entrepreneurship courses, is not confined to new start-ups, although the emergence of new startups is often used as a prime indicator in measuring the level of economic growth particularly with regard to entrepreneurial activities at a national and regional level (Acs & Szerb, 2011). Accelerating entrepreneurial activities has always been the hallmark of achieving socio-economic development and growth goals of a country.

Extant literature suggests that traditional pedagogy methods in entrepreneurship education follow the "about" approach (i.e. to teach what entrepreneurship is about) (Pittaway & Edwards, 2012) lacks the applied methodological approach (i.e. to engage and expose students to the entrepreneurial process through problem-based learning and design thinking process) (Neck & Greene, 2011). The underlying assumption is to revise and reframe a coherent entrepreneurial education system that enables students to learn and reflect the entrepreneurial process. The nature of the entrepreneurial process involves entrepreneurial actions and experiences that represent the degree of creativity, ideation, opportunity analysis, resilience, and dealing with uncertainty as well as institutional structures. The conventional methods primarily grounded in the linear approach of problem-solving lack the suitable toolkits to solidify the students' contextual understanding and learning of the entrepreneurial process (Neck & Greene, 2011).

Students are the main recipients of the entrepreneurship education system and developing human capital stemming from 21st century skills. Accordingly, this has become paramount for UAE's socio-economic growth and development, and to achieve sustainable competitive advantage at the global level. Recently, the UAE government has launched a university entrepreneurship program termed "Alchemy" as a part of transforming HEIs into university

free zones to provide students and in particular, to undergraduates, with the key support from academia as well as industry to facilitate the transformation of their ideas into well-established businesses (Gulf News, 2019). An initiative that aims to foster an entrepreneurial ecosystem through active engagement of key stakeholders that can help identify gaps and support capabilities enhancement. Within this, the role of HEIs and industry partners is to work in collaborative partnerships that allow the students to experience important phases of the entrepreneurial process include 'ideation', 'incubation' and 'acceleration'. To achieve successful outcomes in terms of viable business ideas, it is equally important that students learn and develop key 21st century skills to reap the maximum benefits of an entrepreneurial ecosystem.

This study undertook qualitative approach to investigate an extent to which 21st century skills are developed particularly through entrepreneurship education from the viewpoint and experiences of undergraduates pursuing innovation & entrepreneurship major program in the business division at one of the Higher Education Institutes in the UAE. This study does not aim to assume a quantitative character, rather to offer insights on the convergence between 21st century skills and entrepreneurship education; a considerable topic that is in much need of exploration, particularly in the UAE context.

2. Background

2.1 Emergence of 21st Century Skills

In a modern and ever-evolving world of business, human capital represents a key indicator in achieving organizational goals and competitiveness. Graduates equipped with 21st century skills play a vital role in supporting organizations to outperform their counterparts, both in terms of competitiveness and as well as sustainability performance. Recently, policymakers signify the importance of the creation and embeddedness of 21st century skills in teaching and learning activities and in particular to entrepreneurship education. The 21st century skills have also been identified as critical success factors for individuals to secure and sustain their career progressions.

These skills include creativity, critical thinking, collaboration, leadership, perseverance, and social skills combined with performing effectively as part of a team represent important categories of 21st century skills. There are the skills which are rooted in entrepreneurship education and in the present context, entrepreneurship education, with its focus on innovation, has become an attractive strategy for policymakers to drive growth through socio-economic activity and create jobs (Komarkova, Conrads, & Collado, 2015).

In the context of the UAE, entrepreneurship education, driven by innovation and 21st century skills, aims at sustaining the efforts of achieving excellence across all sectors (UAE Ministry of Education, 2019). Against this backdrop, individuals emerge from entrepreneurial competencies coupled with enhanced 21st century skills that are the catalyst for UAE socio-economic growth. Moreover, at the global level, Europe 2020 strategy undertakes the systematic approach to the development and promotion of creativity, innovation, and self-employment primarily through the interface of entrepreneurship education that will foster the entrepreneurial mindsets (Sinkovec & Cizelj, 2013).

2.2 Creativity and Entrepreneurial Competencies

The core purpose of 21st century skills is to transform individuals who can 'use' and 'apply' knowledge beyond the norms in a particular context. Given the dynamic nature of the workplace evolving from rapidly changing technologies, it has become of paramount importance for HEIs to produce work-ready graduates equipped with the skills of creativity and innovation, communication and collaboration, research and information fluency, critical thinking, problem-solving, and digital citizenships to shine and excel in the workplace (Crosling, Nair, & Vaithilingam, 2015). This is where human capital engrained in the 21st century skills unlock and liberate human mindset, and thus foster a more creative process to deal with dynamic issues.

It can be argued that these skills have always been important but are now assuming a different perspective i.e. collaboration and innovation required to analyze information from different sources to make quick decisions and create improved, and in particular, new ideas (Silva, 2009). Evidence suggests that young people with an inadequate level of skills further deprive equitable economic growth and social cohesion (UNESCO, 2012). This further asserts the pressure on HEIs to restructure entrepreneurship education that promotes the attainment and development of transversal competencies which are crucial for employability. According to the European Commission, entrepreneurial pursuits driven by transversal competencies are more likely to create social, economic and environmental value (Komarkova et al., 2015).

Enhancing creativity and innovation have always been highlighted as one of the top five entrepreneurial competencies in which more training was needed indicating as a crucial predictor for workplace success (Yar Hamidi,

Wennberg, & Berglund, 2008). Industries often encounter rapid changes in their operational activities due to technological advancements and are actively seeking a workforce with a high level of creativity and social skills to seek sustainable competitiveness (Frey & Osborne, 2013). Previous research on entrepreneurship education (Kyrö, 2008) maintained how convergent creativity has been practiced and measured within the classroom setting with the various assessments tools. There is a strong urge of shifting from the traditional practices of rote learning and recycling of information in teaching creativity and innovation to inculcate the learners creative capacity through problem-solving and higher-order thinking process (Crosling et al., 2015). Extant literature suggests that creativity and critical thinking represent inseparable attitudes and abilities leading to innovation that, contrary to common belief, can be developed and taught through education (Dyer, Gregersen, & Christensen, 2009; Lin, 2011). Integrated entrepreneurial education systems provide a platform that supports, protect, encourage and stimulate confidence to incorporate collaborative involvement in accessing and sharing of information in the development to new knowledge, and in turn unlock the process of identifying and accessing appropriate work opportunities in a rapidly changing global economy. This gives impetus to strategies entrepreneurial ecosystem in the public policy given the role of HEIs in fostering culture, attitudes and infusing entrepreneurial mindsets to prepare youth for future economic pursuits.

2.3 Entrepreneurship Education and Socio-Economic Development

Entrepreneurship education embedded in 21st century skills has become the focus of discussion in academia and public policy circle due to the evolving nature of the competitive workplace. To fully address the peculiarities of an enabling environment for students to grasp good know-how of 21st century skills, traditional entrepreneurial education has been associated to operate on a chronologically based methodology. Which is about identifying a commercial opportunity and to pursue a feasible business model has become one of the most common subject areas in current entrepreneurship curricula (Kuratko & Morris, 2018). A most common practice in entrepreneurial education is where the field of entrepreneurship is viewed and taught as a natural science as opposed to the applied discipline (Neck & Greene, 2011).

Although, different school of thoughts, embedded in social and cultural views, in their attempt to define entrepreneurship represents the development and transformation of behavioral change that leads to knowledge creation (Mwasalwiba, Dahles, & Wakkee, 2012; Yesufu, 2018). On the other hand, the role of entrepreneurship education that accelerate entrepreneurial activities in the community reflects the economic view of point (with entrepreneurship seen as a panacea to a range of economic problems, especially job creation). The latter argument prevails in the policy and practices of entrepreneurship education. Furthermore, the convergence between the two highlights the debate on the development of indicators and benchmarks that aid the definition of entrepreneurship education. In defining entrepreneurship education, one must avoid the "tendencies to apply entrepreneurship based on the mindset that it is distinctive from the status quo and provide a feasible framework to create innovative solutions to any given issue situated in the realm of social and economic dilemma" (Kuratko & Morris, 2018, pg. 14).

The purpose of fostering entrepreneurship education in the Middle East & North Africa (MENA) region is to tackle the youth unemployment issue. Therefore, HEIs are primarily driven to design entrepreneurship education to foster entrepreneurial activities and economic development in the country. Moreover, MENA is experiencing a startling growth in both the number of successful startups and amount of investment funding available to them (Alkasmi et al., 2018). Against this backdrop, UAE's strategic vision is not just to stimulate the untapped entrepreneurial potential but to develop a burgeoning ecosystem where the development of human capital grounded in entrepreneurial skills and competencies further strengthen its strategic position in the MENA region. To achieve this, HEIs are an important catalyst for developing an entrepreneurial mindset in the students who will, in turn, to take the lead in achieving economic transformation ambitions of the country.

2.4 Experiential Entrepreneurship Education and Skills Development

To keep the pace of demanding and steadily increasing the nature of producing workforce integrated into entrepreneurial and 21st century skills, traditional methods of delivering entrepreneurial education aiming at developing a general understanding of the phenomenon has faced a lot of criticism (Mwasalwiba et al., 2012; O'Connor, 2013). Therefore, structural reforms in entrepreneurial education to enable experiential learning for students have taken considerate attention in policy paradigms intending to produce enriched human capital build on entrepreneurial skills and competencies. These reforms tend to prioritize the experiential learning approach (Johnson, Snowden, Mukhuty, Fletcher, & Williams, 2015) to build a conscious community-driven by entrepreneurial mindset to make an effective economic and social change. It is also evident that the key 21st century skills that include:

creativity, problem-solving, perseverance, and leadership are very much contextual and must be supported with the intervention of entrepreneurial and experiential learning (Sirelkhatim & Gangi, 2015, pg. 4). Thus, the role of HEIs should focus on creating the prerequisites for experiential entrepreneurship education through an adequate environment where knowledge creation and transfer occur.

HEIs tend to measure the success of their entrepreneurship program based on stimulating convergent creativity leading to the formation of start-up intentions or the actual establishment of a new venture. It can be argued that entrepreneurship education is a conducive platform for applying divergent creativity thinking tools and techniques in-class activities and assessments with the aim of enabling students to acquire transversal competencies to secure employment opportunities as well as increases the likelihood and success of a new venture (Schmidt, Soper, and Facca, 2012). Entrepreneurship education embedded in divergent creativity process has a great potential to affect perception of and confidence in creativity by learning various creativity skills: fluency (abilities to generate maximum number of ideas); flexibility (diverse idea ranges, perceptions and categorization); elaboration (showing good command on idea generation with related features and benefits); originality (mindset and ability to identify gaps); complexity (the ability and courage to conceptualize ideas with different and complex layers); and curiosity (eager to uncover the hidden insights) (Yar Hamidi et al., 2008). Neck and Greene (2011) maintain that entrepreneurship education grounded in applied teaching and learning approach accelerates the development of key 21st century skills. To an extent, previous research has underlined design thinking process as an important tool in entrepreneurship education and represents the best fit in the applied method of teaching entrepreneurship (Val, Gonzalez, Iriarte, Beitia, Lasa, & Elkoro 2017).

3. Research Method

3.1 An Overview of Research Methodology

In the context of exploring the relationship between 21st century skills and entrepreneurship education, researcher's underlying ontological and epistemological assumptions drive the formation of research questions asked and the design employed (Leitch, Hill, & Harrison, 2010, pg. 69). Interpretivist approach was adopted since the research questions were grounded in understanding the views and experiences of undergraduate students. The qualitative research method was deemed appropriate for this study to understand the extent to which undergraduate students studying innovation & entrepreneurship major program identify, develop and master 21st century skills.

Qualitative research tends to develop empirical understanding of a phenomenon "that is contextual and situational, in contrast to quantitative research where work is multivariate but often weak on context and in-depth understanding" (Strauss, 1987, pg. 2). To understand students' views and perception of how entrepreneurship education support their development of 21st century skills, this study underpinned by grounded theory. Data collection involved in-depth semi-structured interviews with 12 students and 1 focus group session. The focus of interviews was to explore students' situations and experiences of formal and informal teaching and learning activities that helped them to develop 21st century skills and entrepreneurial mindset. Each interview session lasted for an average duration of 30 minutes. Interviews were audio-recorded and transcribed for data analysis. This study needed to record the interviews and allow the researcher to probe and capture all the nuances of the 21st century and entrepreneurship skills. The emerging themes from the literature review influenced the interview format. Themes such as 21st century skills, creativity, leadership, entrepreneurial values, experiential learning and entrepreneurial education were used to develop an interview guide. The focus group sessions were conducted to confirm the saturation point and verify the themes emerged from the interview data.

Due to a limited number of primary date resources, this study deployed purposive sampling whereby respondents were deliberately selected with a specific purpose in mind (Punch, 2005, pg. 187). In order to ensure right balance and breadth in terms of the type of respondents, only those students with CGPA 3.0 or above and currently in their third year of innovation & entrepreneurship major program were selected for this study. This sample was deliberately selected due to their better position of engaging and providing interesting, yet reliable information grounded in their experiences.

3.2 Data Analysis

The coding method was employed to analyze data. Initially, open coding was used to breakdown the data, recognize relationships in the data, and grouped to form categories that gave rise to early concept development for the emerging theory (Loonam & McDonagh, 2008). The researcher has taken an inductive approach through the qualitative analysis of data and begun with identifying descriptive categories that led to the development of hierarchical categories showing analytical linkages and interpretation of data (Strauss & Corbin, 2008) – achieved

through axial coding. Selective coding was applied to further refine and integrate hierarchical categories having reached a point of theoretical saturation (Strauss & Corbin, 1987, pg. 143). In addition, the social constructivist approach to grounded theory further refines the themes in the analysis part where the researcher aims to create a meaningful interpretation of findings or outcomes (Guba & Lincoln, 1989).

4. Findings

This section presents the emerging themes from the analysis of the interviews with students. The use of narratives and excerpts in presenting findings of this study will further provide the refined versions of the overview of the themes.

4.1 Social Relationship and Entrepreneurial Mindset

Building networks and establishing fruitful relationships with industry experts had been identified useful for the students to seek insights into the pursuits of their entrepreneurial ideas. Networking provides an engaging opportunity to further strengthen and bridge the relationship between the conceptual and operational understanding of entrepreneurial competencies (Johnson et al., 2015). Students also realize that entrepreneurship field is a serious endeavour that requires a mindset operated by the key entrepreneurial competencies such as social relationship that helps in tackling the dynamic nature of small businesses and organizational settings Moreover, the key to sustain an entrepreneurial venture is to master the social relationship skills, and one must develop to the mastery level. This is where HEIs, particularly in the field of entrepreneurship education, facilitate avenues for networking to enable students to practice 21st century skills and develop an entrepreneurial mindset. Students advocate that a teacher with the passion to trigger and stimulate the entrepreneurial mindset is vital to keep their thought-provoking journey alive. One student maintained:

"I feel confident when I talk to my teacher and discuss ideas. Having a teacher listening to my ideas and giving feedback makes me to think differently and deal with the approach in a different manner". (Interview 1)

"Every time, I speak to an entrepreneur I feel that I have learned something new… I understand more about the links between what I study in class and how it practices in real situation". (Interview 2 & 4)

One of the many events encompasses social relationship and other key entrepreneurial competencies organized by Social Business Impact (SBI) club at this particular higher education institute was to influence local businesses to engage in socially responsible practices. Club members and the students from innovation & entrepreneurship major were given a task to secure food donations from the local small businesses to organize a lunch for the least fortunate members of college community including cleaners, gardeners, security and facilities staff. The definition of the least fortunate people in this context is the low-paid labor who struggle to meet ends. The underpinning rationale of this activity was to foster the overall development of students' entrepreneurial mindset where they experience the use of innate and developed competencies as a result.

Given the nature of entrepreneurship that entails ambiguity and dynamism, and can be better understood through experience, this activity was drawn from the philosophy of 'learning by doing' to accelerate entrepreneurial mindset among the students. One student was very enthusiastic about this event and took it as a challenge to secure the contribution of at least one small business. Negotiating with small businesses to provide food donations as part of their social responsibility practices where no financial benefits are south out was a challenging experience for some students. One student stated:

"I went in with the mindset that any business should contribute without any doubts or questions, but this cafe asked me a question that: what's in it for us if we give you food donation... I found it tough to answer because I was not prepared to answer or justify the good cause I am involved in". (Interview 3)

Although the student successfully managed to convince the café by highlighting the important benefits that include desirable publicity, favorable reputation and widening customer base as a result of their altruistic behavior. The student has gained confidence by putting her communication and collaborative skills into practice as one of the important 21st century skills. An action-oriented approach embedded in social processes and social behavior (Byers, Kist, & Sutton, 1997) underpinned this particular activity to get the students exposed to experiential learning and develop social relationship skills. These skills also represent critical importance given the changing and dynamic nature of the workplace (Markman, 2007).

Other students equally observed this altruistic activity as a variant platform to learn and exhibit civic qualities. They mentioned:

"*It was a great opportunity to not just show the values of being responsible citizen but also to urge others to show such values". (Interview 5)*

"… this is something we have learned in business ethics course but never got to practice it and felt good about it". (Interview 6)

The 'position of responsibility' within the community was conducive to learning development and provides a guide to the students in their experiential understanding of the entrepreneurial mindset. The findings further suggest how experiential learning enables students' development by taking steps to 'feel' and 'experience' the change practices and habits existing outside the formal curriculum and academic arena. A practice that prevails in entrepreneurial education systems where the focus is on shifting students capabilities from "abstract knowledge" to "grounded knowledge" – an important pillar of 21st century skills.

4.2 Empowerment and Entrepreneurship Education

Entrepreneurship education supports learners to explore and develop key entrepreneurial values which are considered to be psychological in nature and includes characteristics such as intuition, extroversion, risk taking, flexibility, and a sense of control (Crosling et al., 2015). In synthesizing entrepreneurship education with 21st century skills, the students draw clear distinctions in terms of skills learned and developed in entrepreneurship and non-entrepreneurship courses. They collectively put forward the view that 'sense of empowerment', 'dealing with contextual situations', 'urge to think outside the box to generate multiple views', and 'creativity' are the distinctive features practiced extensively in entrepreneurial courses. Students implied that empowerment is something that is rare to learn and practice in other courses as opposed to the entrepreneurship courses:

"*…I feel more creative, I feel that I have more control in what I am doing in class, I feel freedom and flexibility, I don't have to follow the series of concepts as they are taught in other classes". (Interview 7)*

"…too many theories are difficult to memorize in organizational behavior course and sometime I think why I have to study these". (Interview 8)

This further strengthens the view that entrepreneurship education enables students to adapt quickly to the process of exploring psychological and behavioral traits of entrepreneurs (Benzing, Chu, & Kara, 2009) that contributes to their entrepreneurial learning process. Moreover, this further echoes the relevance of applying experience-based pedagogy in entrepreneurship education to transform students' intellectual level. Another student mentioned that:

"I look forward to come to new ventures creation class because the more I study and participate in-class activities the more I enjoy it – build confidence to talk more". (Interview 10)

It can be argued that most responses are stemmed from the way entrepreneurial courses have been taught in-class coupled with the interest level of students that drives their active engagement. Nevertheless, entrepreneurial traits mentioned above and, in particular, to creativity holds unique importance in the entrepreneurship curriculum. A scaffolding of entrepreneurial traits should be infused in the entrepreneurship curriculum and not confined to a specific course. Furthermore, it is fair to suggest that entrepreneurship curriculum infused with 21st century skills and not confined to a specific course (Morrison & Johnston, 2003) play a critical role in accelerating entrepreneurial-mindedness and scaffolding student learning (Mourshed, Krawitz, & Dorn, 2017).

4.3 Leadership Skills and Entrepreneurship Education

Leadership is one of the important character traits and behavioral practices of entrepreneurs that overlaps with 21st century skills. The literature on entrepreneurship education maintains the importance of including skills building courses in leadership, creative thinking and negotiation to enable the entrepreneurial capacity building of students in regard to the multiple facets of entrepreneurship in practice (Bagheri & Lope Pihie, 2013). Students from entrepreneurship courses tend to acknowledge leadership quality as a prerequisite to many of the 21st century skills. As few students mentioned:

"I always wanted to take part in activities in college and be active in class but never encouraged or realized if I can actually do this. My teacher started to encourage and supported me to be active in class and I felt the difference in me within a few weeks" (Interview 9)

"I really understood the meaning of leadership in an entrepreneurship course and started to practice my leadership skills when I joined the club activities… I enjoyed the experience and I believe that I can manage things independently". (Interview 11 & Focus Group 1)

Findings reveal that leadership skills and civic values are not mutually exclusive but overlap to a certain extent in the context of entrepreneurship. Students relatively acknowledged that leadership skills can be better developed at personal and function level by situating such competencies in a social context. In this regard, empathy facet in entrepreneurial education situates students in a contextual framework to comprehend the dynamic nature of leadership skills stemmed in personal and functional level. According to Henley, Contreras, Espinosa, and Barbosa (2017, pg. 1018) personal competencies include cognitive and interpersonal skills, whereas functional competencies relate to performance. It became evident that leadership skill is practiced actively within and out of the class to bridge relationships with classmates and external stakeholders to thrive academically as well as socially.

4.4 Role of Assessments and Skills Building Capacity

Formative and summative assessments have been an integral part of innovation & entrepreneurship curriculum in assessing the students understanding and competencies developed throughout course. To understand an extent to which assessments in innovation & entrepreneurship courses provide challenging scenarios for the students to apply and test their cognitive and non-cognitive competencies is of significant concern in entrepreneurship education. One student mentioned:

"I read question many times before I answer to make sure that I give right answer. But I noticed from the feedback given by my teacher that I do not provide relevant and enough justification in an argument I wrote and did not relate to the case study". (Interview 2)

Another student stated:

"…our teacher always says that it's not about providing detail but to provide sufficient and relevant information… the way in-class activities were performed through interactive discussion". (Interview 12 and Focus Group 1).

Given the findings of this study, it can be argued that the students find it challenging to shift from the mindset of traditional form to the applied nature of assessments. This raises the serious concern of preparing students to shift from phenomenon understanding to apply, analyze, synthesize and create new knowledge. Which in turn, challenges students to develop and practice key 21st century skills including critical thinking, problem solving and perseverance. Moreover, such skills are imperative in entrepreneurship education where students are to be pursued through application of innovative thinking in order to sort through mass of information, create viable options or solutions, and identify and use appropriate criteria for evaluation – parallel to a dilemma that reflects the entrepreneurial experience of resolving a real business scenario in a proficient manner.

4.5 Conceptualization and Critical thinking

Developing coherent conceptualization of the theories and various business models was perceived as challenging for the students. For example, internalizing the concept of social entrepreneurship as an evolving business model was deemed challenging and thus required critical thinking coupled with inquiry learning approaches in entrepreneurship education. One student mentioned:

"I always used to get mixed up that social enterprises are like charities. It's not about the course material or teacher teaching this course, I believe it's about me not understanding it clearly and in my mind trying to see how entrepreneurs are different from social entrepreneurs"

Another student raised the issue of *'difficult vocabulary'* in social entrepreneurship course as a barrier to comprehend and internalize the concepts. It became evident that how the essential components of critical and analytical thinking along with creativity were important pre-requisite skills to support dialectic (i.e. reasoning oriented) approach of teaching and learning entrepreneurial activities (Drummond, 2012). Students with a better command on these skills grasped the concepts quickly and were confident in demonstrating their understanding through formative and summative assessments. The same can be applied when students highlighted how formal and informal feedback on their assessments signifies the issue of lack of application and synchronization of concepts. Such feedback includes: 'lack of clear understanding', and 'lack of application' within a relevant context. Critical thinking skills emerged as an important key competency that students must develop to be able to construct their own knowledge. Intensive feedback both in a formal and informal format, discussion forums, and inquiry-based teaching and learning activities particularly in entrepreneurship education were highlighted by the students to internalize concepts as well as construct new knowledge. In this regard, entrepreneurship education embedded in the development of 21st century skills enables students practice their internal cognitive skills and shift their understanding from abstract concepts to concrete experience.

4.6 Multi Facets of Entrepreneurial Mindset

As highlighted in the literature that entrepreneurship education should not be considered as a tool of teaching entrepreneurship modules and disseminating knowledge about the process of setting up a new venture as the sole objective but to stimulate the entrepreneurial mindset that can produce social and economic outcomes. One student stated:

"I have realized that entrepreneurship is different from other majors in business. I feel that I am doing something practical instead of just reading and memorizing. It helped me to identify what I want to do in my future career because I have learned how to see things differently…" (Interview 3)

"I don't get bored in my innovation class and in fact, I become more alert" (Interview 8)

"I do not think we have to be creative when we write assessments for other courses which are not related to entrepreneurship, but I believe that creativity and critical thinking skills are not just helping us to understand the course but we actually see the difference in our thinking as well" (Focus Group 1)

The above thoughts echo the development of an entrepreneurial mindset that is not just confined to understand and learn the process of starting a new business but as an ability that is closely integrated into creativity. The respondents equally highlighted the overlapping key skills and echoed the role of the case study and problem solving approaches to comprehend the entrepreneurial traits, activities, decision making, and operational dynamics of new ventures through the situational or contextual lens. The underlying assumption of respondents was not just to understand multi facets of entrepreneurship education but advocates the rationale that the acquisition and development of entrepreneurial mindset requires a proactive approach to comprehend, develop and practice dynamic characteristics of entrepreneurs.

5. Discussion

It has been noted in past studies that HEIs tend to develop students entrepreneurial mindset by heavily relying on teaching entrepreneurship modules (Kuratko & Morris, 2018). The purposes of this study are to determine the key 21st century skills that are core to the entrepreneurship education and explore an extent to which teaching and learning approaches from the students perspective, enable skills development through entrepreneurship education. A gap this study attempted to fill by reemphasizing the integration of 21st century skills in entrepreneurship education to further enhance the development of students' entrepreneurial mindset and foster entrepreneurial capacity. The proposed model exhibits the convergence of 21st century skills in an entrepreneurship education where HEIs serve as an important driving force to facilitate the transformation shift of developing graduates into a unique human capital. For this, students not only required to understand and develop an entrepreneurial mindset but to enhance their entrepreneurial capacity as a result of studying and experiencing entrepreneurship education embedded in 21st century skills.

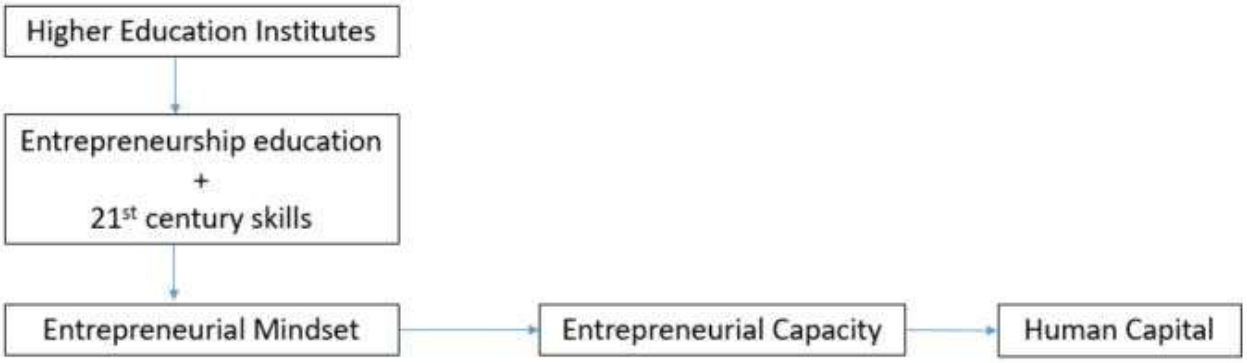

Figure 1. Convergence between 21st century skills and entrepreneurship education

Entrepreneurial education system stemmed in providing experiential learning experiences enables the students to explore and actively participate in developing 21st century skills. Planning guest lectures delivered by local entrepreneurs is one of the common practices of HEIs that supports the learning process through interaction and engagement situated within the real contextual situations. As highlighted in findings, students find it interesting and embrace this as a problem solving activity to uncover a strong relationship between their entrepreneurial learning process in class and the real world. Against this backdrop, one of the implications for HEIs to measure the effectiveness of such activities in terms of an extent to which students identify and develop key 21 century skills,

often taught implicitly within the classroom setting. The focus of these talks is to appreciate and stimulate entrepreneurial cognitions in students, by showing the role of thinking encompasses rational and intuitive thinking style (Karabey, 2012). Such a thinking style has been identified as critical and classified universal to entrepreneurs and represents the inventive thinking in particular to the category of 21st century skills which is needed to apply heuristics (Boyles, 2012).

It can be argued that teaching detailed and nuanced industry knowledge is arguably beyond the scope of entrepreneurship education systems, but to an extent, it is of paramount importance that students are exposed to the organic industry knowledge through interaction and experiential experiences. Within such interaction, the development of convergent 21st century skills such as social relationships, leadership, creativity and critical thinking further nurture entrepreneurial intents among students. This further improves the entrepreneurial alertness of students that is much needed in the later stages of new venture creation (Kickul, Gundry, Barbosa, & Whitcanack, 2009) as well as to enhance organizational capacity to influence firm performance and competitiveness. Moreover, entrepreneurial mindset changes the individual preferred and habitual approach, primarily driven by entrepreneurial intentions, to learn and make a meaningful interpretation of industry-related knowledge.

To access information through primary or secondary means has not been an issue in the present time, on the contrary, to absorb, learn and make a meaningful interpretation of acquired knowledge is critical to developing innovative solutions to emerging societal issues, and thus results in the enhancement of individuals' entrepreneurial capacity. This is where human capital grounded in individuals acquired with key 21st century skills along with entrepreneurial competencies is pivotal for the socio-economic development of the country. Therefore, HEIs should adopt an approach of teaching 21st century skills through entrepreneurship which means a process-based and often experiential approach where students go through an actual entrepreneurial learning process (Kyrö, 2008) to gather, collate, transform and make such information useful and thus increase their entrepreneurial capacity.

The findings indicate the implications for HEIs where the need of re-visiting innovation & entrepreneurship curricula, teaching and learning methodologies, and assessments embedded in divergent thinking process emerges to enable the development and assessment of 21st century skills objectively. This will provide a rich prescription on ways students acquire key competencies through entrepreneurship education. Thus, the role of HEIs in providing entrepreneurship education is to prompt and regulate the behavior of students of entrepreneurial intentions supported by the development of 21st century skills.

Moreover, the findings on understanding the core relationship between 21st century skills and entrepreneurship education further indicate the issues relating to the human capital and their implications for intra-organizational level. Seeking competitiveness driven by employees' entrepreneurial mindset coupled with 21st century skills are the forces that are likely to re-define human capital, and how organizations operate in a dynamic and evolving world. The current study confirms the importance of organizational entrepreneurial capacity as an end attributed to the means of 21st century skills and entrepreneurial education with regards to developing entrepreneurial mindset (Johnson, Snowden, Mukhuty, Fletcher, & Williams, 2015).

6. Conclusion

This study attempted to revisit the place of 21st century skills in entrepreneurship education underlined with the aim of producing graduates who are not just work-ready but in a better position to outperform in their future pursuits. The findings of this study cast fresh light on the relationship between entrepreneurship education and its role in developing 21st century skills in students is not a simple linear one, but rather more complex and contextual. Therefore, this study maintains the "new face" of 21st century skills is to develop a diverse skilled and entrepreneurial workforce that is better equipped to serve their customers and grow their Triple bottom line by increasing market share. This is where HEIs with robust innovation and entrepreneurship curricula will give students a way to contextualize knowledge, develop skills, and personalize the core entrepreneurial competencies in such a manner that will accumulate to the overall development of human capital. Lin (2011) further adds that such learning process will inject self-confidence in the students where they will be able to be more proactive in the process of recognizing and exploiting opportunities.

This study also advocates that the students going through the process of experiential learning quickly realize and embark upon developing 21st century skills. Students equipped with key skills are more driven and experimental by nature and tend to delve into the unfamiliar situations that set them apart from individuals with a low confidence and skills level. This paradigm in itself defines the importance of entrepreneurial mindset given the dynamic nature of the workplace where diversity in terms of key skills are of paramount importance to sustain and acquire a competitive advantage. Although diversity itself is not a guarantee to lead successful integration aiming at generating valuable

outcomes for organizations. To prepare work-ready graduates, it is of imperative importance to provide such learning experiences to the students to embrace integration and build up their entrepreneurial skills capacity. Therefore, entrepreneurship education has the potential to inspire students to unlock the potential of learning a diverse range of 21st century skills supported by active inclusion and integration with relevant key stakeholders. An experience stemmed from diversity and integration gives the 'sense of belonging' and 'feel of included' to the students that are critical to work in an entrepreneurial organization with the strong emphasis on creativity and innovation. This exploration, which represents the part of entrepreneurship education, act as a stimulant to get students to realize the importance of industry-required specific competencies and adapt systematic reflection on their plan to achieve future pursuits more effectively and efficiently.

The findings of this study also evidence the argument that students learning in active entrepreneurial education systems tend to develop curiosity that is classified as conducive to their leadership development in their future career. Moreover, this research re-emphasizes the pertinence of embedding entrepreneurship education in "methods approach (Neck & Greene, 2011), amalgamation of "through" perspective (Pittaway and Edwards, 2012), and highlights how 21st century skills "embedded" in entrepreneurship education enable the shift from generic knowledge and skills to acquire applied knowledge and skills that are of paramount importance given the competitiveness in the job market, and thus advocates the shift from developing entrepreneurial mindset to entrepreneurial capacity. Moreover, further insights emphasize the development of an entrepreneurial mindset through entrepreneurship education is prerequisite for entrepreneurial capacity which can be enhanced from the experiential learning and skills development.

The model proposed in this paper further suggests that teaching 21st century skills integrated into the entrepreneurial education system should not be seen as additional "obligation" of teaching and learning paradigm of an institute but on the contrary, it should be embedded in the mission of entrepreneurship education.

6.1 Limitation and Avenues for Future Research

This study acknowledges the limitations. The most important of these include the small size of the sample which is restricted to the students studying innovation & entrepreneurship program only. A sample of 12 students out of 16 registered students from the 1st cohort of innovation & entrepreneurship major were interviewed. It would be interesting to use a larger sample size by engaging with other business students who studied an elective course related to innovation and entrepreneurship. Future research may include curriculum design team, teachers teaching entrepreneurship related modules and personnel from student outreach department to explore further insights related to the development and in particular, to measuring 21st century skills through entrepreneurship education.

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