ENTREPRENEURSHIP EDUCATION AND THE FUTURE WORKFORCE

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ABSTRACT

"When you grow up you may not have a job"; "Education-change is the only constant" Yuval Noah Harari The adoption of digital technologies has been transforming all facets of our lives, from the way we communicate to the way we access information, learn and work. It is characterized by exponential growth of accessible information and unprecedented speed of technology adoption, levelling the ability of both content creators and consumers to access technology. The paramount competency of our age is becoming the ability to adapt and master new skills and deal with fast paced changes, raising questions on the impact on our future. Younger generations growing up with digital technologies have developed new expectations for their future employment, those that will cater to their frame of reference. How do we prepare students for a future unclear to us? How can academic institutions better prepare students for future challenges? Can academic entrepreneurship education provide the tools and skills that assist in better preparing students, mostly Gen Y and Z, for the future workforce? This paper will address these questions by building on literature and research from the fields of education and the future of the workforce, analysis of entrepreneurial tools and methodologies utilized in academic institutions and attitudinal survey data of entrepreneurship students at IDC Herzliya and Yeshiva University in New York City.

Keywords: Entrepreneurship Education, Future workforce, Gen Y, Gen Z, Digital Technologies.

INTRODUCTION

"***When you Grow up you May not have a Job"; "Education-Change is the only Constant"***

The "*Digital Revolution*" is perceived as one of the most substantial periods of change in the history of mankind. Similar to the print and the industrial revolutions, the adoption of digital technologies has been transforming all facets of our lives, from the way we communicate to the way we access information, learn and work. It is characterized by exponential growth of accessible information and unprecedented speed of technology adoption, leveling the ability of both content creators and consumers to access technology. The paramount competency of our age is becoming the ability to adapt and master new skills and deal with fast paced changes, raising questions on the impact on our future. Younger generations growing up with digital technologies have developed new expectations for their future employment, those that will cater to their frame of reference.

How do we prepare students for a future unclear to us? How can academic institutions betterprepare students for future challenges?

Can academic entrepreneurship education provide the tools and skills that assist in better preparing students, mostly Gen Y and Z, for the future workforce?

This paper will address these questions by building on literature and research from the fields of education and the future of the workforce, analysis of entrepreneurial tools and

methodologies utilized in academic institutions and attitudinal survey data of entrepreneurship students at IDC Herzliya and Yeshiva University in New York City.

The main research questions this paper will address are the following:

RQ₁: Can entrepreneurial teaching and learning methodologies better prepare Gen Y and Z students for the future workforce?

RQ₂: Do entrepreneurship studies address the expectations of Gen Y and Z students to betterprepare them for their future employment/workforce?

LITERATURE REVIEW

Future Skills

The rapid pace of technological change makes predicting the skills that will be needed in the future challenging. (Harari, 2018). "*The Future Workforce*" is a broad term. This paper takes a consumer centric standpoint and refers to the uncertainty and ambiguity that younger generations face in a world of rapid technological changes and digital transformation resulting in changing expectations from their future employment opportunities. Fuller et al. (2019) state that the main forces of change for business leaders include sudden technology based shifts in customer needs that result in new business models, new ways of working and difficulty in finding and recruiting workers with skills for rapidly evolving jobs. Various studies have attempted to define the future skills that will be needed to navigate a fast changing workforce. These include sound judgment and decision making, originality and fluency of ideas, active learning and using creative problem solving within multidisciplinary teams, (Bakhshi et al., 2017) Others point out the increased popularity of flexible, self-directed forms of work that allow more work-life balance and a growing desire for work with purpose. (Brown & Stubbings, 2017) A 2017 PWC Global CEO survey states that the hardest skills to find among candidates are those who cannot be replaced by a machine. These include leadership, creativity, innovative problem solving, emotional intelligence and adaptability.

Generational Expectations

"*Generation*" is defined as a group that shares important vital events at the same birth year and critical developments within these events (Kupperschmidt, 2000) Basic social values of every generation are formed with the effect of environment and values that surrounds it on growing period (Seckin, 2000).

Demographers typically define a generation as approximately 25 years. Today, a "*technological generation*" may be as swift as 5 years. As devices and technologies are rapidly introduced it is difficult to predict what kind of consumer experiences will be available in 5 years' time.

Generation Y, known also as "*Millennials*" (born after 1981) and Generation Z (born after 1997), (Dimock, 2019) represent the majority of the future workforce and as such are at the vanguardof these changes. They bring different expectations to their professional experience than preceding generations. These "*Digital Natives*" reside in a world in which young people are hyper-connected through devices and social networks, toggling through the fluidity of their online and offline environments. Their expectations of choice, control and personalization are the product of an on-demand lifestyle. (Einav, 2014). These expectations include the quest for amore personalized work environment, accelerated use of technology, flexible structures and working toward a higher moral and ethical purpose. (Brown & Stubbings, 2017)

Generation Z grew up with technology a fortiori and together with world wide web, short messages, cell phones, You tube, Ipad and media technologies (Kapil & Roy, 2014).

Generation Z is a self-confident generation wants to guarantee their future. They emphasize finding happiness in their work environment. The lack of happiness is a valid reason to discontinue a job. Both Gen Y and Z are fond of their independence and do not like authority (Ozkan & Solmaz, 2015)

While, Gen Z has a stronger desire for managers to listen to their ideas and value their opinions over Gen Y (61%-56% accordingly), Generation Y has a stronger desire for managers to allow them to work independently than Generation Z (46%) Millennials expectations from the workforce include opportunity for growth, compensation, recognitions, promotions, flexibility, and work/life flexibility in an engaging work environment that fosters professional skills growth. (Linden 2015). According to a 2014 Harris Interactive study, Gen Y and Z crave meaning, fulfillment and continuous learning as well as non-financial rewards such as social activism.[8] Their definition of success, a multitude of short-term jobs, differs from the more traditional definition of single source employment for the generations that preceded them. According to a 2018 Unum study, 61% of employees surveyed felt that companies should make a positive contribution to society and 50% would be discouraged from working for an organization that had no interest in civic or ethical goals. (Ibid, 13). They demand a work environment that is solicitous of emotional needs. Young workers aspire to be "*self-fulfilled*", autonomous and crave the flexibility to pursue personal development. They have an entrepreneurial mindset; adopt a multi-career approach with a commitment to lifelong learning and new skills. (Ibid, 9).

The study concludes that the blurring of the personal and professional will broaden the definition of "*employee benefits*". They prefer programs that nurture creative leadership through non-traditional roles such as reverse mentoring and undertaking a variety of responsibilities. (Ibid,21) Amabile & Kramer (2011) argue that of all the things that can boost employee satisfaction and drive innovative efforts within organizations.

The online study surveyed 3000 UK workers and interviewed a range of industry experts and business leaders. 97% of respondent work full or part time. 3% defined themselves as self-employed the survey was carried out by Optimum research in March 2018. The study is a joint effort of UNUMM, strategic foresight think tank and the Future Laboratory. Amabile and Kramer suggest that, at least in the realm of knowledge work, people are more creative and productive when their inner work lives are positive-when they feel happy, are intrinsically motivated by the work itself, and have positive perceptions of their colleagues and the organization. Moreover, in those positive states, people are more committed to the work and more collegial toward those around them. Inner work life can fluctuate from one day to the next-sometimes wildly-and performance along with it. A person's inner work life on a given day fuels his or her performance for the day and can even affect performance the next day. Important is making progress in meaningful work or as they define it: "*The power of small wins*".

It is imperative to provide a generation that has such high expectations from their future employment, whether self- employed or within an existing organizations the opportunity and academic support that will provide students with skills and tools to adapt to a fast paced, constantly changing environment, operate within uncertainty, learn how to work independently as well as within multidisciplinary teams, lead and ideate and demonstrate original thinking. All this while creating a bridge between student expectations and skills needed to operate within the future workforce. Are academic institutions prepared for such an education?

Entrepreneurship Education (EE)

A recently popular educational approach – project based learning (PBL) helps students realize they can develop useful skills, knowledge and attitudes to solving challenge and "*real life*" problems (Barrows, 2012). PBL is a significant component of entrepreneurial thought and action which Igwe et al. (2021) describe as a new mental model for leadership approach (Igwe et al 2021).

Mcintyre & Roche (1999) define entrepreneurship education as the process of passing the necessary skills and concepts to individuals to identify new business opportunities and to reach high levels of self-confidence to benefit from such opportunities. McMullen & Long (1987); Mcmullan et al. (2002) state that entrepreneurship education should include skill building and leadership programs, new product development, creative thinking and technology innovation Maritz et al. (2015) define entrepreneurship education programs as any educational program or process of education for entrepreneurial manners and skills, which help in developing personal qualities.

Entrepreneurial Thought and Action (ETA) helps students learn that the future is created and not predicted (Greenberg et al., 2011) as they state: "*In unknown situations, actions are needed to determine about the new case to further assess the problems and opportunities and to select the next course of action*"

Entrepreneurial education may include activities which allow students to gain direct experience with entrepreneurial practices through "*learning by doing*" experience (Krecar & Coric, 2013). Another substantial emphasis in entrepreneurial studies is the emphasis on team work, when students interface with other counterparts that learners can change their actions (Swart & Harcup, 2012)

The entrepreneurship curriculum provides students with tools to help build skills determined as necessary for the future workforce by teaching how to efficiently navigate uncertainty, introduce creative solutions, accommodate failure and execute change. Learning is designed to encourage sound judgment and decision making, fluency of ideas, using creative problem solving within multidisciplinary teams, (Bakhshi et al., 2017). (Brown & Stubbings, 2017) traditional current educational methodologies many times fall behind these changes. A 2018 Mcgraw Hill Education survey found that only 1 in 4 college students in the US feels well prepared for their future career. More than half of the students surveyed said that increased access to internships and professional experiences would have helped them feel better prepared for their careers.

There are many ways to teach entrepreneurial skills and tools. The rapid increases in entrepreneurship programs, which combine theory with a strong emphasis on "*hands-on experience*", cater to the expectations of Gen Y and Z for a more practical learning experience that prepares them for an uncertain work environment.

The following are examples of teaching methods that are implemented worldwide that build on EE, ETA and PBL structures. Student feedback to these models is helpful to determine the value derived by students as they prepare for the future workforce.

EE, ETA and PBL Structures in Entrepreneurial Education-Examples

The $5 challenge: Dr. Tina Seelig, Stanford University (Seelig, 2009) Entrepreneurial exercises in class is designed to train students to operate in environments of uncertainty. In this

exercise, students receive an envelope with seed funding of $5 dollars and 2 hours to make as much money as possible. This is a combined exercise in creativity and entrepreneurial thinking. Students learn that using the $5 dollars actually confines them into a certain mind set and impedes on their chances to grow their money. The teams that did not use the 5 dollars are those who made the most money. They realized that the $5 is actually a limitation framed problem too tightly and if they looked at the skills they have and the opportunities around them. "*Sometimes we frame problems much more tightly than needed.*" And that our own skills and opportunities are bigger than what we though tin the beginning (Ibid) Figure 1.
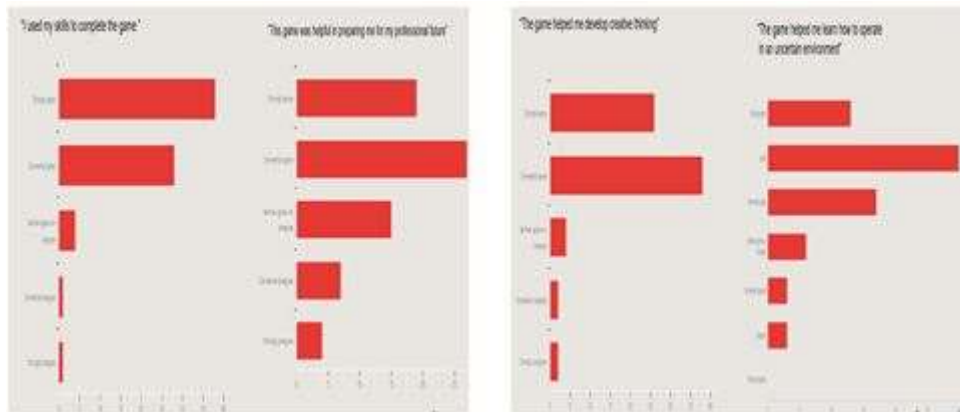
FIGURE 1
STUDENT SELF-REPORTED EVALUATION FOLLOWING COMPLETION OF THE $5 CHALLENGE

"*The Start -Up Game*" Prof Ethan Mollick, Wharton Entrepreneurship Program.

The Startup game throws students into role playing as founders, employees and investors. Through role playing the students practice Wasserman's model of founders decisions, including team building, hiring and consideration of funding opportunities (Wasserman, 2012) The game is designed for students to gain critical understanding of decision making under uncertainty as well as the variations in strategy when there is no "*right or wrong*" path. According to Mollick the learning comes from ways in which students navigate the chaos of the initial part of the game and in turn how the resulting debriefs at its conclusion expand upon the complexities and tradeoffs associated with entrepreneurship that the students experienced Figure 2.
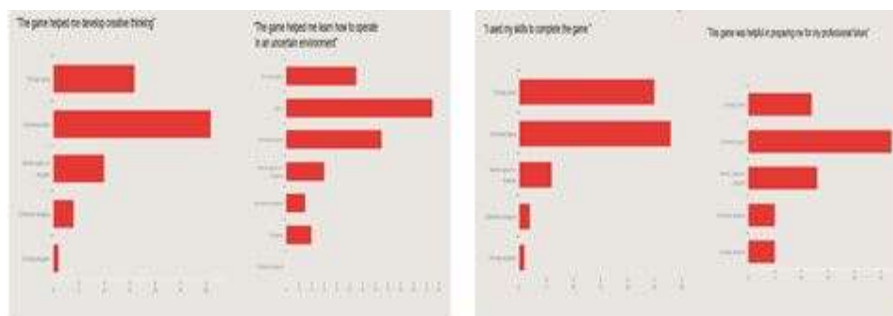
FIGURE2

STUDENT SELF-REPORTED EVALUATION FOLLOWING PARTICIPATION IN THE

<div align="center">**STARTUP GAME**</div>

YU Innovation Lab

The Yeshiva University (YU) innovation lab is a NYC – based launch pad for Israeli startups that are looking to expand and accelerate growth in the US. The lab is incorporated into the curriculum as an advanced course in business acceleration. The course provides an opportunity for students to get hands on experience and exposure to emerging phenomena, processes and technologies in the startup industry. Students learn how to leverage these frameworks, models and tools to develop and create competitive acceleration of the business in market; and engage in projects with Israeli startups participating in YU Innovation Lab. As part of the course requirements students analyze market requirements and develop solutions that address those requirements and advance business strategies and evaluate an organizations strategic plan to enhance its competiveness. Students learn how to apply entrepreneurial practices in work settings. This includes cultivation of critical thinking skills, developing and improving written and verbal communication skills and develop and improve the ability to work in teams. The YU lab recruits startups from various academic institutions and incubators in Israel.

Upstart Venture Creation Program- IDC Herzliya

The Upstart program is one year academic venture creation program open to third year undergraduate students from different schools/disciplines. Acceptance is on a competitive basis and limited to 50 students. The program works to instill an entrepreneurial mindset in students, endowing them with valuable knowledge, tools and skills necessary to take a leadership role in an entrepreneurial startup or business venture. The program offers four fundamental courses in entrepreneurial strategic thinking, user design, legal and financial aspects of venture creation and psychological aspects of creativity and innovation. In a course of one academic year student's work in interdisciplinary teams on their final projects: creating the building blocks for an entrepreneurial venture. Students work closely with industry mentors throughout the program. At the end of the program students pitch their ventures to potential investors and representatives from local accelerators. In 2016 the Adelson School of Entrepreneurship starting administering a full undergraduate degree in entrepreneurship.[21] The curriculum and activities are designed in a manner that will both answer employers needs and the current generational expectations from future employment As part of this research project survey data is being collected from current students examining their attitudes towards the educational exercises and curriculum which include examples described above (Wasserman, 2019).

<div align="center">**CONCLUSION**</div>

These examples demonstrate the characteristics of entrepreneurial studies and the skills and tools that are implemented to provide Gen Y and Z students with a sound base to help prepare them for the future workforce. This paper is part of a wider research project currently in progress that attempts to evaluate the impact and effectiveness of such programs on both employer's requirements and their ability to match student expectations from an academic degree to better prepare them for future challenges.

Most of us, convinced of the impracticality of making a leap into the unknown, eventually give up any hope that we'll pursue our cherishes ideas Hopefully, entrepreneurial studies will assist students to make this leap into the unknown.

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