

## **US Entrepreneurship Education Missing the Mark for Greater Societal Impact**

**Roy C. Carriker**  
**Drexel University Charles D. Close School of Entrepreneurship**

*US workforce economic health continues to deteriorate as contributing stresses mount. Entrepreneurship educators must more broadly define “entrepreneurship”, creating new platforms better preparing society, not just students dreaming of starting something. Beyond entrepreneurship preparation of high school and university students, the task goes to non-traditional education of workers unable to retire and unprepared to finish life as self-employed “unintended entrepreneurs”. The greatest challenge in educating a healthier, more entrepreneurial workforce is first creating awareness of the need. Entrepreneurship educators are best positioned to deliver the needed training, but first must create awareness of the need. If they don’t, who will?*

### **FOREWARD**

The primary driver for education is preparation of an individual for earning a living. However, today earning a living does not have the once clearly defined historic pattern of:

- Be trained/educated
- Earn a living (get a job/work for yourself/have a career/etc.) over one or several employments
- Retire

Today there are a number of coexisting contributing factors creating a “perfect storm” of disruption in this workforce pattern and the ability to attain a secure economic future. While there has been a great deal of public discourse relative to US workers being taken out of the workforce via globalization, robotics, etc., and there exists a growing sense of discomfort and disruption, it appears the public at large and many of those guiding them don’t have a clear view of the multiple elements at play.

Complicating factors include misalignment of education with emerging career paths, globalization, disruptive technologies and new means of earning money variously labeled as the gig, sharing or mesh economies. New patterns of earning a living are redefining what it means to be “employed” and/or “unemployed” and require a much greater understanding of “underemployment” to fully understand how to better prepare the workforce for a healthier economic existence. A growing movement in coping with emerging employment realities is becoming an independent, self-employed worker, i.e., being an entrepreneur, either by choice or out of necessity. The majority of this growing workforce segment never contemplated being an entrepreneur or sought appropriate training. They possibly represent the greatest potential opportunity for the entrepreneurship education community to create socioeconomic impact.

Being employed or unemployed has become blurred and peoples' economic circumstances with respect to earning a living are no longer captured in traditional government statistics. A principal part of this issue is traditional government statistics focus on rigid definitions of **unemployment** which do not capture the workforce economic distress of **underemployment**. If one has a choice of being unemployed or working far under the potential of their training/education, they must opt for the later to survive, i.e., opt to be underemployed and possibly eke out a living.

The first wave in displacing/devaluing human endeavor in developed economies such as the US was globalization with well-paid manufacturing jobs being sourced from or moving offshore. Second came robotics and automation to further remove the cost of labor while simultaneously improving productivity and quality. The negative impact of this in the manufacturing sector was somewhat offset by the creation of the service economy, however, on average service economy jobs did not pay as well nor have the fringe benefits historically associated with manufacturing. The next wave came with the advent of the Internet which allowed knowledge work to be offshored to lower-cost countries just as globalization had done to manufacturing. Finally, we are entering an age where artificial intelligence is beginning to displace workers with advanced education and heretofore lucrative career paths such as structural engineering, medical diagnostics, stock market analysis, etc.

While today's society faces displacement of human endeavor in the workplace, particularly in developed economies, it won't be long until economies relying on low-cost labor will be impacted as well, since low-cost labor alone cannot compete with the productivity and quality of automation and advancing, disruptive technologies.

### **Evidence of Concurrent Stresses on Us Workforce Economic Health**

Certainly one of the key barometers of the US workforce economic health is the degree to which workforce underemployment is growing. Because of the complexity of today's economy there is not a great deal of specific data, yet there is sufficient evidence to paint a picture of significant stress. A second barometer of workforce stress is inflation adjusted wages over time, which show decline for significant portions of the US workforce. A third barometer of workforce economic health is the rapid redistribution of wealth in the United States to the detriment of the workforce at large. Finally, a fourth element of economic stress is extended lifespans with no commensurate retirement planning. Each of these elements will be briefly discussed in what follows.

### **Underemployment**

Today, with the US Bureau of Labor Statistics putting unemployment at around four a half percent, how bad could the economic health of the US labor force be? To understand why government unemployment figures may no longer be a good barometer of workforce economic health more fully, one needs to delve into how the official unemployment rate is determined. Very briefly, according to the US Bureau of Labor Statistics unemployment rate is determined monthly as follows:

- Approximately 60,000 eligible households, comprising on the order of 110,000 individuals are surveyed each month.
- Every month, one fourth of the households in the sample are changed, so that no household is interviewed for more than four consecutive months.
- After a household is interviewed for four consecutive months, it leaves the sample for eight months.
- After eight months the household is again sampled for the same four calendar months a year later, before leaving the sample for good.
- Survey respondents are never asked specifically if they are unemployed, nor are they given an opportunity to decide their own labor force status, their status being determined on the basis of how they respond to a specific question set on recent activities.

This sampling regiment involving 60,000 households is quite small relative to the active workforce and returning to the same sample households after eight months, to examine changes within the sample base, in effect further lowers the breath of sampling.

The basic concepts involved in identifying those who are employed and the unemployed are:

- People with jobs are *employed*.
- People who are jobless, looking for a job, and available for work are *unemployed*.
- People who are neither defined as employed or unemployed are not counted as being in the *labor force*.
- People who have no job and are not looking for one in the past four weeks are counted as *not in the labor force*.
- People are considered employed if they did any work at all for pay or profit during the survey reference week, including all part-time and temporary work.

The last three elements of identifying who are gainfully employed are particularly troubling with respect to ascertaining workforce economic health, because many who are underemployed and eking out a living via multiple odd jobs, the gig economy, etc. are either not counted as being in the labor force or are counted as employed even though they don't have sufficient employment.

As defined by the US Bureau of Labor, only those defined as employed or unemployed are counted in the US workforce. Persons not following in these two categories are considered to be *marginally attached to the labor force*. To be counted as marginally attached the labor force, people must indicate they currently want a job, have looked for work in the past 12 months or since they last worked and are available for work. *Discouraged workers* are a subset of the marginally attached. Discouraged workers report they are not currently looking for work for one of the following types of reasons:

- They believe no job is available to them in their line of work or area.
- They have previously been unable to find work.
- They lack the necessary schooling, training, skills, or experience.
- Employers think they are too young or too old.
- They face some type of discrimination.

Marginally attached and discouraged members of the workforce are not counted as being in the workforce and thus do not count as unemployed.

With a large number in today's workforce working below their training or skill set just to make ends meet, it is clear underemployment is a major workforce economic issue, not necessarily unemployment as defined by rigid historic measures. One gauge of this issue, in recent surveys of graduating university students, 41% (Reynolds) to 46% (Federal Reserve Bank of New York Report) said they did not need their degree to obtain the job they were able to get, thus they are certainly underemployed relative to their career expectations.

With the complexities of today's economy it is difficult to exactly assess the level of underemployment and its impact on a person's ability to earn a satisfactory living. Certainly a contributing factor to this complexity is today's gig economy with an ever increasing number of platforms such as Uber, Lyft, Airbnb, TaskRabbit, etc. providing supplementary income. It can be reasoned these platforms have attained such rapid popularity due to the growing need for means of earning a supplemental income.

The US Bureau of Labor realizes their historic unemployment measures are too restricted and do not adequately capture the breath of labor market problems. Accordingly, economist at the Bureau of Labor Statistics developed a set of alternative measures, more broadly defined than historic unemployment, but still including it, which they term *labor underutilization*. However, in examining the variation in their labor underutilization figures in conjunction with times of recession, variations in labor underutilization

appear to better represent a lack of job availability rather than a measure of being underemployed, i.e., working, but in a job well below one's training or skill set.

An excellent 2016 study by the McKinsey Global Institute (Manyika) delves into "independent work" as opposed to those who work in more traditional roles as employees. The McKinsey study defines four types of independent workers:

- **Free agents** who derive their primary income from independent work and actively prefer it
- **Casual earners** who use independent work for supplemental income and do so by choice
- **Reluctants** who derive their primary income from independent work but would prefer a traditional job
- **Financially strapped** who do independent work for supplemental income to make ends meet but prefer not to do this

McKinsey groups the first two categories, free agents and casual earners, as independent workers who do so by choice. They group the last two categories, reluctants and financially strapped, as independent workers who do so out of necessity. Of the 54 million to 68 million independent earners McKinsey estimates are in the United States, roughly 20 million are in the out of necessity category. The US Department of Labor puts the US workforce at approximately 160 million, with 4-5% typically unemployed at any one point in time. If something on the order of 62 million are independent workers (per McKinsey), then nearly 39% of the US workforce are already independent workers and their numbers are growing. Further, if 20 million are independent earners out of necessity, they comprise about 13% of the US workforce and this number is growing as well.

Contrasting US government figures on self-employment with the findings of the McKinsey study provides insight as to the difficulty in getting a clear picture. In April 2014 the Bureau of Labor Statistics put the number of unincorporated self-employed at nearly 9.3 million, about twice the number of Incorporated self-employed workers, or, taken together, roughly 14 million self-employed in total. At the same time the US Census Bureau reports data on what they term "non-employer firms", basically companies of one, as being around 22.7 million. The Census Bureau economic census data also reported on what they termed one employee firms. For the years 2002 and 2007 these numbers were 20.9 million and 26.5 million, respectively. In the 2012 census data they stopped reporting this figure, but one can probably use the 22.7 million from the non-employer firms data. In any case, these figures are far from the 54 - 68 million independent workers found in the McKinsey study and suggest a great deal of uncertainty as to just how many of the US workforce are self-employed, independent workers, but likely significantly higher than government estimates.

The rising penetration and impact of the internet in every aspect of life is undeniable. Knowledge of the skill and value of every individual is being continuously refined and detailed knowledge of the workforce in general is becoming more and more "fine grained". This enables employers to reach into the workforce at large to find an individual or individuals with the skill sets and knowledge needed for a specific project or task without having to hire these contributors/problem-solvers as traditional employees, but only as independent contractors. Given the uncertainties in permanent hires in terms of the individual working out and/or their needed skill/knowledge being obviated by technological or market disruptions, use of contract/independent workers will only grow, possibly accelerate, in the future.

### **Inflation Adjusted Wages Over Time**

Despite an apparent historic growth in wages over the years, October 2014 analysis provided by the Pew Research Center (Desilver) showed, using 2014 dollars as a constant, seasonally adjusted average hourly wages in the United States actually have fallen since the early 1970s when inflation is taken into account and this has been true regardless of whether the economy has been adding or subtracting jobs. This grim picture is not true for top wage earners and wealthier Americans, but certainly points to an inability of middle income and lower income individuals to share in the nation's growth in wealth.

Historically, career oriented University educated individuals have fared much better with their inflation adjusted wages growing in real terms and they were able to accumulate some level of wealth. However, in approximately the last decade the fortunes of graduating University students have diminished. Today on an inflation-adjusted basis, the average starting salary for graduates entering the workforce has been depressed from that of their counterparts a decade ago. While around 60% of recent University graduates are avoiding this problem, average starting salaries are being depressed in general by the 41 the 46% of recent graduates who say they didn't need a University education to get the job they were able to get.

### **Rapidly Rising Wealth Inequality**

Just how uneven the playing field has become in participating in the American dream of getting ahead financially and accumulating enough wealth to be able to retire later in life is evidenced in the following.

According to an analysis conducted in 2007 (Hurst), the wealthiest 1% of the American population owned 34.6% of the country's total wealth while the next 19% wealthiest households owned 50.5%. Thus in that time, the wealthiest 20% of Americans owned 85% of the nation's total wealth while the bottom 80% of the population only owned 15% in aggregate.

A recent paper by economist Edward N Wolff (Ingraham) using data from the federal Survey of Consumer Finances reports the wealthiest 1% of American households now own 40% of the total wealth in the United States, up from 34.6% in 2007. In fact, they now own more wealth than the bottom 90% combined. As noted previously, in 2007 the wealthiest 20% of Americans owned 85% of the nation's total wealth. According to Wolff's study the top 20% of households in the US now own 90% of US wealth up from 80% only 10 years ago. This trend of consolidation of wealth at the top has continued for roughly a half century. Adding to this picture, in recent years households in the bottom 10% of the wealth distribution have gone from zero wealth to on average being approximately \$1000 in debt.

This accelerating wealth inequality in the United States goes hand-in-hand with inequality in the ability to earn. Today, more and more, people do not earn money, capital does. Thus, as noted above, people with capital continue to get richer while those who work to earn a living and acquire capital are falling behind. In a recent open letter to the Harvard Business School community (Scott), HBS Professor Emeritus Bruce Scott pointed to business education being a factor in this wealth consolidation/concentration whereby business graduates are sent forward to manage with the mandate to optimize shareholder value. Clearly one outcome of this mandate has been to remove US workforce content to lower costs and improve returns on shareholder equity by off-shoring work, importing rather than domestic manufacture, reinvesting offshore earnings offshore for lower labor costs and the use of automation/robotics.

### **Aging Workforce Inability to Retire**

Beyond all the exacerbating factors noted above is the dramatic change in US life spans in just one lifetime, i.e., roughly 70 years. According to the US Census Bureau (Whalen), longevity in the US has gone from 68 years in 1950 to nearly 79 years today. The historic economic model has been to work and prepare to retire at age 65, thus on average, retirement preparation and financial planning only had to cover on the order of 3 years. While people still associate 65 years of age as a retirement milestone, the average time span to financially cover in retirement is now on the order of 14 years.

Because of the economic uncertainties brought about by globalization and technological disruption of traditional employment, much of the workforce today is faced with uncertainty and an inability to schedule retirement. Many, if not most, are faced with having to continue to work to sustain themselves. With the crushing consolidation of wealth, retirement becomes problematic for most if not impossible. This in turn disrupts the traditional pattern of the retirement of aging workers creating opportunity for those entering the workforce and exacerbates problems already being experienced due to globalization and technological disruption.

## **Entrepreneurship Education's Role for Future Workforce Economic Health**

It seems clear earning a living in the future is going to be far different from the past. However, preparation of individuals to operate in this new environment has not kept pace with reality. The US government response has been to manipulate federal taxation, relying on trickle-down economics, to help right the US economic ship as it relates to workforce economic health. It remains unclear if this will be of any great benefit. One thing for certain, the US workforce must be much better informed and prepared to deal with the vastly different realities of earning a living in the future. Going forward there will likely need to be a number of initiatives which all combine to improve the economic prospects of the US workforce.

The definition of "entrepreneurship" and who is an "entrepreneur" needs to be broadened to suit today's realities. If, as the evidence suggests, an ever-growing proportion of the workforce are going to be self-employed independent workers, i.e., "the entrepreneurs of their own lives", entrepreneurship educators then should think of entrepreneurship in terms of self-employment not just focusing on those pursuing a startup dream. A critical first step, which it seems must fall to entrepreneurship educators, is creating a much broader public awareness of how different earning a living in the future may be. The problem today is, while the workforce is sensing a certain level of economic stress, there is not a full appreciation of what they face in earning a future living and that they may very well default to being the entrepreneur of their own life. Only with this awareness will people understand and appreciate the need for having a more entrepreneurial mindset and skills as potential keys to future success.

In 2015 Deloitte (Mind the gaps) completed a survey of more than 7800 millennials representing 29 countries around the globe, with all participants having been born after 1982, having a college or university degree and being employed full-time in organizations predominantly larger than 100 employees. These recently employed graduates across a wide range of companies, cultures and disciplines gained in appreciation of the importance of being entrepreneurial mindset when being entrepreneurial had not been their focus. They were asked to rate how they now (as an employee, not a student) view the skills and attributes on which businesses place the most value and are currently prepared to pay the highest salaries. The survey pointed to qualities highly valued by companies, but relatively under-developed upon graduation in the view of the millennials interviewed. Being entrepreneurial was viewed as valued by companies (mentioned by 24 percent of the participants), but only 14 percent thought this was a strong personal trait upon graduation. These survey results speak to the growing importance of having an entrepreneurial mindset, even in established companies. This suggests those entering the workforce from higher education haven't been sufficiently educated in the importance of entrepreneurship and being entrepreneurial. They represent yet another subset of the population who would benefit from a broader definition and awareness of entrepreneurship, again supporting the notion entrepreneurship education needs to reach out to students not seeking to be entrepreneurs in the traditional sense, but who will have to be more entrepreneurial in the future.

What training or change in education should the workforce of the future have to be better prepared? One element of this preparation could certainly be bringing a much more pervasive entrepreneurial mindset to the current workforce as well as those being prepared to enter the workforce in the future. If there will be an ever increasing number of independent workers, would it be more business education for everyone? Thanks to clues from a recently reported research study (Campos), the psychological aspects of entrepreneurship may be of greater value in preparing the workforce of the future than business training per se.

This study, recently reported in *Science*, conducted by team headed by Francisco Campos with researchers from the World Bank, the National University of Singapore and Leuphana University reports on improving the performance of small businesses. The study monitored 1500 people running very small businesses in Togo West Africa. Five hundred in the sample were randomly chosen as a control, while a second set of 500 received business training in conventional areas such as accounting, financial management, marketing and human resources. The remaining group of 500 was given training in entrepreneurial skills such as personal initiative, setting goals, dealing with feedback and persistence in the face of setbacks.

After 2 1/2 years the study found small business performance improvement benefited from training in the psychological/entrepreneurial aspects of managing the enterprise rather than having training in traditional business tools. The 500 with business training performed no better in sales and profit than the control group, while those given entrepreneurial training improved monthly sales by 17% and profits by 30% over the control group. One can easily speculate providing McKinsey “independent workers” with the same kind of training would provide similarly positive benefits, making the case for entrepreneurial education at all levels of career preparation and career redirection.

So, many elements of what is taught in entrepreneurship programs could potentially have a significant impact in addressing preparation of the workforce of the future. However, to date entrepreneurship education focuses primarily on those who always wanted to be an entrepreneur. From a recent Kauffman Foundation study (Kauffmann), and using data on students taking courses which had anything to do with entrepreneurship or having entrepreneur or entrepreneurship in the title, it could be roughly estimated approximately 0.3% of the US University student population is studying anything having to do with entrepreneurship. Thus, while successfully growing programs for students intending to be entrepreneurs or those with some interest, this narrow entrepreneurship educator focus severely limits potential societal impact.

To have a much greater societal impact entrepreneurship education needs to be more pervasive across education in general. Further, to help the existing workforce cope with an inability to afford retirement, elements of entrepreneurship education need to extend to this population as well. It might not be too much to say for future workforce economic wellbeing an entrepreneurial mindset will be nearly as important as other basic skills. While the best resource qualified to provide entrepreneurial education across much broader elements of the population are entrepreneurship educators, a major issue is this task is far outside their traditional roles and structures within academia.

## CONCLUSIONS

There is a much broader, high impact societal mission for entrepreneurship education in the face of dramatic historic disruption of how people will earn a living in the future. This mission goes to creating a more entrepreneurial society, not just more startups.

The continuing growth of independent work has major implications for broader entrepreneurship education and better workforce preparation. Certainly one important implication is there needs to be more content on entrepreneurship in basic education. Not simply in terms of the traditional notion of being an entrepreneur, i.e., starting something, but rather having an entrepreneurial mindset, which includes examining alternatives, making reasoned judgements involving risk and dealing with failure. A second important implication for entrepreneurship educators is the need to create both awareness of the need for entrepreneurial training and then providing it for a large proportion of the current US 160 million workforce who will be unable to retire and who have no education/training to be an independent worker.

The basic elements of creating a more entrepreneurial society are really quite simple. First individuals must be educated with respect to the future they face in terms of earning a living which is far different from what has been known historically, often resulting in poor career advice and preparation. Second, there needs to be familiarity with the personal toolset/skills important to entrepreneurs, such as presentation of oneself and one's ideas, negotiation, self-branding, forming and leading teams, creativity, dealing with failure etc. Finally individuals need to have a basic idea of what it takes to be self-employed “company-of-one”. This would include how to find a product or service which is valued and in demand (Is it real?), a few simple financial models like creating budgets and understanding how marginal income needs to cover fixed expenses (Cash is king!), and finally an understanding of broader issues which will require advice from others such as the form of business, liability insurance, intellectual property, etc. (It takes a team.).

While the steps to creating a more entrepreneurial society are conceptually straight forward, the most challenging element is creating an awareness of the need to be more entrepreneurial. How do you create an awareness in people as to what is happening and who are without an appreciation of what the future

portends in respect to earning a living? Without this awareness people will not be motivated to seek avenues of education which will improve their entrepreneurial mindset and ability to perform as an entrepreneur of their own life in the future. To date, the vast majority of those preparing to earn a living in the future are totally unaware they may default to being the entrepreneur of their own life, never having considered they may end up being a self-employed contractor/ independent worker and certainly never having considered being entrepreneurial or starting something. Because entrepreneurship educators are the best resource to provide education and training for this unrecognized need, it falls to this community to extend their mission to creating the necessary awareness. If they don't, who will?

## REFERENCES

- Campos, F., Frese, M., Goldstein, M., Iacovone, L., Johnson, H., McKenzie, D., Mensmann, M. (2017). Teaching personal initiative beats traditional training in boosting small business in West Africa. *Science*, 357 (6357), 1287-1290.
- Desilver, D. (2014, October). For most workers, real wages have barely budged for decades. Retrieved from <http://www.pewresearch.org/fact-tank/2017/11/01/how-wealth-inequality-has-changed-in-the-u-s-since-the-great-recession-by-race-ethnicity-and-income/>
- Hurst, C. E. (2007). *Social Inequality: Forms, Causes, and Consequence*. Pearson, UK: Pearson Education, Inc.
- Ingraham, C. (2017, December). The richest 1 percent now owns more of the country's wealth than at any time in the past 50 years. Retrieved from [https://www.washingtonpost.com/news/wonk/wp/2017/12/06/the-richest-1-percent-now-owns-more-of-the-countrys-wealth-than-at-any-time-in-the-past-50-years/?utm\\_term=.bda3536c672d](https://www.washingtonpost.com/news/wonk/wp/2017/12/06/the-richest-1-percent-now-owns-more-of-the-countrys-wealth-than-at-any-time-in-the-past-50-years/?utm_term=.bda3536c672d)
- Kauffmann National Survey of Entrepreneurship Education, An Overview of 2012-2014 Survey Data. [http://www.nationalsurvey.org/files/2014KauffmanReport\\_Clean.pdf](http://www.nationalsurvey.org/files/2014KauffmanReport_Clean.pdf)
- Mind the gaps, the 2015 Deloitte Millennial survey. (2015). Retrieved from [millennial-survey-executivesummary.pdf](http://www.deloitte.com/au/assets/pdf/00/2015_millennial_survey_executive_summary.pdf)
- Manyika, J., Lund, S., Bughin, J., Robinson, K., Mischke, J., Mahajan, D. (2016, October). Independent Work: Choice, Necessity, and the GIG Economy. Retrieved from <https://www.mckinsey.com/global-themes/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy>
- Reynolds, G. H. (2014, January). Degrees of value, making college pay off. *The Wall Street Journal*, pp. C1, C2.
- Scott, B. (2017, September). What's wrong with the Harvard Business School and American business. Retrieved from <https://www.pbs.org/newshour/economy/making-sense/column-whats-wrong-harvard-business-school-american-business>
- The Labor Market for Recent College Graduates, Federal Reserve Bank of New York. (2017, September). Retrieved from <https://www.newyorkfed.org/research/college-labor-market/index.html>
- Whalen, J. (2017, December 21). U.S. lifespans fall again. *The Wall Street Journal*, p. A3.