

DEVELOPING A CURRICULUM FOR ASPIRING ENTREPRENEURS: WHAT DO THEY REALLY NEED TO LEARN?

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ABSTRACT

The field of entrepreneurship “education” appears split. There are the business school offerings which emulate an MBA for small businesses and startups; there are the accelerator and incubator offerings which cost entrepreneurs a chunk of their equity in order to be processed through a version of the ‘lean canvas’ or some other business modelling process in 12 weeks; and then there are the one day seminars and inspirational gurus who motivate everyone to be a success, even when the reality is statistically going to be otherwise. This paper explores the research on successful entrepreneurs and draws out from this the basis of what a curriculum for would-be entrepreneurs ought to be in order for them to decide if entrepreneurship is the pathway for them, and how they need to navigate the pathway to success. Four key elements arise: their definition of success and subsequent framing of failure; their attitude and propensity for risk; their ability to develop resilience and recover from set-backs; and their level of action orientation to actually get things done. Aspiring entrepreneurs need to learn about themselves and how they are going to manage themselves through the entrepreneurial journey—not a business curriculum that they can pick up anywhere.

Keywords: Entrepreneurship Education, Curriculum Design.

INTRODUCTION

If one were to ask the question “*what does an entrepreneur need to know and be able to do?*” in order to design a curriculum for would be entrepreneurs, a good starting point for many would be any standard business program curriculum. After all, entrepreneurs set up and run their own businesses, do they not? For many providers—that is it. Take a standardized business curriculum and apply it to small business or start up situations. Hence we see a plethora of degrees and postgraduate qualifications that teach finance, marketing, people management, etc. all with the slant of the start-up or small business focus, but are any of their graduates any more successful than a straight business graduate who chooses to start their own business? According to these courses, anyone could be a successful entrepreneur. You learn how to get finance; how to manage your production process, your team, and your bank balance; how to establish if there is an opportunity in the market and how to market your product to that market; and you learn the basics of law so you can sign a contract safely. So why do so many entrepreneurs fail? Maybe it isn’t about the hard knowledge and skills that business schools so love to teach? Maybe being a successful entrepreneur is about something else. This paper sets out to explore what makes entrepreneurs successful and questions whether this should be the basis of entrepreneurship programs rather than the traditional business school view.

THE NATURE OF RESEARCH IN ENTREPRENEURSHIP

A caveat needs to be drawn as to the nature of entrepreneurial research, as this is what is underpinning this paper. In essence, research into entrepreneurs and the nature of entrepreneurship tends to count occurrences or explain them in an attempt to prove they exist, rather than explore their phenomena to develop an understanding of what underpins it. Drakopoulou-Dodd et al. (2014) note that entrepreneurship researchers either take the positivist approach and undertake quantitative studies, or as qualitative researchers they subscribe to similar research strategies as they try to both fit in and stand out with the dominant players, as they don't want their research to be considered an unacceptable deviancy. This is arguably a common feature of all peer-reviewed academic research, as to challenge the canon of knowledge in a discipline could effectively undermine the dominant discourse, potentially leading to what Kuhn (1996) would describe as a paradigm shift. Being the solo voice trying to publish in this vein would require more than entrepreneurial skill, and hence entrepreneurial research is unlikely to be very entrepreneurial in it. Indeed, in an effort to establish itself as a discipline within the business and management literature, entrepreneurship research is arguably even more conservative in methodological approaches than general management or leadership research. To counter this, this paper draws on a range of sources, including books published by successful entrepreneurs who have not undergone peer-review but are more accounts of their lived experience and learning's. This conservatism in the field of research is replicated in curriculum with educational offerings presenting such studies as an oversight of the field, rather than as one particular view to be challenged. This includes, for example, the work of Messenger (2015) who actively seeks to develop entrepreneurs through her own work as an entrepreneur's entrepreneur, and Sprake (2013) with his successful entrepreneurs' recipe.

A second caveat is that Entrepreneurship as a field also struggles to find its place in economic theory. Aspromourgos (2014) explores the concept of entrepreneurship within the economic theory of Adam Smith, noting how it fits into land, capital and labour. He notes that risk-bearing does not lie with the entrepreneur but with the person or entity that provides the capital for the entrepreneurial endeavour, if Schumpeter's (1911) definition of entrepreneurship is applied, or it does lie with the entrepreneur, if Knight's (1921) definition is applied, as the entrepreneur is the provider of the labour. The remuneration of entrepreneurship and the market value of innovation are troublesome concepts as they do not sit within existing markets, but rather require the creation of new markets and hence are difficult to predict. So why is this important? The capitalist interpretation of the world is based on such economic theory, and hence the dominant, western male paradigm of how entrepreneurial success is measured is articulated in the terms of this economic theory. Growth, profit, etc. are the measures of entrepreneurial success expected by society. Baumol (2002) goes so far as to claim entrepreneurial spirit is the miracle that keeps capitalism alive. Such bounded rationality excludes social entrepreneurs, intrapreneurs, and any entrepreneurial endeavour that does not have a specific profit motive as a return on capital invested. This pattern in the literature is reproduced in curriculum offerings and entrepreneurship education focusses on a capitalist economic outcome as success. To counter this, a range of sources from emergent and non-traditional economic sources have also been used, for example a study of Indonesian women entrepreneurs who operate within a strictly Muslim society and are largely based in rural settings, or a study of entrepreneurs in war torn Afghanistan.

A third caveat is that the limitations of different theoretical perspectives are largely overlooked. Trait based theories view various personality traits as contributing to entrepreneurial

success, such as resilience (Brockhaus, 1982; Schumpeter, 1993). Sociological theorists see entrepreneurship as a product of a high achieving capitalist society (McClelland, 1961), or societies where governments promote funding in new ventures and innovation (Galvin, 1978). Both these theoretical streams stem from studies of men (Hurley, 1999). A feminist perspective recognises the power structures of the society that underpin the production of entrepreneurial knowledge, noting that gender is a social construct itself, and that gender inequalities exist in any society (Jacques, 1992), while celebrating the contribution women can make to entrepreneurial outcomes despite the restraint of culture, society and politics (Calas and Smircich, 1992). These limited lenses foreshadow current curriculum offerings and education for entrepreneurs now are generally limited to the entrepreneurial personality and how they succeed in Western society. For the purposes of this paper, the theoretical perspective doesn't matter. We are looking for a pragmatic outcome of what do these people need in a curriculum, not a paradigm from which to interpret the findings. To that extent, perhaps, this is written from a critical realist perspective.

UNDERSTANDING WHO YOU ARE AND WHAT YOU WANT TO ACHIEVE

Every entrepreneur ultimately wants to succeed—nobody sets out to fail, and yet Peirus (2015) notes that more entrepreneurs fail than succeed. He attributes success to six building blocks: our social embeddedness and individual characteristics (i.e. who we are); desire (passion for the venture); experiences (from formal and informal learning); expertise (through resourcefulness); execution (combination of perseverance, self-efficacy and communication); and value creation (for yourself and for others). While these may seem somewhat obvious, to be able to engage with them fully is actually very demanding. Who are we, for example? To answer this fully we need to understand our epistemology and how this is impacting on our ontology. What value do we want to create? This might require a shift in our ontology—with all that that encompasses. Lisa Messenger tackles this question in her book *“Love and Life: Create the Dream”* where she talks through finding her purpose in life after many wrong turns (Messenger, 2015).

Really understanding who we are, how we came to be who we are, and how this impacts on how we are in the world, takes people through Otto Scharmer's (2009) *“Theory U”*, or to the heart of Sinek's (2013) TED Talk *“Start with why”*. And when people do find their *“why”* or become *“present”* they achieve an understanding of themselves, their values and drivers, and a vision of who they want to be in the future. This may provide insight that goes well beyond *“making a million”*—the ultimate stereotyped capitalist entrepreneur's outcome. Juxtapose this with the individual's behaviour in attempting to fulfil this stereotype and identity conflict occurs for they would be entrepreneur. Seth Godin advised an entrepreneur *“Don't build a business because you want freedom. Build a business because you want to run a business”* (Goins, 2017). This simple and somewhat obvious statement fundamental in entrepreneurship education and yet it is not discussed or explored in any traditional course offering, it is taken as an assumption.

Loh and Dahesihsari (2013) found that women entrepreneurs established their businesses in gender segregated business areas, such as services and retail trades, and that while their business success was important, their family commitments and responsibilities had to take priority. While risk taking behaviour differs greatly amongst women, capacity building, seeking knowledge and skill was a high priority for most women, and they display very high levels of resourcefulness and resilience (ibid). Financial backing and past education were not factors impacting on this sample group of women entrepreneurs in Indonesia, and while 50% of them failed on numerous occasions, none of the women regretted their endeavours as they found a

sense of purpose. This suggests these fundamental questions of “*who am I*”, and “*why am I doing what I am doing*” are fundamental in entrepreneurship education.

TOLERANCE FOR RISK

Risk is an unavoidable construct for entrepreneurs and yet it does not appear in the traditional curriculum in anything other than a “*risk management*” format, which assumes that risk can be managed like any other process can be managed, and ignores both the human elements of how we cope with risk and how it impacts our behaviour, and also the specific nature of entrepreneurial risk and the ability of the startup to pivot as new risks arise.

Miles (2014), in his economic theory approach to risk focusses on the actual business enterprise assessment. The economic theory of risk provides two variables: endogenous variables which are within the control of the firm such as operations decisions, pricing, marketing; and exogenous variables which are outside the control of the firm such as GDP, weather (Hirschey and Pappas, 1992). Miles (2014) found that the two combined to reveal eight risk factors for entrepreneurial businesses:

1. Industry and economic forces (such as equipment risk, capital investment risk, government regulation risk).
2. Terrorism and security dynamics.
3. Government and market forces (such as diseconomies of scale, globalisation risk).
4. Market forces (such as intellectual capital risk, time intensity risk, customer turnover risk).
5. Global economic forces (such as expertise industry risk, protection devices risk, business entity risk).
6. Internal forces (such as velocity of profit risk, inflation energy risk).
7. Business Enterprise Intangibles (such as competitive risk, market entry risk).
8. Profit and inflation forces (business climate risk, labour risk).

Despite his being a study which stands alone in its approach to researching risk factors, the elements that Miles (2014) found do form the basis of most traditional entrepreneurship curriculums. Business schools teach about capital investment, government regulation, intellectual property protection, marketing and market entry, competitor analysis, etc. However these areas are identified as knowledge areas that student entrepreneurs need to be aware of and have knowledge about, they aren't generally taught from the perspective of risk management and mitigation—but they could be.

There is a body of research on how risk relates to financial status. Bianchi and Bobba (2013) found that initial access to cash transfers has less impact on entrepreneurial risk taking than the guarantee of future income streams. Their research showed that the possibility to reduce future income fluctuations drove micro-enterprise launches in Mexico.

Fourati and Affes (2014) explored the extent to which entrepreneurs would take greater risks with other people's money than their own, and the extent to which they perceive starting a business venture as a risk in itself or fulfilling a missed opportunity. Interestingly, they found that people starting their own businesses were less risky in approach than those taking risks with other people's money, suggesting that intrapreneurs may take more risks than entrepreneurs, and offers great insight into the mindset of the entrepreneur in terms of how far they are prepared to go to achieve their “*success*”. Equally, people were less likely to be motivated to be entrepreneurial to exploit an opportunity when it was someone else's money than their own, and were more likely to be motivated to avoid a risk. This suggests intrapreneurs will innovate to

avoid risk threats rather than to fulfil potential opportunities, while entrepreneurs will seek the opportunity and try to avoid the risk. This could be an interesting reflection of organisational culture, where people fear getting things wrong and hence will be entrepreneurial to avoid a risk, but hesitant to explore an opportunity for fear of failure (Simms, 2015).

Bandura (1997) outlined the concept of self-efficacy as one's belief in their ability to successfully complete a task. Note it is task specific and hence differs from broader concepts such as self-confidence. Densberger (2014) contradicted much of the extant literature that suggested that risk taking is the result of high self-efficacy per se amongst entrepreneurs. Her qualitative study found that high self-efficacy enabled entrepreneurs to take risks by making them comfortable with risk, not simply being more confident about success, and hence riskier. This suggests that education to improve self-efficacy can enable more people to follow their entrepreneurial intent, although the nature of the training itself can have the opposite effect (Schenkel et al., 2014). This is not necessarily a bad thing. If experiential training in risk taking leads people to lose their entrepreneurial intent, despite their self-efficacy, then remaining an intrapreneur may be the best path for them. Facilitating this type of experience to enable student entrepreneurs to make this choice in a supportive environment should be a critical part of any entrepreneurship curriculum, without it being deemed as a negative outcome—particularly if it prevents some of the many start-up failures that occur.

Other studies give more insight into the relationship between confidence and risk. Macko and Tyzska (2009) found that people who started their own businesses had higher self-confidence than people who had no intention of starting their own businesses, but there was no significant difference in attitude to risk between the groups they studied, although they did find that would-be entrepreneurs made riskier decisions than those not interested in being an entrepreneur in simulated business decisions. Krueger and Dickson (1994) found that increased self-efficacy and self-confidence led to a greater propensity to take risk. Knight (1921) found that entrepreneurs have greater self-confidence than others. However, Macko and Tyzska (2009) could not produce findings to substantiate the logical link that entrepreneurs had a greater propensity for risk. Hence it isn't that entrepreneurs like risk more than others, it is just that they are prepared to deal with it more. Hence developing tolerance for risk, and strategies for managing risk, could be a key to developing entrepreneurs in the future, and necessary components of an entrepreneur's curriculum.

Raiffée and Feng (2014) found that the more risk-averse entrepreneurs who lacked the confidence to give up their day job and launched their own business '*part-time*' in what is called a hybrid entrepreneurship model (Folta et al., 2010), did still tend to follow their entrepreneurial instincts, and had a greater survival rate when they did finally make the jump to full-time self-employment than those who go full-time entrepreneur from the start. Interestingly, they did not find this low self-evaluating group being intrapreneurs—they kept their ideas to themselves—but were only willing and able to make the jump from employment to self-employment once they had reduced the risk to safe levels. Hence they had the entrepreneurial intent (Thompson, 2009), but not the self-efficacy to make the jump until they had somewhat proven themselves in a hybrid model. Again, an entrepreneurship curriculum could support hybrids through their initial start-up phase and assess whether the risk of jumping all the way is too much for them or not—and discovering that the risk is too much and pulling back and remaining in employment is a good outcome, not a failure.

THE NEED FOR EMOTIONAL INTELLIGENCE

While entrepreneurial personalities can be celebrated in many ways, such as for their energy, drive, self-confidence, etc., they can also have a dark side which is often overlooked, including narcissism, aggression, ruthlessness and irresponsibility (Miller, 2014). While it may not be at top of every entrepreneurs personality profile, Ghosh and Rajaram (2015) found that emotional intelligence can be developed through entrepreneurship development programs, and this in turn also improved the success rate of the entrepreneurial endeavours. Rather than forming part of a formal curriculum, this area has previously been left to the “*school of hard knocks*” publications by successful entrepreneurs and consultants. Some have even started their own short courses, such as Evan Kimbrall on Udemy, with some such as B-School and The Entourage having sought qualification accreditation, which they then unfortunately lost through lack of successful completions¹. Their evidence base is largely anecdotal and style of writing is popularist rather than peer-reviewed, and hence the mismatch with academic qualifications is not surprising.

Examples of such popularist curriculum include Tracey (2007), who notes seven secrets to success: clarity (being absolutely clear on who you are and what you want to achieve); competence (being very good at what you do); constraints (identify them and spend energy addressing those that matter most); creativity (innovation in finding solutions not problems); concentration (single-mindedness); courage (to take risks); and continuous action (keep moving forwards).

Sprake (2013) notes the “*Entrepreneur Success Recipe*” as:

- Take one person.
- Add a massive HUNGER for success.
- Add a vivid vision and laser focus.
- Turn up the heat to maximum discomfort.
- Void the environment of toxic influences.
- Find a setting with consistent and unwavering support.
- Be extremely tenacious until goal is achieved.
- Progress until perfect growth and profit is obtained.
- Avoid costly distractions.
- Understand all costs.
- Add powerful resources.
- Relinquish control.
- Maximize income and time off.

Sprake puts all the emphasis on the individual, their abilities, focus and tenacity, while Tracey is more externally focussed, including customers and external constraints as considerations that can impact on success. The question arises as to which point this crosses the

¹ B-School now offers a VET Diploma as an outcome of the entrepreneurship program (www.bschoool.edu.au), as did The Entourage (www.the-entourage.edu.au) although they had to put their Diploma into teach-out after failing to meet the regulators’ standards on completions.

tipping point of becoming narcissism. Navis and Ozbek (2016) found that entrepreneurs high in overconfidence and narcissism are propelled toward more novel venture contexts, where ironically these qualities are most detrimental to venture success, and are repelled from more familiar venture contexts where these qualities are least harmful and may even facilitate venture success. Indeed, they propose that it is overconfidence and narcissism that leads successful business executives to take the step into pursuing an entrepreneurial future as there is an element of need for an elevated ego to be continually reinforced. Mathieu and St-Jean (2013) found that student entrepreneurs scored significantly higher than any other vocational group on a measure of narcissism. One wonders then if intrapreneurs are entrepreneurs without the narcissism as the success doesn't have to be about them. They also stay within the organisation rather than seeking the personal freedom and power of having/being their own organisation.

Swift (2013) in his doctoral thesis found that emotional intelligence had a significant effect on entrepreneurs business starts, longevity and profitability, and hence advocates for emotional intelligence being included in entrepreneurship curricula. This is an important learning outcome for an entrepreneurship student, because it is not all about them, and if they cannot accept that, they may be in the wrong game. Social entrepreneurship may hold some answers here as the enterprise is created for a cause, although the commitment to alleviating others' suffering may stem from more than compassion (Miller et al., 2012).

The message here though is clear. While entrepreneurs may be more narcissistic in their personalities naturally, they must develop some emotional intelligence to improve their chances of success. Indeed, given their narcissistic starting point, they probably need a double dose of emotional intelligence than would most business school courses and yet it rarely appears on the curriculum. Much of this could be subsumed within the business canvas model, product management and analysing the customer experience, some of the newer approaches to agile entrepreneurship, as they focus very much on understanding and empathising with your customer, so the conversation is about their problem rather than your solution (Blank and Dorf, 2012; Osterwalder & Pigneur, 2010). These are starting to find their way into some entrepreneurial strategy classes but are far from the norm in Universities, while they drive the curriculum in 12 week commercial accelerator programs.

SURVIVING BEYOND LAUNCH

Launching a new business venture is one thing; surviving beyond the launch surge is quite another. Owens et al. (2013) studied 147 small business owners and found the four personality factors that correlated most highly with success were goal setting, social networking, emotional resilience and work drive. The top three personality factors predicting satisfaction were optimism, work-based locus of control, and work drive. Interestingly, the two personality factors they found that were not related to business performance were competitiveness and dependability (ibid). Dependability might be a red herring here as it could signal a lack of adaptability, i.e. once you make a decision, people can depend on you to stick to it, whereas an entrepreneur may need to adapt more on the spur of the moment and pivot until they find their beach head market. Competitiveness, however, is counter intuitive in the dominant white male paradigm where competition is everything and "*winning*" is the measure of success. The fact that this personality trait did not predict performance outcomes suggests that alternative business models may be starting to emerge where a more collaborative approach is proving equally successful as a competitive approach to launching a new startup. Danes (2013) also supports the

“*it takes a village*” rather than “*the lone ranger*” approach to developing a new venture, noting the importance of spousal support in particular.

Kessler et al. (2012) studied founding success (starting a business) and survival of entrepreneurial businesses over a seven year period. While personal characteristics such as risk-taking affect founding success, they do not have an impact on survival, but not surprisingly the processes undergone in founding the business does impact on its survival and its successful launch. Cutting corners early on does not pay off, and doing the right homework and ensuring your business venture has a sustainable edge is imperative.

Shigley (2010) notes ‘*a bundle of savings and a golden idea are minimum requirements, yet people who keep ventures afloat rely on key personality traits and coping strategies, too.*’ Hindsight bias can lead to successful entrepreneurs’ glossy narratives, but nobody writes up stories of failures. She notes that successful entrepreneurs are extremely self-aware of their strengths and weaknesses and seek out people with complementary skills and traits to work with. Personality types most suited to being an entrepreneur have a strong sense of autonomy and self-regulation, optimism, resilience and a high tolerance for risk. The non-cash assets she recommends having in place before starting are a good support network, an exit strategy so you know when to walk away, and good coping skills to sustain a positive mindset—not your typical entrepreneurs’ curriculum items. Robertson (2012) studied the neuroscience of success and found the hormone release that occurs with success drives the individual to greater success in a success breeds success cycle. Being successful against a much weaker opponent, for example, is likely to lead you to succeeding over a much stronger opponent, whereas tackling the stronger opponent first is likely to lead to failure.

This positive mindset is necessary but can also have its drawbacks. Hayek (2012) found that the critical differentiator between successful and unsuccessful entrepreneurs was how realistic they were with regard to their control belief. Did they believe they had control of uncontrollable situations? Positive psychological capital (self-efficacy, optimism, hope and resilience) need to be combined with a realistic control belief in order to place realistic risk-boundaries on a venture—which cycles us back to the discussion on risk earlier in this paper.

Entrepreneurs need to be able to discern whether the outcome of a situation is dependent on skill or chance. Their high positive psychological capital can have a negative impact on their perceived level of control and perceived risk, which in turn works against their entrepreneurial intent. Hence the “*exit strategy*” signals of when to walk away, a reality checker, and a sound understanding of risk and control are key requirements for long term entrepreneurial success. Cass Phillips started FailCon to help people recover from entrepreneurial failures and rebuild their resilience for success (Ankeny, 2014). Exit strategies and recovery are also not commonly found in most entrepreneurship curriculum.

McKelvey (2016) sees the ever changing business environment and ability to respond to the rapid pace of change of complex factors as key to entrepreneurial success. The rapid pace of change at which complexity dynamics occur requires businesses to coevolve if they are to survive their competition, such that a change in one part of an organisation brings about change in another. Complexity dynamics start from tensions (forces requiring adaptation) resulting from new knowledge, which when they lead to the coevolution and self-adaptation of organisations, are effectively entrepreneurship in practice. Start-ups occur to fill a gap when organisations fail to adapt to the new tensions and emerging gap. Hence organisations need intrapreneurs to continually reinvent their organisation, in effect to put themselves out of business; and entrepreneurs need to be wise to the opportunities and quick to respond.

Groves et al. (2011) tested the stereotype that entrepreneurs are nonlinear thinkers (intuitive, creative, emotional, etc.) compared to others. They found that entrepreneurs (n=39) possess a more versatile balance in both nonlinear and linear (e.g., analytic, rational, logical) thinking styles than their professional actor (n=33), accountant (n=31), and frontline manager (n=77) counterparts, though they did not significantly differ in thinking style balance from senior executives (n=39). This begs the question of whether most senior managers would therefore make good entrepreneurs, or indeed are they succeeding in senior management because they are good intrapreneurs? Is an intrapreneur an entrepreneur without the entrepreneurial intent? If the answer is yes, then a good entrepreneurship program should also cater for senior managers who are intrapreneurs, as the entrepreneurial intent is a minor factor impacting context and outcome, but not skills set or ability.

DEVELOPING RESILIENCE

If you were to draw a set of scales with risk on one end, and success as the tipping point in the middle, the other end would seat resilience in order to keep the scales in balance. Schumpeter's leading text in entrepreneur's characteristics written in 1911 (in German) noted three key characteristics: first, an entrepreneur has intuition, which is the "view" to do the right things without over analyzing the situation; second they have the power and ability to create something new; and third they have the strength of character to conquer doubt and hostility from their surroundings (Schumpeter, 1993). Arguably, these three combine to form resilience.

Manzano-Garcia and Calvo (2013) measured resilience amongst entrepreneurs using a standardised Resilience measuring scale (the Connor-Davidson resilience scale). While the entrepreneurs they measured did not show significant rating on the five factor scale itself, a factor analysis of the results revealed three factors underpinning entrepreneurial resilience: hardiness, resourcefulness and optimism—Schumpeter's three points in reverse. They defined resilience as "a dynamic process in which the individual displays positive adaptive skills despite experiencing significant traumatic adversity; it is a measure of the ability to cope with stress" (ibid: 246). Tugade and Fredrickson (2004) found that resilient entrepreneurs believe they are more capable of adapting to change, can use past successes to confront current challenges and use positive emotions to recover from negative emotional experiences, having a strengthening effect. These skills, again, are not commonly found in a business school curriculum.

Exploring entrepreneurship at the extreme, Bullough et al. (2014) studied entrepreneurial behaviour under the extreme perceived danger conditions of the war in Afghanistan to study the impact of resilience. They found that even in these extreme conditions individuals are able to demonstrate entrepreneurial intentions if they can grow from adversity (i.e. develop resilience) and believe in their entrepreneurial abilities (i.e. self-efficacy).

In a more congenial environment, studying Indonesian women entrepreneurs, Loh and Dahesihsari (2013) found that resilience as a personality trait led to greater ability to manage risk, but interestingly they also found that education did not impact these women's' attitudes to risk. Whether this is specific to this group and context or not is questionable; they are a group of women in a developing economy. Sepulveda and Bonilla (2014) found that being male, having more years of formal education, and believing they have the necessary skills to deploy a new venture (self-efficacy) reduced the fear of failure in Latin American countries and hence increased the probability of launching a new venture. Gender issues are now so prominently recognised in the entrepreneurship research agenda to the point that ontological biases and gendered epistemologies could be perpetuating female disadvantage (Marlow and Swail, 2014).

This may not be due to systemic agentic issues, but rather to do with access to finance and attitude to risk, as women are inherently averse to risk, although whether this is another myth to sustain the masculine financial investor stereotype or fact is open to debate and interpretation (ibid). Fossen (2012) found that women's greater propensity to risk-aversion accounted for a higher exit rate from self-employment than men, but it didn't account for their lower entry rate, as self-employment rates amongst women is significantly lower than men in most OECD countries. He suggests creditor and consumer discrimination accounts for the low entry rates, a continuation of the white male hegemony. The point here though is not to berate societal gender bias, or the dominant white male paradigm per se, but rather to question the extent to which educating entrepreneurs about impact of this norm will benefit them in succeeding as entrepreneurs, and hence whether or not it should be included in an entrepreneurship education curriculum. Arguably yes it should, if only to open the eyes of students to the concepts of privilege and "otherness", to build the emotional intelligence they require as noted earlier in this paper. Understanding the world through the eyes of others will help build resilience as the depth of knowing that can be drawn on is greater.

CAN THIS CURRICULUM BE TAUGHT?

If a curriculum to support the development of entrepreneurs needs to help them find their measure of who they are and who they want to be (their measure of success); develop their tolerance for risk within the realms of a sustainable reality; develop resilience to failure to bounce back and recover; and develop the emotional intelligence to realise it is not about them, and it is to do this in a manner that challenges the dominant white male paradigm to find new forms of business success—can this be taught?

There are effectively three threshold concepts (Meyer and Land, 2005) in this curriculum: success, risk and resilience. Plus there is the impetus for action so that the learning is not static but applied, and students experience the ups and downs to enable them to make a good decision regarding their entrepreneurial intent.

There is a whole raft of alleged new learning experiences becoming available, literally around the world, through the internet. The "*UnCollege*" for example offers an individual a structured gap year at a cost of US \$16,000 that starts with a volunteering experience before 10 weeks in San Francisco taking workshops in a start-up community, before finishing with an internship².

Other providers are setting up their own certification processes, such as ALISON³, who offer diplomas that they claim are recognised by employers, but they are not mapped against any countries tertiary education framework. And then others are taking niche positions in the market to offer an outcome across a range of different subject areas, such as Anunda College of Higher Consciousness⁴ ultimately offering a masters program.

In the entrepreneurship space, there are offerings for corporate entrepreneurs/intrapreneurs such as the Beanstalk Factory which is the corporate arm of The Entourage which offers a course in Business for entrepreneurs, as does the B-School.

In Australia there are also a plethora of University courses, from the GO8 providers such as University of Adelaide and University of Sydney, to the more business focussed universities

² uncollege.org

³ <https://alison.com>

⁴ <http://anandauniversity.org/>

such as Swinburne University of Technology. These offer a range of undergraduate and postgraduate qualifications in entrepreneurship and innovation variably with curricula that resemble an MBA for small businesses. Subjects are organised in knowledge disciplines (such as accounting, marketing, etc.) and the development of the entrepreneur themselves is invisible in the articulation of the accredited courses.

Udacity.com is a provider of nano degree courses for the tech industry that offers short course offerings and enrolls students in a course offering careers advice to help get them employed when they finish—something that is probably easier in the tech industry as it is a growth industry, than it might be in others. One of their courses is for App designers who want to launch their own business.

Many of the American Universities offer a free entrepreneurship program, such as MIT offering “*entrepreneurial marketing*” through their open courseware; Carnegie Mellon offering Entrepreneurship and Business Planning—what they describe as 16 lecture course; Stanford university offer two short “*tasters*” of their entrepreneurship masters series; and University of California offers “*The Elevator Pitch*”. Generally these are short tasters to bigger offerings, and take the format of video lectures.

But despite these new offerings naming themselves as new and entrepreneurial and “*by entrepreneurs, for entrepreneurs*”, they are all still offering a traditional learning experience. The basis of the curriculum design is still one of “*I know*” and “*I will teach*”, when the literature and evidence clearly points to the need for entrepreneurs to learn from experience in order to develop their resilience and tolerance for risk, never mind their emotional intelligence. This leads us back to the question—can this be taught?

The answer is NO. If the question is can this be learned? The answer is emphatically YES!

To develop entrepreneurs, the curriculum needs to facilitate experiences and provide feedback and support for students to gain as much learning as they can from these experiences in a safe but real environment. The curriculum needs to be responsive to students’ needs, student centred in its design, and supported by a plethora of resources that students can draw on as and when they need them. In addition the students need to apply the learning from the facilitated experiences to their own value proposition/entrepreneurial idea to work through how sustainable their venture idea is as a future proposition. As they build their tolerance to risk they will understand where the tipping points are that they should not venture past with their own ideas; as they develop a resilient mindset they will recover from setbacks, adapt and continue; as they define who they are and what their measure of success is going to be, they will develop their business venture idea in a manner that will fill an opportunity gap rather than reduce a risk; and as they put all this into action, they will develop in themselves and learn through and with others.

This is not a standard business school curriculum. There are no lectures as such. There are no exams or quizzes—because there are no right or wrong answers. This is a journey for people to go on where they will undertake transformational learning experiences and emerge at a different location to where they started. Equally, this would not be the choice of every teacher or academic to teach. This requires individuals who are happy to walk into a space and facilitate, with no idea what the group will bring, and will happily allow the group to co-facilitate and co-create the outcomes. This is not a teaching space for academics that have an area of expertise; this is a teaching space for educators who love to help people learn.

So should this be taught earlier in life and taken into schools? Many High Schools are starting to engage in enterprise education but while it may help students consider the feasibility

of an entrepreneurial endeavour, it does not increase their propensity to act as an entrepreneur (Cardoso et al., 2018). Purwana et al. (2018) found that it is social norms rather than entrepreneurship education that drives young people to an entrepreneurial future, so simply introducing enterprise education into the curriculum will not be enough to stimulate a new generation of entrepreneurs. That is not to say that entrepreneurial education cannot start in schools, but caution should be applied to the expectation of outcomes. It will be about helping people understand if the entrepreneurial pathway is right for them, not how to set up and run their own businesses.

CONCLUSION

So what should an entrepreneurship education look like? It could be taught in schools or it could be a Graduate Certificate in Entrepreneurship, or it could be a non-qualification course in itself. The important thing is that there is no traditional business curriculum in the program, although students could be pointed to where they can find this if they need it. The assessments would allow the students to develop their own value proposition so they can make informed choices at the end of the program about their next career move. The program could be taken by entrepreneurs, intrapreneurs, or groups sponsored by organisations, as well as those seeking to be social entrepreneurs or wanting to campaign for a cause. The flexibility is endless and yet the program could meet all the requirements of the Australian Qualifications Framework (or any national qualification framework) at whatever level required. The program could be facilitated online or face to face, and the more people who are enrolled, the better the learning experiences as the greater the network to draw on. Whereas traditional classrooms operate better when the staff: student ratio is lower, this program works better when it is higher—it has been designed for scale. How? By recognising that the students will learn as much if not more from each other than they will from an academic, and establishing principles of sharing experiences and giving feedback as core to the learning experience. The program design would start from exploring “*what would students need to experience in order to be able to learn this*” and then “*what will they demonstrate for us to know they have had the learning*” (i.e. the assessment). From these questions, the fluid curriculum would emerge. Aspiring entrepreneurs need to learn about themselves and how they are going to manage themselves through the entrepreneurial journey—not a business curriculum that they can pick up anywhere.

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