

Northumbria Research Link

Citation: Watson, Kayleigh and McGowan, Pauric (2019) Rethinking Competition-based Entrepreneurship Education in Higher Education Institutions: Towards an Effectuation-informed Coopetition Model. *Education + Training*, 62 (1). pp. 31-46. ISSN 0040-0912

Published by: Emerald

URL: <https://doi.org/10.1108/et-11-2018-0234> <<https://doi.org/10.1108/et-11-2018-0234>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/41267/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)



**Northumbria
University**
NEWCASTLE



UniversityLibrary

Education + Training



Rethinking Competition-based Entrepreneurship Education in Higher Education Institutions: Towards an Effectuation- informed Coopetition Model

Journal:	<i>Education + Training</i>
Manuscript ID	ET-11-2018-0234.R2
Manuscript Type:	Review Paper
Keywords:	entrepreneurship education, business plan competitions, effectuation, business plan, competition-based entrepreneurship education, coopetition

Rethinking Competition-based Entrepreneurship Education in Higher Education Institutions: Towards an Effectuation-informed Coopetition Model

Purpose:
This paper takes focus with the university-based Business Plan Competition [BPC] and proposes how the theory of effectuation might inform a new model. Such a purpose is timely given the under-challenged nature of the BPC methodology.

Approach:
Extant literature pertaining to business planning and the business plan within entrepreneurship education and effectuation is reviewed; numerous conceptual issues which undermine BPC provision in its traditional form are then identified. In response to these identified issues, a series of principles which could underpin the introduction of an Effectuation-led Business Coopetition [EBC] are outlined.

Findings:
Strong emphasis on business plan production within a conventional BPC model raises questions about its capacity to release the entrepreneurial potential of the HEI student and provide them with an authentic and relevant entrepreneurial learning experience. Through using the ideas of effectuation to rethink provision, the action of business plan production can usefully be replaced with the action of business implementation. As well as facilitate a beneficial shift from competition to coopetition-based entrepreneurship education.

Originality/Value:
This paper valuably critiques the efficacy of a commonly employed yet under-challenged methodology for entrepreneurship education; the BPC. The propositions offered can guide competition provision in a more authentic, realistic and relevant way that is potentially better suited to inspiring and supporting entrepreneurial new venturing amongst students and graduates now rather than in the future. The paper thus has practical value to those designing and delivering competition-based entrepreneurship education.

Keywords: entrepreneurship education; business plan competitions; effectuation; venture creation; competition-based entrepreneurship education; business plan; coopetition

Article Classification: General Review

Introduction

Higher Education Institutions (HEIs) are now expected to stimulate nascent entrepreneurial activity amongst students of all disciplines through the provision of

entrepreneurship education interventions (Aldrich and Yang 2014; Anderson et al. 2014; EC 2008, 2006, 2004; Gibb 2012; Ertuna and Gurel 2011; Katz 2003; Young 2014). To this end, and because of the enduring preference for the business plan within such interventions, the business plan competition (BPC) has been widely employed as a methodology (Jones and Jones, 2011; Russell, Atchison and Brooks 2008; Sharikova et al. 2017; Watson, McGowan and Cunningham 2018). These competitions require participants, working individually or in teams, to develop and submit a business plan for a new venture idea which is then subject to the evaluative judgement of a panel of 'experts'. Financial and non-financial prizes are subsequently and selectively awarded to those judged to hold the most potential. BPC programmes can also typically encompass training, networking and mentoring opportunities, hence supporting new venture creation moreover.

Notwithstanding the significant investment in this agenda and regardless of the high levels of intent declared prior to graduation, actual new venture creation remains a relatively exceptional career choice for new graduates, particularly in the UK (Rideout and Gray 2013; Nabi and Holden 2008; Harding 2007). By way of illustration, only 1% of UK higher education leavers in 2016/17 had started up a new business in the first six months since graduating (HESA, 2018). This prompts concerns as to the efficacy of methodologies currently adopted within HEIs in drawing out the potential of the learner for new venture creation. Such concern is highly pertinent with regards to the BPC, provision of which has endured largely without question (Florin, Karri and Rossiter 2007; Watson, McGowan and Smith 2014). Despite first, a lack of evidence to suggest that BPC participation results in new venture creation and second, the broader debate surrounding the relevance and effectiveness of putting focus on the business plan and competition within entrepreneurship education (Bridge and Hegarty 2012, 2013;

Brentnall, Rodriguez and Culkin 2018a, 2018b; Jones and Penaluna 2013; Daxhelet and Witmeur 2011; Lange et al. 2007). Such observations are pertinent given the advent of effectuation, a theory which deems new venture creation as guided by action rather than business plan creation and adherence (Baron 2008; Sarasvathy 2008; Sarasvathy and Dew 2005; Read et al. 2017). The growing attention upon coopetition¹ (Brandenburger and Nalebuff 1996) within the broader entrepreneurship domain (Gast et al. 2015) is also salient here given its notable lack of attention within discussions around entrepreneurship education.

The limited critique of the BPC methodology renders it a prime example of a ‘taken for granted’ form of entrepreneurship education which researchers and educators are urged to take a more critical stance toward (Fayolle 2013, 692). Consideration of how alternative theoretical models such as effectuation can be applied to entrepreneurship education is timely (Nabi et al. 2016). The current paper responds to such a call within the specific context of competition-based entrepreneurship education.

The aim of this paper is to propose how the theoretical principles of effectuation can inform a new model of coopetition-based entrepreneurship education. The case for such action is developed through reviewing extant literature pertaining to business planning, business plans and competition within entrepreneurship education, as well as effectuation. Numerous conceptual issues which undermine BPC provision in its traditional form are subsequently identified. In response to these identified issues, a series of principles are outlined which could underpin and guide the introduction of an Effectuation-informed Business Coopetition [EBC] model. As an alternative to the BPC, the model proposed is argued to be more authentic, realistic and relevant and

¹ Understood as the simultaneous pursuit of cooperation and competition between ventures

moreover potentially better suited to inspiring and supporting entrepreneurial new venturing amongst students and graduates.

Entrepreneurship education, Business Planning and Business Plan Competitions

Education for entrepreneurship represents the idea that entrepreneurial behaviour can be stimulated via entrepreneurial learning through the design and delivery of education either formally or informally (Davidsson and Honig 2003; Harrison and Leitch 2005; Pittaway and Cope, 2007a; Pittaway and Cope, 2007b). Such education has traditionally been concerned with equipping learners with the knowledge needed to create new business ventures but focus has increasingly widened overtime to encompass capabilities, behaviours and attitudes necessary for effectiveness (Katz 2003; Karatas-Ozkan and Chell 2010; QAA 2018). The design and delivery of entrepreneurship education ought therefore to encompass opportunities for learning through and from exposure to experiences and activities which authentically represent the realities of new venture creation (Pittaway and Cope 2007a). A focus on business planning and business plan creation within entrepreneurship education has been pursued by entrepreneurship educators as central to providing such opportunities (Honig and Samuelsson 2012; Karlsson and Honig 2009).

Business Planning and Business Plans: The Rationale

The prevailing focus on business planning and the business plan which can be observed in contemporary entrepreneurship education provision can be deemed symptomatic of entrepreneurship traditionally being taught in terms of the acquisition of knowledge related to general business and management functions, i.e. marketing, operations, human resources and finance, and within a business school context (Katz

2003; Moberg 2011). This is despite entrepreneurship education now being viewed as distinctive from general business and management education.

Business planning entails information collection and vision creation as well as developing objectives and strategies so that these can be achieved (Karlsson and Honig, 2009). Engaging in such planning has been considered conducive to: venture development and success (Hormozi et al 2002); resource effectiveness (Delmar and Shane, 2003); decision making (Chwolka and Raith 2012); goal attainment (Dimov, 2010) as well as an important learning tool (Castrogiovanni 1996). Such advantages can be observed as underpinning sustained emphasis on business planning within entrepreneurship education.

The business plan², can be viewed a formal, tangible and measurable output of the business planning process (Chwolka and Raith 2012). Business plan creation has commonly been deemed an important antecedent to action and success when creating new ventures (Delmar and Shane 2003). Reducing uncertainty (Whalen and Holloway 2012), the plan can be used to facilitate procurement of resources and support (Kraus and Schwartz 2007; Brinkmann et al 2010; Daxhelet and Witmeur 2011). It can also serve as a learning tool to understand whether to pursue opportunities or not and guide decision making (Chwolka and Raith 2012).

Positioning business plan creation as a common activity and output of entrepreneurship education programmes is driven by the idea that this provides an authentic entrepreneurial learning experience (Honig and Samuelsson 2012; Kelmar 1992; Lourenço, Jones and Jayawarna 2013; Wilson, Kickul and Marlino 2007). Which moreover enables the development of beneficial entrepreneurial competencies that can

² Understood here as ‘a written document that describes the current state and the presupposed future of an organisation’ (Honig and Karlsson, 2004; 29),

be utilised in new venture creation (Ferrerias-Garcia, Hernandez-Lara, Serradell-Lopez, 2019; Honig and Karlsson 2004; Mitra and Manimala 2008; Tounes, Lassas-Clerc and Fayole 2014; Wilson 2008). This focus also tangibly provides the written document which might be sought by external parties such as banks or investors if support and investment for an emergent venture is to later be acquired (Bridge and O'Neill 2017; Daxhelet and Witmeur 2011). Typically following a standardised format, business plan documents are easily evaluated and judged against each other, henceforth providing a convenient option for those delivering entrepreneurship education programmes (Bridge and Hegarty 2013).

It follows that the ascribed benefits of business planning and business plan creation within entrepreneurship and entrepreneurship education has gone hand in hand with the provision of BPC initiatives.

Business Plan Competitions: The Rationale

A BPC typically involves participants, individually or in teams, working through a structured process leading to the development and submission of a formal written business plan for a new venture idea which is then subject to the evaluative judgement of a panel of experts (McGowan and Cooper 2008; Watson and McGowan, 2017; Watson, McGowan and Cunningham 2018). Although originating within a business school context (Katz, 2003), BPCs tend to now be delivered by centralised enterprise development units and recruit participants from the wider university community (Russell et al. 2008; Sekula et al. 2009; Watson, 2019). These competitions consequently serve as a means of drawing awareness to entrepreneurship as a viable career option and to promote the start-up support available within the HEI (McGowan and Cooper 2008). The large monetary prizes which are often attached to BPCs are a means of promoting new venture creation as feasible and desirable (Randall and

Brawley 2009). As too are the opportunities for ‘in-kind’ prizes, in the form of office space or professional services that might also be offered (Russell et al. 2008).

BPCs are part of a broader competition-based learning agenda which has more generally pervaded HEIs (Connell, 2013; Olssen and Peters, 2005). This agenda has been particularly popular within enterprise and entrepreneurship education policy and practice (Brentnall, Rodriguez and Culkin 2018a, 2018b). Competition has commonly been portrayed as a powerful motivational force, a means of helping to drive performance and goal attainment (Kistruck et al 2016; Worrell et al 2016). With regards to entrepreneurship education specifically, competition is proffered as helping to reward and inspire participants (Brentnall, Rodriguez and Culkin 2018a); as well as stimulate the capabilities, behaviours and attitudes needed to engender entrepreneurial intent (Arranz et al. 2017; Florin, Karri and Rossiter 2007) and effectiveness (Jones and Jones 2011; Russell, Atchison and Brooks 2008; Sekula, Bakhru and Zappe 2009).

Elements which typically tend to accompany business plan creation within a BPC programme, such as training, mentoring, feedback, networking, pitching and PR opportunities, further enhance the potential for participants to gain from the competition experience (Hegarty 2006; Russell, Atchison and Brooks 2008; Watson, McGowan and Smith 2015; Watson 2019). Providing scope for participants to learn from each other and other competition stakeholders, as well as develop their social networks (McGowan and Cooper, 2008; Roldan et al, 2005).

Business Plan Competitions: A critique

Having explored why the BPC endures as a mechanism for entrepreneurship education, we now turn our attentions toward critique of the BPC. Chiefly through

consideration of the various contentions that surround the business plan and competition.

Contentions surrounding the business plan

The utility of formal written business plan and promotion of its creation have been deemed overemphasised within entrepreneurship education (Bridge, 2013; Dexhelet and Witmeur 2011) and BPC programmes more specifically (Lange et al. 2007). Continued inclusion of the business plan within such programmes has been attributed to ritual and ease of evaluation rather than yielding the possibility of actual new venture creation (Fayolle 2013; Honig 2004; Honig and Karlsson 2004; Whalen and Holloway 2012). Regarding the value of business plan production as a learning tool, Taylor, Jones and Boles (2004) suggest that as an outcome of an entrepreneurship education programme the production of a business plan does not mean that an individual has the skills which are necessary to start a new venture.

Regarding the ascribed authenticity of BP production as an objective of entrepreneurship education, the resultant lack of real world emphasis has also been claimed as distracting from venture creation goals (Vincett and Farlow 2008). Edelman, Manolova and Brush (2008) suggest a retained emphasis on the business plan can be deemed a shortcoming in the authenticity and relevance of the activities which entrepreneurship education might involve and its legitimacy moreover. Emphasis instead would be better placed on the development of networks (Bridge 2013; Honig and Karlsson 2001) and the iterative development and refinement of the business idea (Corbett 2005); given the emergent and socially enacted nature of the entrepreneurial process (Higgins, Smith and Mizra 2013).

The presence of business plan production as an activity within entrepreneurship education reflects the causal logic which has traditionally underpinned entrepreneurship

education provision (Sharikova et al. 2017). Within the context of new venture creation, this portrays new venture creation to be a systematic, sequential and predictive process initiated by discovery of an opportunity and subsequently followed by extensive market research, forecasting and strategising which informs the development of a formal business plan that is then utilised to acquire resources necessary to achieve predetermined venture implementation goals (Read et al. 2017; Whalen and Holloway 2012).

Production of a detailed business plan prior to new venture creation has paradoxically been deemed less valuable than conventionally espoused (Lange et al. 2007; Honig and Karlsson 2004; Karlsson and Honig 2009). This having the potential to prematurely stifle action and momentum (Read et al. 2017). In reality much of the information needed for business plan production can be unknowable until some venture implementation has taken place (Watson and McGowan, 2018), as it is only through seeing what works over a period of time that risks and feasibility can be assessed with any hope of any degree of certainty (Bridge and O'Neill 2017;).

Rethinking the traditional usage of the business plan as a framework for educative provision is necessary (DeNoble and Zoller 2017). So that such provision better reflects the realities of starting a venture, realities in which a traditional business plan might not feature as prominently as commonly portrayed (Edelman, Manolova and Brush 2008). The creation of business models has gained traction as an alternative. Here emphasis is upon how value is created, delivered and captured; testing and validating business models through customer interaction and feedback (Blank 2013, DeNoble and Zoller 2017). This can still be considered a form of business planning, but is a more practical and iterative approach.

Contentions surrounding competition-based entrepreneurship education

The competitive basis of the BPC reflects a tendency to view competition as intrinsically beneficial (Kohn 1992; Ruben 1981). Referencing school-based enterprise education, Culkin and colleagues suggest it is dangerous to assume that competitions are effective learning interventions; to do so is to overlook that the theoretical basis of competition can be challenged and the unintended effects of competition that are seldom fully recognised (Brentnall, Rodriguez and Culkin, 2018b). The enduring deployment of competitions in educative practice is underpinned by taken for granted assumptions (Brentnall, Rodriguez and Culkin 2018a; Watson, McGowan and Smith 2014). First, that competition is more beneficial to stimulating entrepreneurial learning than cooperation and second, that competition and cooperation may not beneficially coexist within entrepreneurship education interventions to enhance the entrepreneurial learning experience and outcomes.

Whilst cooperation and competition are commonly presented as a dichotomy they coexist within the hybrid notion of coopetition which endorses their simultaneous promotion (Brandenburger and Nalebuff 1996; Gast et al. 2015). Although to date coopetition has received scant attention within the entrepreneurship education domain, it has been of growing interest in management, strategy and increasingly entrepreneurship (Gast et al. 2015; Mione 2009; Thomason, Simendinger and Kiernan 2013). Coopetition enables advantageous knowledge sharing, resource acquisition and innovation (Mention 2011).

Consideration of how alternative models can be applied within entrepreneurship education is timely given the contentions levelled at the business plan and competition-based learning (Nabi et al. 2016). Doing so provides a means of challenging the rituals

that prevail (Fayolle 2013). In the context of competition-based entrepreneurship education specifically, calls for more emphasis to be placed on venture implementation rather than business plan production have been made (Lange et al. 2007; Watson, McGowan and Smith 2014). Effectuation theory offers useful potential here (Sharikova et al. 2017) and also, in our view, complements the notion of coopetition-based learning as valuable new focus in entrepreneurship education.

Effectuation; Building a Case for an Effectuation-informed Business Coopetition Model [EBC]

Developed by Sarasvathy and colleagues (Dew et al. 2009; Read et al. 2009; Sarasvathy 2001, 2004, 2008; Sarasvathy and Dew 2005; Wiltbank et al. 2006), Effectuation has increasingly been embraced as a useful theoretical lens through which to view the complex process of opportunity emergence, development and implementation (Fisher 2012; Matalamäki 2017). The core principles which effectuation proposes guide new venture creation, namely the use of resources currently available, experimental activity, risking only what one can afford to lose, co-creation and continual learning; provide a good basis for informing revised thinking within entrepreneurship education (Nabi et al. 2016; Sharikova et al. 2017; Wiltbank, Sudek and Read, 2009).

A defining principle of effectuation is that new ventures are created utilising the resources or 'means' currently possessed rather than the goals which might be held. These means reside within the entrepreneurship education participant's current reality, assets, beliefs and environment. According to Sarasvathy (2008) they can be ascertained by the participant answering the questions 'who am I?', 'who do I know?' and 'what do I know?' The readily available and intangible resources which ensue constitute the beginnings of entrepreneurial endeavour, with the participant encouraged to focus on

1
2
3 'selecting between possible effects that can be created with that set of means'
4
5 (Sarasvathy 2001; 245); generating new venture opportunities from these 'mere
6
7 possibilities' (Read et al. 2017; 5). Such sentiment rejects the emphasis placed upon
8
9 relentless pursuit of the perfect entrepreneurial opportunity, deeming this unnecessary
10
11 and overemphasised (Sarasvathy 2001, 2008).
12
13

14
15 Recognising the importance of intuition and flexibility, Effectuation deems
16
17 opportunities to be proactively made through experimentation rather than discovered
18
19 (Chandler et al. 2011; Perry, Chandler and Markova 2012). Entrepreneurship education
20
21 would therefore usefully promote experimentation within provision. Rather than
22
23 expending effort on analysing opportunities and producing formal plans the
24
25 entrepreneurship education participant should be encouraged to experiment through
26
27 taking action to pursue sales from their nearest potential customer, any planning
28
29 undertaken being informal and shorter term (Read et al. 2017). As well as enabling the
30
31 expansion of means available, the learning afforded through experimentation enables
32
33 venture opportunities to be iteratively refined and subsequent actions determined
34
35 (Chandler et al. 2011). The actions taken and resources committed during
36
37 experimentation are decided on the basis of what one can afford to lose, with further
38
39 resources only committed when results are realised (Chandler et al. 2011; Fisher 2012;
40
41 Sarasvathy 2008). Pursued actions and their subsequent outcomes are a function of the
42
43 means available at any given point in time (Goel and Karri 2006; Whalen and Holloway
44
45 2012). This can be beneficial in the uncertain resource constrained environments which
46
47 participants of entrepreneurship education can find themselves and that moreover might
48
49 serve to prevent the realisation of intentions to create a new venture.
50
51
52
53
54

55
56 Recognising the unpredictable character of new venture creation, Effectuation
57
58 encourages those starting ventures to leverage the contingencies (e.g. unexpected
59
60

1
2
3 events, meetings or information) which might be faced during these endeavours
4
5 (Sarasvathy 2001). Rather than encouraging its participants to predict, avoid, overcome
6
7 or adapt to surprises as is traditionally the case, entrepreneurship education could
8
9 valuably do the same, emphasising the importance of the participant staying flexible,
10
11 expecting the unexpected and using any surprises as an opportunity or resource for the
12
13 new venture (Read et al. 2017).
14
15

16
17 Co-creation is a further defining principle of effectuation (Sarasvathy 2008);
18
19 opportunities are thus suggested to be created in collaboration and partnership with
20
21 stakeholder groups (Chandler et al 2011; Read et al. 2009). These stakeholder groups
22
23 can be anyone who might have an interest in the offering or working with the
24
25 entrepreneur but typically includes be customers, suppliers, prospective competitors or
26
27 previous collaborators (Read et al. 2009). The entrepreneurship education participant
28
29 would usefully be encouraged to identify and interact with potential stakeholders
30
31 (Fisher 2012). This stakeholder interaction can enable the establishment of partnerships
32
33 (Sarasvathy 2008) and pre-commitments to the emergent venture offering (Read et al.
34
35 2017) as well as allowing ideas to be shared, tested and feedback acquired (Fisher
36
37 2012). Additionally, it can facilitate the acquisition of resources; albeit financial, human
38
39 or social capital (Maine, Soh and Dos Santos 2015; Wiltbank, Sudek and Read 2009). It
40
41 follows moreover that the outcomes of stakeholder interaction direct future courses of
42
43 action (Sarasvathy 2008) and reduce uncertainty (Fisher 2012).
44
45
46
47
48

49 One way of facilitating a shift towards participants of entrepreneurship
50
51 education being able to 'think and act' as entrepreneurs (Read et al. 2017; p52) is by
52
53 utilising the principles of effectuation to inform innovations in provision (Wiltbank,
54
55 Sudek and Read 2009). Whilst there is some indication that such endeavour has started
56
57 to gain traction (Sharikova et al. 2017), there is still much to be done (Nabi et al. 2016).
58
59
60

Outlining an Effectuation-based Business Coopetition Model

A number of pertinent conceptual issues emerge from the review offered thus far. First, BPCs have been widely utilised as an educative mechanism to promote venture start-up with limited evidence to suggest effectiveness in this regard. Second, considering what is known about the business plan and its value for enabling appropriate authentic entrepreneurial learning which reflects the realities of new venture creation, the BPC model could be considered wanting. Third, the business-plan centric nature of the BPC and its underpinning causation logic, offers a partial account of the broader entrepreneurial process given the growing emphasis upon effectuation as an alternative theory which has attracted growing support. Finally, these issues are compounded by the contentions which surround the use of competition-based entrepreneurship education. Given that these issues might indicate the BPC could be counterproductive to promoting the entrepreneurial activity intended, it is pertinent to explore how these issues can be reconciled through more explicitly incorporating the theoretical propositions of effectuation within provision.

To that end, the paper now presents five principles which, through the medium of an Effectuation-informed Business Coopetition model [EBC hereafter], can guide competition provision in a more appropriate and timely new direction. Figure 1 provides a visual overview of the underpinning antecedents for these principles.

Insert Figure 1 about here

Principle 1: Encouraging the participant to “do” rather than “plan to do”

The EBC operates on the assumption that every prospective participant, albeit a team or individual, have ‘means’ immediately available to draw upon with respect to ‘who they are’ ‘what they know’ and ‘who they know’ (Dew et al. 2009; Read et al.

2017; Sarasvathy 2001). Assisting participants to appreciate that they have such means and that these can be leveraged during the EBC is critical. Therefore the only prerequisite for participation would be that every participant enters with a willingness to develop a venture possibility using the means they currently have available. Participants should be encouraged to see fellow participants as collaborators and co-creators of new possibilities rather than competitors. Participants might therefore get to know each other at the outset of the programme so that they can explore whether there is scope to combine personal means.

The EBC provides an outlet for critical action allowing participants to ‘test the waters’, creating possibilities utilising means available and testing the potential of these possibilities through taking action, managing risk and building personal confidence with each successful step, widening the participant’s repertoire of means for ongoing expansion simply through participation (Bridge and O’Neill 2017; Timmons and Spinelli 2009).

The action of implementation, rather than business plan production, becomes the uniting principle of the EBC (Lange et al., 2007). Implementation does not require a business plan (Bridge and Hegarty 2013; Read et al. 2017). By championing possibilities (Sarasvathy 2008), the onus is on ‘taking action’, albeit building the product, making the sale, becomes the crux of the EBC. As the coopetition context becomes an arena for the development of the venture possibility through action, concern is not upon the identification of perfect possibilities but rather those that can be worked on within the time and space available within the EBC. Space for exploration, experimentation and reflection are fundamental (Farney et al. 2016; Bridge and Hegarty 2013).

Principle 2: The programme experience remains central

The EBC retains a competitive element similar to the BPC model (McGowan and Cooper 2008) but as previously stated this is tempered with an emphasis on collaboration and co-creation between participants. Evaluation or judgement as to a participant's level of engagement could, it is envisaged, be based upon participants presenting the development of their venturing possibility through their implementation activities. Prizes might therefore be given for progress and development of the participant themselves, the potential of the venturing possibility described by successes in sales and marketing activity undertaken and/or the level of stakeholder commitment which have been elicited within the context of the EBC programme timescale.

The prospective 'experience' can incentivise competition participation, rendering it central to the EBC model. Self-selection to participate already indicates a level of motivation in the participant to pursue entrepreneurial business venturing. Engagement in the EBC experience should maintain and strengthen this. The experience therefore encompasses implementation activities which support the development of a venturing possibility, particularly marketing and selling activity (Bridge and O'Neill 2017). Such a format aims to promote the interaction of the participant and the venturing possibility with the wider environment, so that the competition experience becomes semi indicative of the context the participant might find themselves in post EBC. The participant engages with the learning process, making sense of their experiences and revising, where appropriate, their actions and level of engagement in the uncertain dynamics of the effectuated planning process (Jones and Hongqin 2017; Passararo et al. 2017; Treleaven 2012).

Principle 3: Engendering stakeholder buy-in and involvement

In maintaining but also enhancing the semi-market place context which BPCs typically encompass (Bell 2010; Russell, Atchison and Brooks 2008), an EBC would retain heavy reliance upon buy-in and commitment from a wider business community. Facilitating communication with others involved in the EBC, but also others who they know more generally (Sarasvathy 2008), can define relationships and collaborations which may be mutually beneficial in terms of bringing expertise, funding or technology to the participant's venturing possibility (McGowan and Cooper 2008). This extends to the availability of mentoring opportunities aimed at providing participants with guidance on key aspects of venture implementation.

Partaking in implementation activities as part of the competition experience provides opportunities for the participant to interact and potentially elicit commitment to their offering from potential stakeholders, partners, suppliers and customers within the EBC but also in the wider environment of the EBC. Through doing so the EBC provides opportunity for the participant to cultivate wider collaborative and mutually beneficial opportunities (Sarasvathy 2008), with already established businesses. This, it is envisaged, could incentivise the business involvement and sponsorship upon which competition programmes can typically rely.

Principle 4: Supporting transformation of participant and possibility

Every participant is viewed by the EBC as being idiosyncratic. The model thus builds in space for the participants own aspirations to be recognised and emotions to be accommodated. Consequently, the participant's experience can be used to facilitate the attainment of these needs, rather than dictating or potentially inhibiting those requirements. Moreover, the participant is facilitated to tailor the context of the EBC

and conversely their experience of the EBC to their learning needs as participants in their own journey of business creation (Read et al. 2017).

The EBC is accessible to those who may like the idea of entrepreneurial new venturing but currently lack a nascent idea. As all one needs to enter is willingness within the coopetition context to create and explore venture possibilities on the basis of the set of means they currently have available. This champions the notion of transformative possibilities (Goel and Karri 2006; Sarasvathy 2004). The participant need not consider they are ‘tied’ to any possibility which might be created. Instead the venturing possibility is promoted as a ‘work in progress’, which can and should be explored and developed in interaction with the coopetition setting, other participants and wider environment (Read et al. 2017). This provides a unique, cumulative learning opportunity for the participant, supporting the development of essential entrepreneurial competencies (Johannisson 2016). It also provides a means for participants and other stakeholders to contribute to the evolution of the participant’s venturing possibility as critical collaborators (Sarasvathy 2008).

Principle 5: Promoting fluidity between participation and post-participation endeavours

Promoting the idea amongst its participants that “anything is possible within the context of now”, the EBC seeks to promote less of a gulf between the experiences of the programme and post programme endeavours. A focus upon what the participant is going to do during the EBC, as it happens, reinforces the idea that each participant can pursue their venturing possibility post-EBC using the resources currently held. As misapprehension and uncertainty about the nature of entrepreneurial endeavour often influences the decision to abandon or defer entrepreneurial action (Read et al. 2017), the EBC aims to facilitate the participant’s next-step beyond the programme by engaging

1
2
3 them in entrepreneurial action now. The EBC endeavours to raise awareness amongst
4 participants that they are already ‘doing something’ with their venturing possibility,
5
6 albeit on a crude level, within the very context of the EBC. The idea is set with
7
8 participants that continued pursuit of their venturing possibility, post-EBC, is doable
9
10 and does not represent so big a decision and is a relatively less daunting, natural
11
12 progression or small next step.
13
14
15

16
17 Building upon the momentum developed, the EBC seeks to leave the participant
18
19 with an ‘it’s difficult to walk away from this venture’ sentiment. The intent being that
20
21 participants will be more incentivised and perhaps find it harder to abandon continued
22
23 implementation of their venturing possibility post-EBC than if no implementation had
24
25 taken place. Importantly, the participant perceives that continued pursuit of their
26
27 venturing possibility does not necessitate an all-or-nothing choice between continued
28
29 pursuit of that venturing possibility or employment. It may even be feasible and
30
31 practical that both could be managed together, at least for a time.
32
33
34

35
36 The EBC offered promotes the idea that the experience of participation
37
38 transcends the timeframe of the actual competition entrance, remaining with the
39
40 participant as something which can be drawn upon to cultivate action in going forward.
41
42 Henceforth the EBC experience becomes a ‘means’ which the participant can draw
43
44 upon (Jones and Hongqin 2017; Sarasvathy 2008) – part of who they are [through
45
46 heightening awareness of their traits, tastes and competencies], what they know
47
48 [through providing learning opportunities, expertise and experience] and who they
49
50 know [through giving rise to new social and professional networks]. These applicative
51
52 benefits transcend new venture creation, so thus even if the venturing possibility is
53
54 discarded after the conclusion of the EBC, participants can utilise aspects of the
55
56 experience which are of benefit to their own needs and requirements going forward.
57
58
59
60

We turn now to draw conclusions.

Conclusions

This paper has taken focus with the university-based BPC and suggests how effectuation might be transferred and applied within this context. Such focus is timely given the under challenged nature of the BPC model. Particularly in light of the reservations levelled at business plan production and competition as a learning tool and activity within education and new venture creation respectively, coupled with growing emphasis on coopetition and effectuation. Henceforth it is suggested effectuation serves as a vehicle through which a coopetition-based entrepreneurship education model might be achieved.

In this work we make several contributions. First, we contend that the strong emphasis traditionally placed on the production of a formal written business plan within the BPC model is counterproductive to an espoused rationale of supporting new venture creation and an individual's entrepreneurial learning. Second, we offer a series of principles which would enable effectuation to be transferred and applied within a entrepreneurship education context, through the medium of an EBC; in which the action of business plan production is replaced with the action of business implementation and competition is replaced with coopetition.

These contributions have theoretical and practical implications for BPC provision generally but particularly within a university entrepreneurship education context. The emergence of effectuation within the field of entrepreneurship is positioned as offering untold value in heralding a change of emphasis within competition provision and affording the competition agenda a valuable new direction; namely towards coopetition. The EBC serves as a means of integrating effectuation without compromising the elements which afford the BPC its popular status. The EBC

represents an attempt towards the entrepreneurship education agenda reflecting and embracing a combination of causation and effectuation logic. Henceforth the model proposed transcends entrepreneurship as a planned rational and linear process and entrepreneurship as a non-predictive, anti-rational and decision-led process.

Our notion of an EBC does not negate the need for business planning as a dynamic activity but of the business plan as a static outcome of such activity. Thus, demanding distinction between the business plan and business planning, the latter being accommodated through the mobilisation of effectuation within entrepreneurship education. Reducing emphasis on the business plan, the EBC exercises a preference for action now. Promoting exploration, development and implementation of possibilities using the elements provided by the EBC experience generates momentum considered conducive to entrepreneurial activity following participation. This moreover addresses concern that participants may defer start-up activity post participation, hence potentially better suited to achieving the overarching goal of cultivating entrepreneurial activity and learning, which often guides competition provision.

Managing student learning in such an effectuated context has implications too for entrepreneurship educators. It raises pedagogical tensions between managing and evaluating learning at the interface between theory and practice. It also requires a greater level of entrepreneurial engagement and greater personal and professional investment by entrepreneurship educators in order to ensure that student learning is valuable and of sustainable worth. As well as putting onus on participants as collaborators and co-creators rather than just competitors. They will have to become 'entrepreneurial' entrepreneurship educators if they hope to be effective in this enterprise.

1
2
3 Whilst the conceptual nature of this paper was appropriate given the broader
4
5 research aim, this should be recognised as a key limitation. Such a limitation sets the
6
7 scene for valuable further research into the competition-based entrepreneurship
8
9 education phenomenon, which might empirically examine the value of the business plan
10
11 within competition provision from the perspective of the participant. Additionally,
12
13 further research might beneficially look at mobilising and testing the EBC model in
14
15 practice. This could afford practical advice about how to mobilise the change toward
16
17 helping participants experience entrepreneurship in both planned and non-predictive
18
19 ways. We also suggest that there is a need to take a critical examination of the
20
21 competition-based learning agenda which prevails in entrepreneurship education. The
22
23 notion of coopetition within entrepreneurship education is an area which is ripe for
24
25 further exploration and could offer untold opportunities for innovative educative
26
27 practices going forward.
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

References

- Aldrich, H.E. and Yang, T. (2014), "How to entrepreneurs know what to do? Learning and Organizing in new ventures", *Journal of Evolutionary Economics*, Vol. 24, No 1, pp. 59-82.
- Anderson, S. N., Culkin, N., Penaluna, A., and Smith, K. (2014), "An Education System Fit for an Entrepreneur, 5th Report by the All-party Parliamentary Group for Micro-businesses" London: The Stationary Office. Available at: <http://www.enterprise.ac.uk/index.php/news/item/402-entrepreneurs-and-educators-agree-new-report-calls-for-better-integration-of-entrepreneur-skills-at-all-levels-of-education>.
- Arranz, N., Ubierbna, F., Arroyabe, M.F., Perez, C., and de Arroyabe. J.C.F (2017), "The Effect of Curricular and Extracurricular Activities on University Students' Entrepreneurial Intention and Competences", *Studies in Higher Education*, Vol. 42 No. 11, pp.1979-2008.
- Baron, R. A. (2008), "Effectual Versus Predictive Logics in Entrepreneurial Decision Making: Differences between Experts and Novices Does Experience in Starting New Ventures Change the Way Entrepreneurs Think? Perhaps, But for Now, "Caution" is Essential", *Journal of Business Venturing*, Vol. 24 No 4, pp.310–315.
- Bell, J. (2010), "Student Business Plan Competitions: Who Really Does Have Access", Paper presented at the 34th Annual Conference of the Small Business Institute, February 18-20, Albuquerque, New Mexico.
- Blank, S. (2013), "Why the Lean Start-Up Changes Everything", *Harvard Business Review*, Vol.91, No.5, pp. 64-72.
- Brandenburger, A.M. and Nalebuff, B.J. (1996), *Co-opetition*, Doubleday: New York.
- Brentnall, C., Rodriguez, I.D., and Culkin, N. (2018a), "The Contribution of Realist Evaluation to Critical Analysis of the Effectiveness of Entrepreneurship Education Competitions", *Industry and Higher Education*, Vol. 32, No. 6, pp.405-417.
- Brentnall, C., Rodriguez, I.D., and Culkin, N. (2018b), "Enterprise Education Competitions: A Theoretically Flawed Intervention", in Higgins, D., Jones, P, and McGowan, P. *Contemporary Issues in Entrepreneurship Research*, Emerald Publishing Limited, pp. 25-48.

- 1
2
3 Bridge, S. (2013), "Reflections on the omission of social capital from enterprise
4 education and business start training." *Education + Training*, Vol. 55 No. 8/9,
5 pp.899-910.
6
7
8 Bridge, S. and Hegarty, C. (2013), *Beyond the Business Plan: 10 Principles for New*
9 *Venture Explorers*. Palgrave Macmillan: Basingstoke.
10
11 Bridge, S., and Hegarty, C. (2012), "An Alternative to Business Plan-based Advice for
12 Start-ups?" *Industry and Higher Education*, Vol. 26 No.6, pp.443-452.
13
14 Bridge, S. and O' Neill, K. (2017), *Understanding Enterprise, Entrepreneurship and*
15 *Small Business*. Palgrave Macmillan: Basingstoke.
16
17
18 Chandler, G. N., DeTienne, D. R., McKelvie, A. and Mumford. T. V. (2011),
19 "Causation and effectuation processes: A validation study." *Journal of Business*
20 *Venturing*, Vol. 26 No. 3, pp. 375- 390.
21
22
23 Connell, R. (2013), "The Neoliberal Cascade and Education: An Essay on the Market
24 Agenda and its Consequences", *Critical Studies in Education*, Vol.54. No.2,
25 pp.99-112.
26
27
28 Corbett, A.C. (2005), "Experiential learning within the process of opportunity
29 identification", *Entrepreneurship Theory and Practice*, Vol.29, No.4, pp.473-
30 498.
31
32
33 Davidsson, P. and Honig. B. (2003), "The role of social and human capital among
34 nascent entrepreneurs", *Journal of Business Venturing*, Vol. 18, No. 3, pp.301–
35 331.
36
37
38 Daxhelet, O., and Witmeur, O. (2011), "What Financial Backers Expect from Business
39 Plans: Effectual versus Causal Logic." Universite Libre de Bruxelles. Working
40 Paper CEB11-029.Available at:
41 <https://dipot.ulb.ac.be/dspace/bitstream/2013/92208/1/wp11029.pdf>
42
43
44 DeNoble, A.F. and Zoller, T. D. (2017), "Is the Business Plan Really Dead and Should
45 it Be?: A Case for the Lean Start-Up Approach", in Kuratko, D.F. and
46 Hoskinson, S. *The Great Debates in Entrepreneurship*, Emerald, Bingley,
47 pp.21-34.
48
49
50 Dew, N., Read, S., Sarasvathy,S.D and Wiltbank., R. (2009), "Effectual Versus
51 Predictive Logic in Entrepreneurial Decision-Making: Differences between
52 Experts and Novices", *Journal of Business Venturing* Vol. 24, No. 4., pp.287-
53 309.
54
55
56
57
58
59
60

- EC (European Commission). (2008), *Entrepreneurship in Higher Education, Especially in Non-Business Studies*. Available at:
http://ec.europa.eu/enterprise/newsroom/cf/_getdocument.cfm?doc_id=3581
- EC (European Commission). (2006), *Fostering Entrepreneurial Mindsets through Education and Learning. Survey of Entrepreneurship Education in Higher Education in Europe*. EC: Brussels.
- EC (European Commission). (2004), *Helping to create an entrepreneurial culture: A guide on good practices in promoting entrepreneurial attitudes and skills through education*. EC: Brussels.
- Edelman, L. F., Manolova, T. S. and Brush, C. G. (2008), "Entrepreneurship Education: Correspondence between Practices of Nascent Entrepreneurs and Textbook Prescriptions for Success", *Academy of Management Learning & Education*, Vol. 7, No. 1, pp.56-70.
- Ertuna, Z. L. and Gurel, E. (2011), "The modernising role of higher education on entrepreneurship education", *Education + Training*, Vol.53, No.5, pp. 387-402.
- Fayolle, A. (2013), "Personal Views on the Future of Entrepreneurship Education", *Entrepreneurship & Regional Development*, Vol.25 No.7/8, pp.692-701.
- Ferreras-Garcia, R. Hernandez-Lara, A.B. Serradell-Lopez, E. (2019), "Entrepreneurial Competences in a Higher Education Business Plan Course", *Education + Training*, DOI 10.1108/ET-04-2018-0090.
- Fisher, G. (2012), "Effectuation, Causation, and Bricolage: A behavioral Comparison of Emerging Theories in Entrepreneurship Research" *Entrepreneurship Theory and Practice*, Vol. 36, No.5, pp.1019-1051.
- Florin, J., Karri, R. and Rossiter, N. (2007), "Fostering Entrepreneurial Drive in Business Education: An Attitudinal Approach", *Journal of Management Education*, Vol. 31, No.1, pp.17-42.
- Gast, J., Filser, M., Gundolf, K. and Kraus, S. (2015), "Coopetition Research: Towards a Better Understanding of Past Trends and Future Directions", *International Journal of Entrepreneurship and Small Business*, Vol. 24. No.4, pp.492-521.
- Gailly, B. (2006), "Can You Teach Entrepreneurs to Write Their Business Plan? An Empirical Evaluation of Business Plan Competitions", in Fayolle, A. and Kandt, H. *International Entrepreneurship Education: Issues and Newness*, Edward Elgar, Cheltenham, pp.133-155.

- Gibb, A.A. (2012), "Exploring the Synergistic Potential in Entrepreneurial University Development: Towards the Building of a Strategic Framework", *Annals of Innovation and Entrepreneurship*, Vol. 3, No.1, pp.1-21.
- Goel, S. and Karri, R. (2006), "Entrepreneurs, Effectual Logic, and Over-Trust." *Entrepreneurship Theory and Practice*, Vol. 30, No. 4, pp.477–493.
- Harding, R. (2007). *Graduate Entrepreneurship in the UK: Summary Report from GEM UK Data*. NCGE: Birmingham.
- Harrison, R. T. and Leitch, C. M. (2005), "Entrepreneurial learning: researching the interface between learning and the entrepreneurial context." *Entrepreneurship Theory and Practice*, Vol. 29, No.4, pp.351-371.
- Hegarty, C. (2006), *Business Plan Awards: Their Value in Northern Ireland*. National Council for Graduate Entrepreneurship. Working Paper 053/2006. NCGE: Birmingham.
- HESA (Higher Education Statistics Agency). (2018), "Higher Education Leavers Statistics: UK, 2016/17 – Leaver activities and characteristics", available at: <https://www.hesa.ac.uk/news/28-06-2018/sfr250-higher-education-leaver-statistics-activities> (accessed 12 November 2018).
- Higgins, D., Smith, K. and Mizra, M. (2013), "Entrepreneurial Education: Reflexive Approaches to Entrepreneurial Learning in Practice", *The Journal of Entrepreneurship*, Vol.22, No.2, pp.135-160.
- Honig, B. (2004), "Entrepreneurship Education: Toward a Model of Contingency-Based Business Planning." *Academy of Management Learning and Education*, Vol.3, No.3, pp. 258 – 273.
- Honig, B. and Karlsson, T. (2001), "Business plans and the nascent firm: a study of instrumental and Institutional theories", *Frontiers of Entrepreneurship Research*, 13–23.
- Honig, B., and Karlsson, T. (2004), "Institutional Forces and the Written Business Plan", *Journal of Management*, Vol. 30, No.1, pp.29 – 48.
- Honig, B. and Samuelsson, M. (2012). "Planning and the Entrepreneur: A Longitudinal Examination of Nascent Entrepreneurs in Sweden", *Journal of Small Business Management*, Vol.59, No.3, pp.365-388.
- Johannisson, B. (2016), "Limits to and Prospects of Entrepreneurship Education in the Academic Context", *Entrepreneurship & Regional Development* Vol.28, No.5/6, pp.403-423.

- Jones, A. and Jones, P. (2011), "Making an impact" A Profile of a Business Planning Competition in a University", *Education + Training*, Vol.53, No.8/9, pp.704-721.
- Jones, C. and Penaluna. A. (2013), "Moving Beyond the Business Plan in Enterprise Education", *Education + Training*, Vol.55, No.8/9, pp.804-814.
- Jones, O., and Hongqini. L. (2017), "Effectual entrepreneuring: sensemaking in a family-based start-up", *Entrepreneurship & Regional Development*, Vol. 29, No.5/6, pp.467-499.
- Karatas-Ozkan, M. and Chell. E. (2010), *Nascent Entrepreneurship and Learning*, Edward Elgar: Cheltenham.
- Karlsson, T. and Honig, B. (2009), "Judging a Business by its Cover: An Institutional Perspective on New Ventures and the Business Plan", *Journal of Business Venturing*, Vol.24, No.1, pp.27-45.
- Katz, J.A. (2003), "The Chronology and Intellectual Trajectory of American Entrepreneurship Education 1876-1999", *Journal of Business Venturing*, Vol.18, No. 2, pp.283-300.
- Kelmar, J. H. (1992), "Business Plans for Teaching Entrepreneurial Behaviour", *Education + Training*, Vol.34, No. 1, pp.30-32.
- Kistruck, G.M., Lount, R.B., Smith, B.R., Bergman, B.J. and Moss, T.W. (2016), 'Cooperation vs. competition: Alternative Goal Structures for Motivating Groups in a Resource Scarce Environment', *Academy of Management Journal*, Vol. 59, No.4, pp.1174-1198.
- Kohn, A. (1992), *No Contest: The case against competition*. New York: Houghton Mifflin.
- Lange, J. E., Mollov, A., Pearlmutter, M., Singh, S., and Bygrave.W. D. (2007), "Pre-start-up Formal Business Plans and Post-start-up Performance: A study of 116 new ventures", *Venture Capital*, Vol. 9, No. 4, pp.237- 256.
- Lourenço, F., Jones, O. and Jayawarna, D. (2013), "Promoting Sustainable Development: The Role of Entrepreneurship Education", *International Small Business Journal*, Vol. 31, No. 8, pp. 841-863.
- Maine, E., Soh, P., and Dos Santos. N. (2015). "The role of entrepreneurial decision-making in opportunity creation and recognition", *Technovation*, Vol. 39, No. 1, pp. 53-72.

- 1
2
3 Matalamäki, M. J. (2017), "Effectuation, an emerging theory of entrepreneurship –
4 towards a mature stage of the development", *Journal of Small Business and*
5 *Enterprise Development*, Vol. 24, No. 4, pp.928-949.
6
7
8 McGowan, P. and Cooper. S. (2008), "Promoting Technology-based Enterprise in
9 Higher Education: The Role of Business Plan Competitions", *Industry and*
10 *Higher Education*, Vol.22, No.1, pp.29-36.
11
12
13 Mention, A-L. (2011), "Co-operation and co-opetition as open innovation practices in
14 the service sector: Which influence on innovation novelty?", *Technovation*, Vol.
15 31, No. 1, pp.44-53.
16
17
18 Mione, A. (2009), "When entrepreneurship requires coopetition: the need for standards
19 in the creation of a market", *International Journal of Entrepreneurship and Small*
20 *Business*, Vol. 8, No. 1, pp. 92-109.
21
22
23 Mitra, J., and Manimala, M. J. (2008), "Higher Education's Role in Entrepreneurship
24 and Economic Development", in Potter, J. *Entrepreneurship and higher*
25 *education*, OECD, Paris, pp.45-64.
26
27
28 Nabi, G. and Holden, R. (2008), "Graduate entrepreneurship: intentions, education and
29 training", *Education + Training*, Vol.50, No.7, pp.545-551.
30
31
32 Nabi, G., Walmsley, A., Linan, F., Akhtar, I., and Neame, C. (2016), "Does
33 Entrepreneurship Education in the First Year of Higher Education Develop
34 Entrepreneurial Intentions? The Role of Learning and Inspiration", *Studies in*
35 *Higher Education*, Vol. 43, No. 3, pp.452-467.
36
37
38 Olssen, M. and Peters, M.A. (2005), "Neoliberalism, Higher Education and the
39 Knowledge Economy: From the Free Market to Knowledge Capitalism",
40 *Journal of Education Policy*, Vol.20, No.3, pp.313-345.
41
42
43 Passaro, R., Quinto, I., and Thomas, A. (2017), "Start-up Competitions as learning
44 environment to foster the entrepreneurial process", *International Journal of*
45 *Entrepreneurial Behavior and Research*, Vol. 23, No. 3, pp. 426-445.
46
47
48 Perry, J. T., Chandler, G. N., and Markova, G. (2011), "Entrepreneurial Effectuation: A
49 Review and Suggestions for Future Research", *Entrepreneurship Theory and*
50 *Practice*, Vol. 36, No. 4, pp.837-861.
51
52
53 Pittaway, L., and Cope. J. (2007a), "Entrepreneurship education - A Systematic Review
54 of the Evidence", *International Small Business Journal*, Vol. 25, No. 5, pp. 477-
55 506.
56
57
58
59
60

- Pittaway, L. and Cope, J. (2007b), "Simulating entrepreneurial learning: Integrating experiential and collaborative approaches to learning", *Management Learning*, Vol. 38, No. 2. pp. 211–233.
- QAA (Quality Assurance Agency for Higher Education) (2018), *Enterprise and entrepreneurship education: guidance for UK higher education providers*. QAA: Gloucester.
- Rideout, E.C. and Gray, D. O. (2013), "Does Entrepreneurship Education Really Work? A Review and Methodological Critique of the Empirical Literature on the Effects of University-Based Entrepreneurship Education", *Journal of Small Business Management*, Vol. 51, No. 3, pp.329–351.
- Read, S., Dew, N., Sarasvathy, S. D. and Wiltbank, R. (2009), "Marketing under Uncertainty: The Logic of an Effectual Approach", *Journal of Marketing*, Vol. 73, No. 3, pp.1-18.
- Read, S., Sarasvathy, S.D, Dew, N, and Wiltbank, R. (2017), *Effectual Entrepreneurship*, Routledge: Oxford.
- Roldan, M., A. Osland, M.V. Cannice, M. Solt, and B.V. Dean. 2005. "Business Plan Competitions: Vehicles for Learning Entrepreneurship", in Wankel, C. and Defillippi, R. *Educating Managers through Real World Projects*, Information Age: Greenwich, pp. 309-333.
- Ruben. H. L. (1981). *Competing*. New York: Pinnacle Books.
- Russell, R., Atchison, M., and Brooks, R. (2008), "Business Planning Competitions in Tertiary Institutions: Encouraging Entrepreneurship Education", *Journal of Higher Education Policy and Management*, Vol. 30, No. 2, pp.123-138.
- Sarasvathy, S. D. (2001), "Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency", *Academy of Management Review*, Vol. 26, No. 2, pp.249–263.
- Sarasvathy, S. D. (2004), "The Questions we ask and the Questions we Care About", *Journal of Business Venturing*, Vol.19, No.5, pp.707-720.
- Sarasvathy, S. D. (2008). *Effectuation: Elements of Entrepreneurial Expertise*. Edward Elgar: Northampton.
- Sarasvathy, S. D. and Dew. N. (2005), "New Market Creation as Transformation." *Journal of Evolutionary Economics*, Vol.15, No.5, pp.533-565.
- Sekula, R., Bakhru, S. and Zappe, S. (2009). "Playing to Win", *Nature Biotechnology*, Vol. 27, No. 9, pp. 793-796.

- Shirokova, G., Osiyevskyy, O., Morris, M.H., and Bogatyreva, K. (2017), "Expertise, University Infrastructure and Approaches to New Venture Creation: Assessing Students who Start Businesses", *Entrepreneurship & Regional Development*, Vol. 29, No. 9/10, pp. 912-944.
- Taylor, D.W., Jones, O., and Boles, K. (2004), "Building social capital through action learning: an insight into the entrepreneur", *Education + Training*, Vol. 46, No. 5, pp.226 – 235.
- Timmons, J. and Spinelli, S. (2009), *New Venture Creation: Entrepreneurship for the 21st Century*, New York: McGraw-Hill International.
- Tounes, A., Lassas-Clerc, N. and Fayolle, A. (2014), "Perceived entrepreneurial competences test by business plan pedagogies", *International Journal of Entrepreneurship and Small Business*, Vol. 21, No. 4, pp.541-557.
- Treleaven, L. (2012), "A Dissemination Methodology for Learning and Teaching Developments through Engaging and Embedding", *Studies in Higher Education*, Vol. 37, No. 6, pp.747-767.
- Vincett, P.S. and Farlow, S. (2008), "Start-a-Business": An experiment in education through entrepreneurship", *Journal of Small Business and Enterprise Development*, Vol. 15, No. 2, pp.274-288.
- Whalen, P. S. and Holloway, S.S. (2012), "Effectual Marketing Planning for New Ventures", *AMS Review*, Vol. 2, No. 1, pp. 34-43.
- Watson, K. (2019), "Stimulating Entrepreneurial Behaviour Thorough Start-Up Competitions: Current Features of Provision in UK Higher Education Institutions" in McAdam, M. and Cunningham, J.A. *Entrepreneurial Behaviour Individual, Contextual and Microfoundational Perspectives*, Palgrave Macmillan: New York, pp.121-144.
- Watson, K. and McGowan, P. (2018), "Emergent perspectives toward the business plan among nascent entrepreneur start-up competition participants", *Journal of Small Business and Enterprise Development*, <https://doi.org/10.1108/JSBED-02-2018-0038>
- Watson, K. and McGowan, P. (2017), "Technology Nascent Entrepreneur Experiences of Start-up Competition Participation", in Cunningham, J. and O'Connor, C. *Nascent Technology Based Entrepreneurship*, Palgrave Macmillan: New York, pp.279-308.

- Watson, K., McGowan, P., and Cunningham, J.C. (2018), “An Exploration of the Business Plan Competition as a Methodology for Effective Nascent Entrepreneurial Learning”, *International Journal of Entrepreneurial Behavior & Research*, Vol. 24, No.1, pp. 121-146.
- Watson, K., McGowan, P. and Smith, P. (2014), “Extracurricular business planning competitions: Challenging the assumptions”, *Industry and Higher Education* Vol. 28, No. 6, pp. 411-417.
- Watson, K., McGowan, P. and Smith, P. (2015), “Leveraging Effectual Means through Business Plan Competition Participation”, *Industry and Higher Education*, Vol. 29, No.6, pp.481-492.
- Worrell, F.C., Knotek, S.E., Plucker, J.A., Portenga, S., Simmonton, D.K., Olszewski-Kubilius, P., Schultz, S.R., and Subotnik, R.F. (2016), “Competition’s Role in Developing Psychological Strength and Outstanding Performance”, *Review of General Psychology*, Vol.20, No.3, pp. 259-271.
- Wilson, F., Kickul, J. and Marlino, D. (2007), “Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education”, *Entrepreneurship Theory and Practice*, Vol. 31, No.3, pp. 387–406.
- Wilson, K. (2008), “Entrepreneurship Education in Europe” in Potter, J. *Entrepreneurship and higher education*, OECD: Paris, pp.1-20.
- Wiltbank, R., Dew, N., Read, S., and Sarasvathy, S. D. (2006), “What to do next? The case for non-predictive strategy”, *Strategic Management Journal*, Vol. 27, No. 10, pp.981-998.
- Wiltbank, R., Sudek, R., and Read, S. (2009), “The role of prediction in new venture investing”, *Frontiers of Entrepreneurship Research*, Vol. 29, No. 2, Available at: <http://digitalknowledge.babson.edu/fer/vol29/iss2/3>.
- Young, D. 2014. *Enterprise for All – The Relevance of Enterprise in Education*, BIS, London.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Education + Training

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

