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# Reconceptualizing the role of the future entrepreneurship educator: an exploration of the content challenge

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## ABSTRACT

This paper critically explores a key challenge facing future entrepreneurship educators, that of *content*, i.e., deciding what to teach. Understanding the factors that influence the content decision could enhance the quality and effectiveness of future entrepreneurship education programmes. The paper argues that as a result of entrepreneurship education's increased popularity, its expanding scholarship base, its growth in non-business disciplines, and increased attention from policy makers and employers, entrepreneurship educators are in danger of trying to do too much to please too many. The paper asks: What are the categories of influence that impact on the content decision? And, how should future entrepreneurship educators deal with the content challenge? The paper contributes to entrepreneurship education theory and practice by enhancing understanding of the myriad elements entrepreneurship education comprises, highlighting the dangers of trying to do too much, and theorizing towards a reconceptualization of the role of the future entrepreneurship educator as a 'unique aggregator of content.'



## KEYWORDS

Entrepreneurship education; future entrepreneurship educator; content challenge; unique aggregator of content; reconceptualization of role

## 1. Introduction

Entrepreneurship education (EE) is in vogue, with scholars witnessing notable and sustained growth in the number of dedicated chairs, faculty, programmes, conferences and research scholarship in recent years (Neck and Greene 2011; Fayolle 2013; Johannisson 2016). Interest from policy makers and employers has also grown (Sewell and Dacre Pool 2010; Henry 2013; Jones 2016), alongside a drive to embed EE into non-business disciplines (Hannon 2006; Jackson and Hauser 2016). As Winkel (2013, 313) reminds us, the 'glorious waves' of entrepreneurship are all around us; these waves are growing and represent a global phenomenon. However, EE's increased popularity means that entrepreneurship educators face a complex challenge in their classrooms, that of *content*, i.e. deciding what to teach (Volery et al. 2013). This paper focuses on this challenge from the perspective of the future entrepreneurship educator.

While researchers have explored a wide range of EE topics (see Fayolle and Liñán 2014; Nabi et al. 2017 for overviews) with regard to contemporary entrepreneurship educators, little by way of concerted academic attention has been paid to the challenges facing future entrepreneurship educators as they endeavour to sustain and further develop the academic field they have spent decades crafting. (As an exception, see Fayolle 2013). This is a significant gap in scholarship that needs to be addressed because understanding future EE challenges – such as that of content – could help enhance the quality and effectiveness of future EE programmes. Gaining a more in-depth understanding of EE content, the possible different areas of focus that can be adopted in EE

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programmes, and the various categories of influence that impact the EE content decision could help future entrepreneurship educators manage the content challenge more effectively. Such understanding could also enable the entrepreneurship educator to account for different student backgrounds, interests, motivations and learning styles, ensuring that the human factor in EE is privileged. Finally, bringing all of this understanding together could allow for a more effective reconceptualization of the role of the future entrepreneurship educator as a 'unique aggregator of content.'

To help address the above gap in scholarship, this paper asks: What are the categories of influence that impact on the content decision? And, how should future entrepreneurship educators deal with the content challenge? The paper contributes to EE theory and practice in three ways. Firstly, it enhances understanding of the myriad elements EE comprises. In this regard, it critically explores the range and volume of possible areas of EE focus, highlighting the difficulties associated with deciding what and how much to teach from an ever expanding EE content spectrum. Secondly, by focusing on the specific challenge of content, it highlights the dangers of trying to 'do too much', as well as the need for realism in the design of entrepreneurship curricula. Here, the various communities of EE interest and their respective agendas are discussed, illustrating the many different categories of influence impacting the EE content decision as well as the dangers of trying to 'please too many.' Thirdly, the paper contributes to scholarship by building new theory that helps reconceptualize the role of the future entrepreneurship educator. A novel reconceptualization of the role of the future entrepreneurship educator is presented – the 'unique aggregator of content' – allowing the educator to take control of content and determine what is best suited to his/her particular student cohort.

The remainder of this paper is structured as follows: the next section reviews the background literature on EE, identifying some key trends that have impacted the content challenge. This is followed by an in-depth critique of the possible areas of EE programme focus. The subsequent section discusses how the content challenge might be dealt with in the future, and how the role of the future entrepreneurship educator could be reconceptualized in order to deal with this. Conclusions are drawn, and avenues worthy of future entrepreneurship education and research attention are identified.

## **2. Key trends impacting the EE content challenge**

Volery et al. (2013) suggest that one of the biggest challenges for contemporary entrepreneurship educators is reflecting on what (and how) they teach. Such reflection is further complicated by the fact that EE has several characteristics that differentiate it from other academic disciplines (Duval-Couteil 2013). For example, it is perceived as a relatively young discipline with a body of knowledge that is ill-defined (Kuratko 2005; Volery et al. 2013); it is fragmented, lacking in theory (Fayolle 2013) and strives for increased legitimacy (Neck and Greene 2011). In addition, there have been a number of key trends that also impact the EE content decision. These are discussed below.

### **2.1. Growth of EE in academia**

While EE activity has grown across all educational levels, it has been especially popular within the higher education sector (Kyrö 2005; Volery et al. 2013; Johannisson 2016). As Johannisson suggests (2016), regardless of their particular organizational structure or practice, it has become popular for universities to present themselves as entrepreneurial organizations (p.420). Indeed, it could be posited that entrepreneurial labels are often self-assigned by higher education institutions (HEIs) without any concrete evidence to demonstrate that they are actually entrepreneurial. By way of proxy, the mere provision of entrepreneurship programmes – and the quantity (rather than quality) of these – has, to some extent, become the informal measure of a HEI's entrepreneurialness; accordingly, there is a growing trend for (HEIs) to offer more and more entrepreneurship programmes (Fayolle 2013; Kauffman Foundation 2015).

Alongside the increased popularity of EE programmes, the body of related academic scholarship has also grown significantly. As Henry and McGowan (2016) identified, academic literatures have been expanding steadily over the years, exploring themes such as programme categorization (Garavan and O’Cinneide 1994), aims and objectives (Hytti and O’Gorman 2004), approaches to delivery (Carrier 2007; Hindle 2007; Taatila 2010), attitudes and perceptions towards EE (Shinnar, Pruett, and Toney 2009), programme content and frameworks (HETAC 2012; QAA 2012), and evaluation and impact (Henry, Hill, and Leitch 2003; Martin, McNally, and Kay 2013; Henry 2015). Additional and emerging themes attracting scholarly attention include: experiential learning and assessment approaches (Moylan, Gallagher, and Heagney 2016); EE for minority/disadvantaged groups (Cooney 2009); employable skills (Jones 2016); the use of simulation and serious games (Greene 2011; Short 2016); the influence of gender in EE (Jones 2014); teaching entrepreneurship to social entrepreneurs (Sherman 2013), and methods for researching EE (Pittaway and Cope 2007). Furthermore, the number of academic journals publishing EE-related research has also widened, generating further interest in some of the niche areas mentioned above. (See, for example, the ABS journal listing available at: <https://charteredabs.org/academic-journal-guide-2015/>).

## **2.2. Interest from policy makers and employers**

In recent years, EE has attracted increased attention from policy makers and employers. This is evident within the EE scholarship base, discussed above, with many regional, national and international conferences dedicated to EE now including policy- and employer-focused streams in addition to core academic research tracks. In addition, several EE policy frameworks have been developed at the European level (EU 2008, 2013, 2016, 2016a) to promote entrepreneurship, and influenced by these, most national education authorities have developed their own EE strategies and guidelines (see, for example, QAA 2012; BIS 2015).

Recognizing the importance of EE in preparing graduates for the workplace, employers have been taking more of an interest in EE programme design. As a result, the task of developing students’ ‘employable skills’ has recently been added to the objectives of most entrepreneurship programmes (Sewell and Dacre Pool 2010; Jones 2016). Employable skills are considered as: modern workplace skills such as team working, business awareness and communication skills; a range of competencies within the categories of people skills (i.e. interpersonal, leadership, team, customer orientation, communication); self-reliance (i.e. confidence, motivation, networking, willingness to learn); general skills (i.e. problem-solving, commitment, business acumen), and specialist skills (i.e. technical knowledge, organization-specific skills) (Henry and Treanor 2010; EU 2016aa). While the employable skills focus is highly practice-oriented, it must be noted that such skills are designed to help graduates become effective employees rather than employers.

## **2.3. The drive to embed EE into non-business disciplines**

The general growth in popularity of entrepreneurship programmes and related scholarship has sparked interest among non-business academics such as those in STEM (science, technology, engineering, maths and medicine) disciplines (Henry and Treanor 2010; Jackson and Hauser 2016). However, trying to incorporate entrepreneurship into non-business disciplines makes the EE content challenge even more complicated. This is because non-business students, especially those in professional and health related fields, do not readily see the underpinning link between entrepreneurship and their core programme of study (Henry and Treanor 2010); hence, they do not always appreciate the benefits of studying entrepreneurship in the same way that business students do. According to Hannon (2006), in non-business programmes, there is a danger that entrepreneurship components are simply ‘inserted’ rather than ‘integrated’ (p. 297) and, as a result, students may perceive entrepreneurship as ‘peripheral’ rather than ‘core’ to their overarching programme of study (Henry and Treanor 2010). This dilemma has prompted discussion on the concept of ‘embedding’ entrepreneurship.

However, mindful that ‘embedding’ is often interpreted in practice as simply ‘inserting’ (Hannon 2006), entrepreneurship educators have started to place more emphasis on ‘integrating’, i.e. unpicking existing curricula and programmes in order to discretely weave through the very essence of entrepreneurship (Fayolle 2013; Henry 2015; Thrane et al. 2016). Such an approach presents further challenges for entrepreneurship educators as it deviates from the traditional notion of a single educator being responsible for delivering an entire programme and moves towards the concept of team teaching. In such an approach, the entrepreneurship lecturer would work with the lead lecturer for the non-business programme to identify opportunities to logically introduce entrepreneurship concepts and enable the student to apply these to their core field of study.

## **2.4. Summary remarks**

This section has argued that the content challenge is one of the biggest challenges facing contemporary entrepreneurship educators. This is because, in addition to its many unique characteristics (Kuratko 2005; Duval-Couteil 2013; Fayolle 2013; Volery et al. 2013), EE has grown rapidly in academia both in terms of the number/scope of programmes and the volume of scholarship. Furthermore, policy makers and employers have begun to take more of an interest in EE programmes, attempting to influence content to satisfy their own particular agendas. Alongside this influence, there is an increasing trend to embed EE into non-business disciplines, especially in STEM areas. If such trends continue and are not carefully managed, they will have consequences for future entrepreneurship educators, leaving them unclear about what to teach and putting pressure on them to do too much to please too many. The next section builds on this discussion by illustrating the many possible areas of EE programme focus and showing how these have resulted in a very wide EE content spectrum.

## **3. The content challenge: what to teach?**

### **3.1. Possible areas of focus**

The literature identifies a wide range of possible areas of focus for EE, suggesting to entrepreneurship educators what can or should be taught. These areas can range from basic awareness raising, i.e. encouraging students to consider entrepreneurship as a viable future career path in its own right; through to business planning, adopting a real world focus, and competency development. Collectively, these areas make for a wide EE content spectrum that moves from the theoretical to the practical, taking the student right through to new venture creation, growth and the consideration of exit strategies. This section discusses these areas in more detail, further illustrating the complexity of the EE content challenge.

#### **3.1.1. Awareness raising focus**

Some scholars suggest that the overarching objective of EE should be to encourage individuals to think and act entrepreneurially (Liñán 2004; Jones et al. 2011; Fretschner and Weber 2013; Rauch and Hulsink 2015). As ‘acting entrepreneurially’ goes beyond new venture creation, this implies that the primary – and, arguably, the sole – focus of entrepreneurship education should be to raise awareness (Liñán 2004, 2007). Supporting this view, Fretschner and Weber (2013) suggest that the entrepreneurship educator should explicitly focus on what makes an entrepreneur, explaining the risks an entrepreneur takes. They propose a number of guidelines for designing awareness courses in higher education, suggesting that educators should: focus on shaping student’s entrepreneurial attitudes not skills (the latter should be developed in follow up programmes); emphasize the value of acting entrepreneurially in existing organizations, social settings and daily life (Fretschner and Weber 2013, 423), and strengthen students’ beliefs that setting up and establishing their own business is an attainable opportunity and not predetermined by external factors. Consistent with Shane (2012) and

Eckhardt and Shane (2013), Fretschner and Weber (2013) suggest that this might be achieved by providing an introduction to opportunity recognition or entrepreneurial alertness.

### 3.1.2. *Business planning focus*

Moving on from awareness raising, many entrepreneurship programmes tend to be designed around the business plan, taking students through the process of considering the marketing, financial, production and management aspects of starting a new business. While Fayolle (2013) draws our attention to the business plan's 'pride of place' in entrepreneurship programmes, Winkel (2013) questions whether it should be included at all, suggesting that a focus on business models might be more appropriate. As Honig (2004) points out, the problem with the business plan is its linear thinking; rather, students should be encouraged to engage in the sorts of complex non-linear thinking patterns needed at start-up (Edelman, Manolova, and Brush 2008). To demonstrate this latter point, Edelman, Manolova, and Brush (2008) compare start up activities of PSED (Panel Study of Entrepreneurial Dynamics) nascent entrepreneurs to data from a sample of entrepreneurship textbooks. They examine whether current entrepreneurship practices are relevant to what actual entrepreneurs are practicing. They find that business planning is not a good start-up predictor, and that entrepreneurs do not place as much emphasis on business planning as text books do. Recognizing the challenge of making entrepreneurship programmes more relevant, Edelman, Manolova, and Brush (2008) suggest that entrepreneurship educators should place more emphasis on real actions rather than research and business plan writing, and focus on operational activities such as purchasing materials or equipment, establishing credit with suppliers, registering a business with the authorities and signing up to pay taxes.

### 3.1.3. *Real world focus*

Vanevenhoven (2013) advises a more enacted approach to entrepreneurship education content and associated delivery, one that is better linked to the real world (p. 466). Echoing social enterprise ethos, he argues for a move away from profit maximization towards stakeholder value creation, and the need for more revolutionary teaching approaches (p. 468). Consequently, Vanevenhoven (2013) argues for more 'real world' content, suggesting that students and educators should be sent out of the classroom. What is particularly noteworthy about his perspective is that he both acknowledges and makes allowances for the potential risks associated with such an approach:

A commitment to getting students enacting opportunities does invite the chance for failure, criticism, and embarrassment that may not otherwise be present in the safety of our classrooms and offices – but as we teach, if we are to fail, we should fail with magnificence. (Vanevenhoven 2013, 468).

To some extent, Lorz, Mueller, and Volery (2013) concur with this view, but also acknowledge the potential risk on the part of the student, arguing that providing students with a (real) learning environment designed to help them make a more profound decision either for or against an entrepreneurial career is an important function of entrepreneurship education. What they refer to as the 'sorting effect' can have both positive and negative effects, as an individual's level of entrepreneurial intention can either increase or decrease (p. 146).

### 3.1.4. *Competencies focus*

Winkel (2013, 313) suggests that entrepreneurship education presents a unique opportunity to engage students in experiential learning. He proposes that entrepreneurship programmes should move from skill-building to experience-building, hence, teaching competencies becomes important. Similarly, Volery et al. (2013) view entrepreneurship as an action-oriented endeavour where individuals need to be able to actually implement their ideas. Hence, they suggest that the primary goal of entrepreneurship education should be to encourage students to initiate ventures of their own. Consequently, consistent with Shane (2012) and Eckhardt and Shane (2013), they identify two core competencies that should be included in entrepreneurship programmes: opportunity recognition

and opportunity exploitation. While such focus appears entirely logical, albeit entirely start-up-oriented, despite a number of research studies in the area of entrepreneurial competencies (see, for example, Rasmussen, Mossey, and Wright 2011), the specific competencies that support new venture creation are still difficult to identify. Indeed, there is still a tendency in the literature to equate entrepreneurial competencies with the start-up phase, and managerial competencies with the general management and growth phases of a business. While Morris et al. (2013) argue that entrepreneurship requires a discrete set of entrepreneurial competencies, they also contend that these must be developed in conjunction with the more general business competencies (p. 352–253). Using a Delphi study, the authors identify 13 competencies they feel are unique to the ‘entrepreneurship’ (rather than to the ‘management’) context, and suggest that these will be useful in informing the content of future entrepreneurship programmes (see Table 1).

Morris et al.’s set of competencies shares several similarities with the European Union’s Entrepreneurship Competence Framework (EU 2016) – EntreComp. Designed to help develop individual and organizational entrepreneurial capacity, the framework focuses on the three core areas of *Ideas and Opportunities*, *Resources* and a set of competencies required to put ideas *Into Action*. However, the key difference between the two frameworks is that while the EU model emphasizes leadership, management and long term sustainability (i.e. mobilizing others; planning and management; financial literacy), Morris et al. (2013) prioritize the more practical and potentially more immediate (in a start-up scenario) ‘Guerrilla’ skills, i.e., the ability to take advantage of one’s surroundings; employing unconventional, low-cost tactics; doing more with less, and mitigating against the associated risks.

**3.1.4.1. Summing up.** To summarize, so far this section has considered some of the different areas that EE content might focus on, illustrating not just the considerable variety but also the significant volume of content that could be included in an entrepreneurship programme. The key challenge,

**Table 1.** Entrepreneurial competencies.

Competency area	= Ability to:
1 Opportunity recognition	Perceive changed conditions or overlooked possibilities in the environment that represent potential sources of profit
2 Opportunity assessment	Evaluate the content structure of opportunities to accurately determine their relative attractiveness
3 Risk management/mitigation	Take actions that reduce the probability of a risk occurring or reduce risk impact
4 Conveying a compelling vision	Conceive and articulate an image of a future organizational state in a manner that empowers followers to enact it
5 Tenacity/perseverance	Sustain goal-directed action and energy when confronting difficulties and obstacles
6 Creative problem solving/imaginativeness	Relate previously unrelated objects or variables to produce novel and useful outcomes
7 Resource leveraging	Access resources one does not necessarily own or control
8 Guerilla skills	Take advantage of one’s surroundings, employ unconventional, low-cost tactics and do more with less
9 Value creation	Develop new products, services, and/or business models that generate revenues exceeding their costs
10 Maintain focus yet adapt	Balance an emphasis on goal achievement and the strategic direction of the organization while addressing the need to identify and pursue actions to improve the fit between an organization and developments in the external environment
11 Resilience	Cope with stresses and disturbances such that one remains well, recovers, or even thrives in the face of adversity
12 Self-efficacy	Maintain a sense of self-confidence regarding one’s ability to accomplish a particular task
13 Building and using networks	Use social interaction skills to establish, develop and maintain sets of relationships with others who assist them in advancing their work or career.

(Adapted from Morris et al. 2013, 358).

therefore, for the entrepreneurship educator is to decide which area and how much of it to focus on. Such variety in EE focus has been acknowledged by Mwasalwiba (2010), who also notes a significant lack of alignment within EE programmes. This is contrary to some earlier evidence of convergence around EE programme content (Katz 2008). In his semi-systematic literature review and thematic analysis of 108 published articles, Mwasalwiba (2010) identifies a shift in EE programme focus from 'start-up' to 'attitude-changing' content, as well as an increasingly stronger economic (rather than social) rationale. His study suggests that the overarching aim of EE now appears to be that of promoting entrepreneurship by influencing attitudes, values and the general community culture:

This aim is the driving force behind all other objectives, namely start-ups, self-employment, job creation, knowledge advancement and skill development. (Mwasalwiba 2010, 40).

Mwasalwiba (2010) further highlights the 'haphazard selection' of EE content and methods. Such haphazardness has not only continued into contemporary programmes, but has grown, as noted by the apt example provided in Kamovich and Foss (2017), where EE programme content is categorized as either theoretically- or practically-oriented, covering topics as diverse as personality characteristics, entrepreneurial traits, opportunity recognition, idea implementation, risk, team building, idea generation, innovation, creativity, business planning, networking, pitching to investors, adapting to change, the unpredictability of the real world, and developing 'plan B' and exit strategies (Piperopoulos and Dimov 2015, as cited in Kamovich and Foss 2017). Recognizing the different interacting elements involved in teaching entrepreneurship (i.e. teachers, students, context, learning activities and outcomes), Kamovich and Foss (2017) suggest that the principle of 'instructional alignment' could be applied to EE to help off-set the lack of congruence between content, delivery and assessment. This is because 'any system with elements that constantly interact with each other, strives to reach a stable equilibrium' (Biggs 1996, 350). More importantly, by acknowledging that one size does not fit all, Kamovich and Foss (2017) alignment framework (drawn from Cohen 1987; Biggs 1996), allows us to fully embrace the heterogeneity of entrepreneurship programme content (p. 15). This supports Johannisson (2016) who reminds us that there are 'many roads to training for entrepreneuring' (p. 418). Accordingly, as illustrated above, there are many different approaches to EE. The next section further emphasizes this point.

### 3.2. The EE content spectrum

The above section has highlighted the considerable variety and volume of EE content that the entrepreneurship educator is expected to be able to deliver. If we consider this content as a spectrum, and map some of the different areas of focus on to this spectrum, then we can begin to get an even better understanding of the complexity of the content challenge. For example, a content spectrum allows us to see the considerable journey that the entrepreneurship educator is expected to take the student on in his/her EE programme, guiding them from awareness raising right through to business growth and exit strategies. The spectrum also prompts us to start thinking about the different pedagogical approaches that the entrepreneurship educator will need to adopt depending on which part of the content spectrum he/she is focusing on. This serves to further underline the importance of the content challenge for future entrepreneurship educators. This spectrum is illustrated in Figure 1 and is discussed below.

As the focus within the content spectrum moves from *Awareness Raising* through to *Start-up & Growth*, the pedagogical foundation also moves from mostly theory- to mostly practice-based teaching, although both the theory and the practice dimensions will continuously inter-play across the spectrum as theory is used to inform/explain practice, and vice versa. Students are brought on a learning journey that moves from predominately text book/classroom-based to predominately real world/externally-based teaching (Neck, Greene, and Brush 2014). Competencies and employable skills (as discussed above) are weaved across the spectrum and delivered according to the particular pedagogical focus. For example, under *Awareness Raising, Creating an Entrepreneurial mindset* – what



<i>Awareness Raising</i>		<i>Start-up &amp; Growth</i>		
<i>Competencies</i>				
<i>Creating an Entrepreneurial Mind-set</i>	<i>Opportunity Recognition</i>	<i>New Venture Creation</i>	<i>Growth</i>	<i>Exit Strategies</i>
<i>Employable Skills</i>				
<i>Theory(practice)-based</i>		<i>Practice(theory)-based</i>		

**Figure 1.** The entrepreneurship education content spectrum.

Liñán (2004, 2007) considers as the starting point of most entrepreneurship programmes – focuses on getting students to think about entrepreneurship, encouraging them to explore what it means to them, shaping their attitudes towards entrepreneurship and increasing both their awareness of and receptiveness to the entrepreneurial process. Teaching strategies in this regard draw on basic economic theories, and use a combination of lectures, guest speakers, case studies and interviews with entrepreneurs to help students learn about the value of acting entrepreneurially in organizational and social settings as well as in daily life (Fretschner and Weber 2013). The *Opportunity Recognition* part of spectrum aims to help students develop the necessary skills and abilities to systematically look for and identify potential opportunities for entrepreneurship. Teaching strategies here include activities that enhance students' entrepreneurial alertness (Shane 2012), idea generation, problem solving exercises, and team based projects.

As we move across the spectrum to EE content that addresses the *Start-up & Growth* dimensions, a more competency-based approach is adopted (Morris et al. 2013). For example, within *New Venture Creation*-focused content, teaching activities invariably cover market research, feasibility, business plan development, resource acquisition and the operational aspects of entrepreneurship, often resulting in the creation of a real campus-based student enterprise. *Growth*-focused EE content aims to build on these aspects, and will typically include much more competency-based learning, where students are given the tools to help them identify new product and market opportunities for the business, develop their own leadership capabilities and adopt a more strategic approach to business management. Finally, while often neglected in entrepreneurship programmes, content focused on *Exit-Strategies* aims to develop students' higher level strategic planning capabilities, realize a return for their investment, look to the future and potentially reinvest in a new venture opportunity as a serial entrepreneur (Piperopoulos and Dimov 2015). Teaching strategies here typically draw on scenario planning, financial modelling and more complex live case studies.

Regardless of which part(s) of the spectrum the entrepreneurship educator decides to focus on, he/she needs to be mindful of their limited 'budget' in terms of both human resource and financial implications. The additional restriction of educational norms, i.e. allocated hours and credits<sup>1</sup> must also be considered. Finally, the entrepreneurship educator's own skills and abilities also need to be considered, as it is unlikely that a single educator will possess all of the skills required to deliver

across the entire content spectrum in [Figure 1](#). Hence, covering the full EE content spectrum is clearly an impossible task, especially in view of the fact that, in the space of a few decades, the focus of entrepreneurship education appears to have shifted radically from straightforward education ‘about’ (Gibb and Cotton 1998), to the production of:

super-skilled graduates who will be entrepreneurially effective and capable of thinking creatively, solving problems, analysing business ideas, identifying opportunities, innovating, effecting economic growth, empowering others and creating both jobs and value for society. (Henry 2013, 837).

### **3.2.1. Summary remarks**

Having argued that entrepreneurship educators are faced with a considerable variety and volume of possible EE content, making it difficult to decide what to include in their EE programme, this section has suggested that considering such content on a spectrum ([Figure 1](#)) could help illuminate further the complexity of the EE content challenge. The spectrum shows EE as a type of journey, albeit quite a long and complex one, whereby the entrepreneurship educator is required to guide the student ultimately towards the creation of a growth business. Moving across the spectrum requires entrepreneurship educators to augment their own knowledge and skills along the way as they focus on different areas of content, some of which may be new to them. Different pedagogical approaches will be required at different points in the spectrum, as different areas of focus are targeted. Consideration also needs to be given to the entrepreneurship educator’s available resources in terms of time, academic credits and classroom facilities.

### **3.3. Doing too much to please too many?**

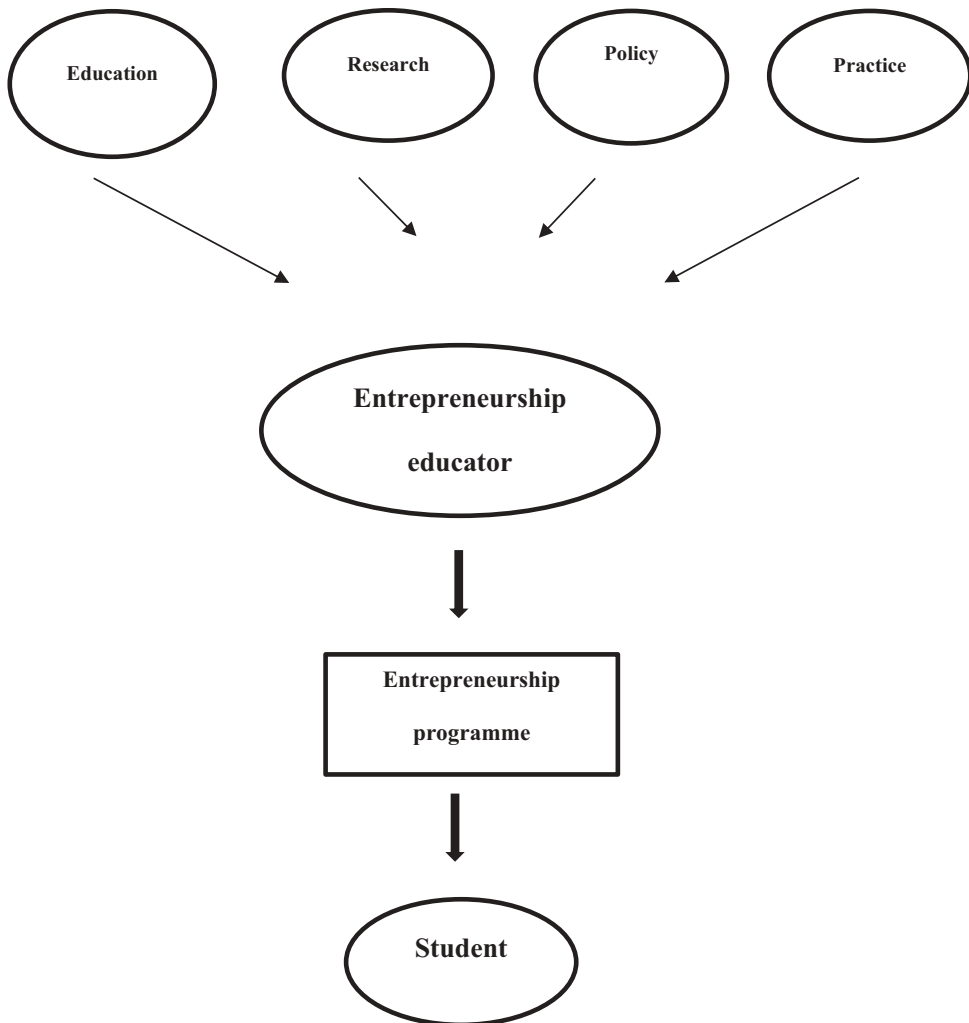
If we reflect on the above arguments, it is clear that if the EE content challenge is not appropriately dealt with now, it may cause serious problems in the future, including but not limited to: putting additional stress on both educator and student; content being delivered with insufficient depth of coverage; aspects of the curriculum being inappropriately assessed or not assessed at all, and as a consequence, further difficulties around measuring impact. In summary, it seems that entrepreneurship educators are trying to ‘do too much’ and ‘please too many’ (Henry 2013), but in the process, they may end up failing entirely. Such failure, however, may not be as magnificent as Vanevenhoven would like (2013, 468). The next section discusses one possible solution

## **4. Discussion**

### **4.1. Reconceptualizing the role of the future entrepreneurship educator: understanding the categories of influence**

One way to help entrepreneurship educators deal with the content challenge and avoid some of the problems identified above, is to completely reconceptualize their role in the future. However, before we can do this, we need to first reflect on some of the specific factors that more directly influence the entrepreneurship educator and impact the EE content decision. As [Figure 2](#) illustrates, currently, four different categories of EE content influence can be considered.

The *education* category, due to its obvious proximity to the entrepreneurship educator, tends to take priority and thus exerts the most influence on EE content. Such influence will be focused mainly on the broad *Awareness Raising* part of the EE spectrum. The *education* category relates to the internal teaching environment as well as external regulatory requirements, i.e. how entrepreneurship is positioned within the educator’s own HEI, the resources available, and the national educational accreditation process. These aspects will influence the content decision in different ways. For example, the extent to which EE is seen as a strategic priority in a particular HEI will directly influence an educator’s decision to include entrepreneurship in a new course of study, and will impact the



**Figure 2.** Entrepreneurship Education: Categories of influence impacting the content decision.

coverage he/she decides to attribute to it, the particular areas of the EE content spectrum he/she chooses to focus on, and his/her chosen pedagogical approach. While programmes with substantive entrepreneurship components may be appealing in theory, in practice, they require greater human, financial and physical resources (i.e. potentially more teaching hours to accommodate the smaller class sizes best suited to EE, more tutorial hours, guest speaker costs, start-up seed monies, etc), and hence, may not always be supported by HEI senior management. Furthermore, all HEIs are governed by some type of external educational standards body that formally validates and accredits their programmes of study, giving them the legal authority to award degrees within specific educational fields. Such bodies set requirements in relation to learning outcomes depending on the type and level of degree being awarded; the number of credits allowed; the expected quantity of teaching and learning hours, and the type and quantity of assessment components. If such regulatory requirements are not adhered to, then the entrepreneurship programme will simply not be validated. Sometimes such requirements – designed to suit more traditional and theoretical fields of study – can appear to be at odds with the more practical types of content and assessment found in contemporary EE programmes (i.e. business plan development, investor pitches or the creation of

a student enterprise), often making it difficult for entrepreneurship educators to make their programmes 'fit.'

The *research* category could, arguably, have the next highest level of influence on EE content, impacting the content decision across the full content spectrum, from *Developing an Entrepreneurial mindset* right through to *Exit Strategies*. As the majority of entrepreneurship educators are academics, one would expect there to be some reliance on existing scholarship, concepts and theories, emerging thinking as well as academic text books, all suggesting what should be taught within the realms of EE. Given the growth in EE scholarship, however, it is surprising that more EE research is not reflected in the content of EE programmes. Many of the content models used in EE are borrowed from consultancy agents or other research fields such as management, and not derived from EE research itself. Other research influence comes from the international EE academy which comprises a substantive and growing number of research-based academic conferences and symposia; discussions and debates held here can also impact the entrepreneurship educator's content decision. This is especially the case for those educators based in research-intensive universities and who need to be constantly engaged with contemporary theories in their field in order to show that their teaching is up to date. In addition, research-oriented educators need to be able to deliver on their publishing targets for national or institutional requirements (see, for example, REF<sup>2</sup> requirements in the UK). In such cases, entrepreneurship educators may be more influenced by research and will thus endeavour to incorporate it into their teaching content. This is also more likely to be the case amongst the new (younger) research-aware generation of entrepreneurship educators who are under additional pressure to publish in order to meet promotional criteria.

The *policy* category refers to the prevailing and/or emerging education, entrepreneurship and business-related policies in the entrepreneurship educator's country or region. The level of influence here will not only depend on the particular policies in operation but also on the relationship the educator and his/her respective HEI has with policy organizations. HEIs need to be able to demonstrate that teaching content is informed by current regional, national and international policies; this is especially the case when HEIs and/or individual entrepreneurship academics are applying for funding. There is no doubt that policy makers want to see that their policies have been incorporated into activities on the ground; in this regard, EE content may be influenced by several different types of policy, making it more difficult to integrate into EE programmes. The employable skills agenda (EU 2016aa) coupled with recent EU policy frameworks (EU 2016) are good examples here. Collectively, policy-makers propose a long list of skills to inform EE content, and while it is practically impossible to incorporate all of them into a single entrepreneurship programme, as the previous section has already argued, entrepreneurship educators need to (and, in most cases do) include many of them, most notably, creativity, problem solving and team working, and skills that relate to the *Entrepreneurial mindset* and *Opportunity Recognition* parts of the EE content spectrum.

Finally, the *practice* category comprises the various stakeholders involved in developing the entrepreneurship education agenda at the entrepreneurship educator's HEI. While all four categories will influence the content decision, this category should, arguably, have the greatest influence. This is because it should, in theory at least, comprise actual entrepreneurs, local businesses, large corporates, employer bodies, chambers of commerce and similar actors with real and relevant experience of entrepreneurship. These actors will be mostly interested in the various components that comprise the *Start-up & Growth* part of the content spectrum. Collectively, these actors constitute the 'real world' dimension of EE, ensuring it is appropriately anchored in contemporary practice. EE stakeholders influence EE content by directly engaging with the entrepreneurship educator, coming forward with ideas of important new areas that should be included in the EE curriculum. Sometimes these ideas take the form of suggesting opportunities for students to engage with local industry to help solve problems, identify new products/services, or develop case studies around live businesses. However, while engagement with this category of influence appears to be increasing, as evidenced by the use of guest speakers, case studies and entrepreneurs in residence at many HEIs, it is still

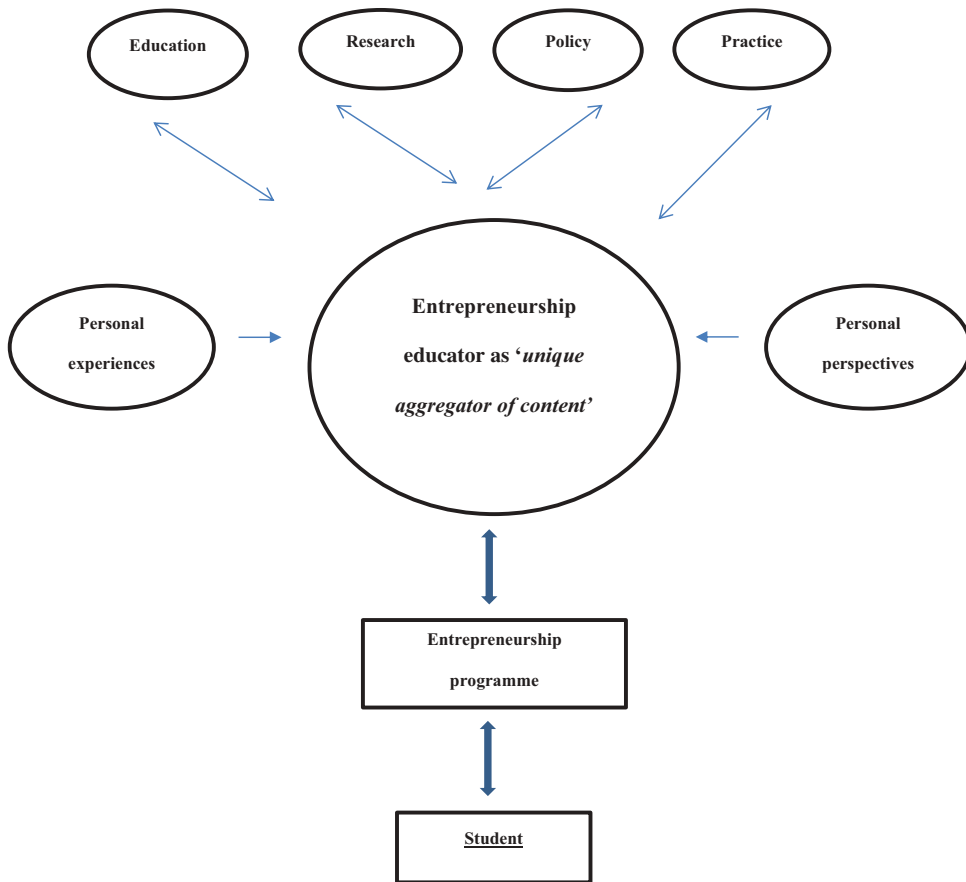
considerably underutilized. This is surprising given the focus on start-up and practice-based approaches adopted by many entrepreneurship programmes (Neck, Greene, and Brush 2014).

#### **4.2. Privileging the human factor**

By way of addressing the content challenge, some scholars have argued for a common curriculum, highlighting the value of shared entrepreneurship education frameworks (Gibb 2005; Fayolle 2013; Winkel 2013). The common curriculum approach could be beneficial to both entrepreneurship educators and students, limiting the focus, and presumably the quantity of content delivered, and ultimately reducing the pressure on educators. However, I would caution against such an approach. Following Kyrö (2015) who, while acknowledging the need for shared frameworks in entrepreneurship, recognizes that the phenomenon of education is centred on the human being, I argue that both the individual educator and the individual student are integral parts of the entrepreneurial learning process. Citing Van Gelderen (2010), Kyrö (2015) stresses the importance of learning autonomy and learners' freedom to define their own learning goals, as well as the means of achieving those goals (Kyrö 2015, 613). After all, entrepreneurship is all about human behaviour, therefore, human beings are a core component of any conceptualization (or re-conceptualization) of entrepreneurship. Kyrö strengthens her argument by drawing our attention to the philosophical bases for understanding individual approaches to entrepreneurship education, and the importance of: ontology – 'our ideas of reality and how it is constituted'; epistemology – 'how we can acquire knowledge about that reality'; and axiology – 'value theories related to both ontology and epistemology' (Kyrö 2015, 605). As each of these is shaped by individuals' knowledge, experience, values and perceptions, they are different for everyone. Thus, in the context of Figure 2, and following Kyrö's (2015) logic, the individual entrepreneurship educator must take on a 'filtering' role with regard to the categories of influence, using his/her own personal perspective on entrepreneurship as the decision making lens when determining not just what to teach but also what to privilege in his/her programme. It is this personal filtering mechanism that makes each entrepreneurship educator unique; makes each programme different, and adds richness and diversity to the entrepreneurial learning process. Therefore, as discussed above, while the entrepreneurship educational process and, as a consequence, the *content* decision – i.e. 'what to teach' – is influenced by several different factors, it is the human factor – in the form of the individual educator, and also the individual learner (i.e. student) – that, arguably, exerts the strongest influence. After all, in addition to the *education, research, policy* and *practice* categories of influence illustrated in Figure 2, there are other personal influences on the entrepreneurship educator (as well as on the student) that shape his/her perception of entrepreneurship; these include one's background, culture, discipline area, previous entrepreneurial experience (and whether or not this was positive), role models and exposure to the entrepreneurial landscape. Such individual perceptions need to be accounted for in any reconceptualization of the entrepreneurship educator's role.

#### **4.3. The future entrepreneurship educator as 'unique aggregator of content'**

In Figure 3, the categories of influence discussed above (*education, research, policy, practice*) will still impact the EE content decision, but this time their level of influence is carefully filtered through the entrepreneurship educator. In this re-conceptualization, the entrepreneurship educator will consider each category of influence, assess its importance, relevance and value to his/her entrepreneurship programme, and determine how (or, indeed, whether) it affects content. More importantly, in Figure 3, influence is bi-directional, as illustrated by the dual directional arrows; this means that while education authorities, researchers, policy-makers and practitioners influence the entrepreneurship educator, the entrepreneurship educator also influences them. In reviewing the information and recommendations from these categories of influence, the entrepreneurship educator digests them, reflects on them and integrates into his/her programme only those elements that he/she deems appropriate. He/she will



**Figure 3.** The role of the future entrepreneurship educator: A reconceptualization.

then provide feedback to the various categories of influence. Furthermore, as [Figure 3](#) illustrates, the entrepreneurship educator is also influenced by his/her own personal experiences of and perspectives on entrepreneurship which, whether positive or negative, will always be unique; these in turn will influence his/her decision with regard to what to teach. As illustrated by the dual direction of the arrows between the entrepreneurship educator and the EE programme, when the entrepreneurship educator influences the content of the programme, he/she will observe how this works in practice and adapt content accordingly, perhaps replacing old content with new content, or changing content focus depending on which part of the content spectrum the particular programme is focusing on. Finally, this dual direction of influence also occurs between the student and the programme. Here, as the student 'receives' the programme, he/she will react, indicating what content works and what does not. This response is fed back into the programme and on to the entrepreneurship educator who can then adapt content accordingly. While this sometimes happens automatically, in this new reconceptualization, the entrepreneurship educator will actively encourage such feedback, ensuring his/her choice of content is appropriate for the particular student cohort.

Looking to the future, entrepreneurship educators will need to be more realistic about what they can effectively teach within the confines of their entrepreneurship programmes. Rather than overly promote common frameworks and curricula, there may be value in adopting a more fluid approach that allows future entrepreneurship educators their freedom to deliver entrepreneurship programmes as they see fit, using their own personal perspective, shaped by their own personal experiences of entrepreneurship. While arguments in favour of common frameworks may help mitigate the inherent

risks of teaching entrepreneurship and the fear of failure (Vanevenhoven 2013), it is the educator's own individual contribution and perspective on entrepreneurship that gives the field its unique added value. After all, similar to entrepreneurs, entrepreneurship educators are not a homogenous group, therefore, each will have a different view on what should or should not be taught within the confines of their particular programme. It is precisely these differences – regardless of the risk involved – that should be embraced when designing entrepreneurship programmes. Therefore, the educator's role in the entrepreneurial learning process must be viewed as critical (Fretschner and Weber 2013).

Adopting the above approach leads us to reconceptualize the future entrepreneurship educator as a sort of 'unique aggregator of content', whereby he/she determines content but where influences are filtered by personal perspective and shaped by personal experience. In light of the increasingly expanding spectrum of content illustrated in Figure 1, and the argument that entrepreneurship educators are trying to do too much to please too many, such a reconceptualization makes sense. There are simply too many components that justifiably could be taught within a single entrepreneurship programme, and encouraging entrepreneurship educators to take on their own unique aggregator role allows the human element to be privileged (Kyrö 2015), acknowledging that with regard to EE, one size does not fit all. By reconceptualizing the role of the entrepreneurship educator in this way, we can help cast the future entrepreneurship educator in a new light, transforming him/her from a mere imparter of knowledge to a 'learning catalyst' (Volery et al. 2013, 443) and even further – towards that of a unique learning director.

As scholars, rather than complain about fragmentation and a lack of convergence in relation to entrepreneurship education content, we might be better served to embrace such uniqueness, because, in the case of entrepreneurship education it could be that our very differences are our strengths in the classroom. After all, entrepreneurship is more a 'science of unique events' than a completely academic practice (Agevall 1999). Therefore, it seems logical that each entrepreneurship educator – shaped by many different influencing factors – will have his/her own unique perspective on entrepreneurship. Hence, entrepreneurship educators cannot help but take an individual approach to their teaching, determining the content of their teaching, deciding which elements of entrepreneurship they should include, which they should omit and which they should privilege. In many respects, the individual opportunity nexus (Shane 2012; Eckhardt and Shane 2013) applies to entrepreneurship educators as much as it does to entrepreneurship students because entrepreneurship – in terms of how to enact it (students) and how to teach it (educators) – is always going to be a subjective interpretation. Therefore, following Kyrö (2015), future entrepreneurship educators need to:

reflect on their current understanding of entrepreneurship education and make conscious decisions on how each of them would like to define the concept of entrepreneurship education and adopt it in their respective tasks (p. 600).

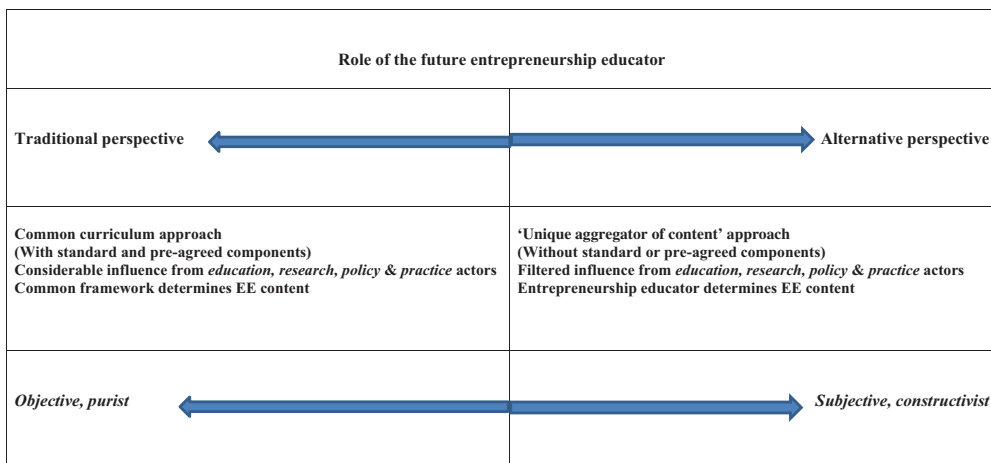
In so doing, however, an appropriate balance between rigour and relevance will need to be found (Johannisson 2016, 404). One way to ensure such balance is to incorporate the dual directional feedback loops in Figure 3 (but missing from Figure 2), allowing the entrepreneurship educator – based on his/her experience of what works and what does not in the classroom – to directly influence *education, research, policy* and *practice*. The additional feedback loop between the student, programme and entrepreneurship educator is also critical to ensure that the student perspective is better represented in the process, facilitating a valuable flow of influence from the student towards the entrepreneurship educator and subsequently filtered through to the four main categories of influence. If the conceptualization in Figure 3 is realized in the future, then the content challenge should become much more manageable, and the unique role of the entrepreneurship educator as informed and experienced aggregator of content will be secured. However, this reconceptualization could meet with resistance; it is somewhat controversial in that it affords considerable autonomy to the entrepreneurship educator and, as such, challenges the more traditional EE approach. The next

section discusses this point by illustrating how the ‘unique aggregator’ concept is polarized relative to the more traditional perspective of the entrepreneurship educator.

**4.4. Unique aggregator of content: traditional vs alternative perspective**

Figure 4 shows the ‘unique aggregator’ entrepreneurship educator concept (alternative perspective) relative to the more traditional perspective of a common curriculum approach, positioning the former as polarized to the latter. The traditional perspective (depicted in the left-hand column) is fact-based, built on rules and regulations, and involves pre-agreement amongst the broader EE community and categories of influence; consensus is required. The degree of influence from the various categories and their actors, i.e. *education, research, policy and practice*, is direct and considerable. Here, the personal experiences, feelings or opinions of the entrepreneurship educator have no influence. In this conceptualization, content components are incorporated into a standard EE framework and applied to all entrepreneurship educators and EE programmes almost unquestionably resulting in a common curriculum approach. This approach is highly objective, didactic and purist in nature, with EE content decided by others without regard to context, or, indeed, individual student interests, backgrounds, motivations, learning styles or educational needs. Furthermore, no account is taken of the entrepreneurship educator’s EE knowledge, skills and abilities; his/her entrepreneurial interests, experiences or unique perspective. Hence, this approach is positioned at one extreme of the spectrum.

In contrast, the alternative perspective proposed in this paper does not require pre-agreement on content amongst the various categories of influence and the actors therein. Rather, in this new conceptualization, it is the entrepreneurship educator who takes responsibility for the content decision. Here, the entrepreneurship educator is allowed to be influenced by his/her personal entrepreneurial experiences, knowledge, feelings and opinions, and based on these, makes decisions on programme content. There is no common curriculum here; rather, each programme is different, depending on the entrepreneurship educator’s particular experiences, interests and perspectives on EE, resulting in the ‘unique aggregator’ approach. This perspective is positioned in the right-hand column, at the other end of the spectrum and is subjective in nature. While some traditionalists may (perhaps) argue that this constructivist approach is also didactic, giving all the content authority to the entrepreneurship educator, the unique aggregator role privileges the human factor. It allows the entrepreneurship educator to account for context, as well as individual student interests, learning styles, motivations and needs. Hence, entrepreneurship learning is contextualized, with the learner



**Figure 4.** The entrepreneurship educator as ‘unique aggregator’ of EE content: Traditional vs alternative perspective.



directly involved in the entrepreneurial learning process. This must surely be an advantage, and one that will really help entrepreneurship educators manage the complex content challenge in the future.

## 5. Conclusions

This paper focused on a key challenge facing the future entrepreneurship educator – that of content, i.e. deciding what to teach. This is an important area of inquiry because understanding the EE content challenge and the role of the future entrepreneurship educator could help enhance the quality and effectiveness of EE programmes.

This paper has contributed to existing EE theory and practice by enhancing understanding of the myriad elements EE comprises, by highlighting the dangers of trying to do too much, and by theorizing towards a reconceptualization of the role of the future entrepreneurship educator. With particular regard to the latter, the paper presented a novel reconceptualization of the future entrepreneurship educator who – shaped by his/her own personal experiences of entrepreneurship, informed by his/her own perspectives, and filtering the various flows of several categories of external influence – takes on the role of a ‘unique aggregator’ of entrepreneurship content. Such a role, if accepted by the various stakeholders involved in the entrepreneurship education process, would not only ease the pressure on both entrepreneurship educator and student, but could also make for a more realistic, meaningful and effective entrepreneurship education experience. Reversing the flow of content influence so that the entrepreneurship educator’s and, as a consequence, the student’s perspective is better accommodated privileges the human factor, highlighting that neither educators nor students are a homogenous group and, therefore, that one size cannot possibly fit all. This builds on and extends Kyrö’s (2015) perspective, which recognizes that education is centred on the human being.

Furthermore, this paper suggests that the principle of instructional alignment proposed by Kamovich and Foss (2017) could be applied to the reconceptualized role of the future entrepreneurship educator to help legitimize the ‘unique aggregator of content’ role. This would allow us to fully embrace the heterogeneity of entrepreneurship programme content. Kamovich and Foss (2017) view EE as a system in which many different elements constantly interact with each other until they achieve an acceptable equilibrium. In the ‘unique aggregator’ conceptualization, it is the entrepreneurship educator who moderates such equilibrium by controlling the EE content. Linked to this point, the reconceptualization illustrated in Figure 3 adds further support to the view that the educator’s role in the entrepreneurial learning process is critical (Fretschner and Weber 2013). This is because, by being allowed to take on the unique aggregator role, the entrepreneurship educator can take account of the educational context and ensure individual student interests, experiences, motivations and learning styles are catered for. Being allowed to filter the various categories of influence will allow the entrepreneurship educator to decide on EE content that is best suited to the student cohort.

### 5.1. Avenues for future entrepreneurship education

Reflecting on the wide spectrum of EE content illustrated in Figure 1, there are a number of new areas within EE that might be further developed in the future. One such area is globalization. In this regard, there may be opportunities within EE to develop content that is more international in nature. While such global content development may already be occurring, it could become much more common and popular in the future. After all, entrepreneurship by its very nature is a global phenomenon, and EE could become a highly effective vehicle for rapid internationalization through, for example, a multi-national student start-up enterprise, where the university network provides a ready-made route to the global marketplace.

Another content area that could be further developed within EE is that of social and non-profit enterprise. This topic has been attracting considerable attention in the field of entrepreneurship generally, both from a research and teaching perspective. This is because it is now generally acknowledged that new ventures should have some social dimension incorporated into their mission statement. Consequently, social and non-profit enterprise could well predominate in future EE programmes, as the concept of doing well by doing good becomes embedded in entrepreneurship teaching.

While developing the above content opportunities within EE could be exciting and beneficial for both EE students and educators, there would, of course, be consequences. Specialist knowledge would be required on the part of the entrepreneurship educator, suggesting the need for a type of continuous professional development that would potentially be more intense than that (if any) currently provided. Additional human and financial resources would also be needed.

Regardless of their particular focus, future EE programmes will undoubtedly be more significantly influenced by the entrepreneurship educator in his/her role as 'unique aggregator of content.' Indeed, at some point in the future, this role could well be extended to entrepreneurship students who, depending on their particular unique perspective on entrepreneurship, will be instrumental in determining EE content and designing their own à la carte EE programme – one that suits their particular interests and the potential entrepreneurial role they aim to play in society.

## **5.2. Avenues for future entrepreneurship education research**

The reconceptualization of the role of the entrepreneurship educator presented in this paper opens up new questions which require further reflection. For example, this paper has focused on the EE content challenge facing future entrepreneurship educators in HEIs, but to what extent is this different within primary and secondary level educational contexts? What role might the future entrepreneurship educator play in determining content across professional discipline areas, especially those where new venture creation is not the primary objective? Are there potential dangers in allowing entrepreneurship educators too much freedom with regard to the content decision? Finally, what about the future entrepreneurship student? How will his/her role change as that of the entrepreneurship educator is reconceptualized? Such questions present valuable avenues for future research and could help alleviate the stress placed on the entrepreneurship educator of trying to do too much to please too many. In pursuing these avenues of scholarly inquiry there is considerable scope for both conceptual and empirical approaches, innovative methodologies, cross-country comparative studies, and explorations of the EE content challenge in different contexts and cultures. Given the reconceptualized role of the entrepreneurship educator presented here, it is expected that the human factor will be privileged in such explorations. Hopefully, this paper has helped pave the way for such studies.

## **Notes**

1. By way of example, under the QQI-accredited Irish HE system, single entrepreneurship programmes (referred to as modules in the Irish context) typically comprise around 36 class-contact hours and 5 academic ECTS. This calculation is based on a typical undergraduate module timetabled for 3 class-contact hours per week over 12 weeks.
2. In the UK, the REF – Research Excellence Framework – assesses the quality of research outputs for academic institutions, and relates this to funding awarded (<http://www.ref.ac.uk>).

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## References

- Agevall, O. 1999. "A science of unique events. Max Weber's methodology of the cultural sciences." PhD Diss., Uppsala: Uppsala University. DOI:10.1046/j.1469-1809.1999.6320101.x.
- Biggs, J. 1996. "Enhancing Teaching through Constructive Alignment." *Higher Education* 32 (3): 347–364. doi:10.1007/BF00138871.
- BIS. 2015. "Entrepreneurship Skills: Literature and Policy Review." BIS Research Paper No. 236. Department for Business, Innovation & Skills, September. Accessed 25 January 2018. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/457533/BIS-15-456-entrepreneurship-skills-literature-and-policy-review.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/457533/BIS-15-456-entrepreneurship-skills-literature-and-policy-review.pdf)
- Carrier, C. 2007. "Strategies for Teaching Entrepreneurship: What Else beyond Lectures, Case Studies and Business Plans?" In *Handbook of Research in Entrepreneurship Education*, edited by A. Fayolle, 143–159. Vol. I. Cheltenham: Edward Elgar.
- Cohen, S. A. 1987. "Instructional Alignment: Searching for a Magic Bullet." *Educational Researcher* 16 (8): 16–20. doi:10.3102/0013189X016008016.
- Cooney, T. M. 2009. "Developing Entrepreneurship Programmes for Female Members of the Irish Traveller Community." *International Journal of Gender and Entrepreneurship* 1 (2): 134–147. doi:10.1108/17566260910969689.
- Duval-Couteil, N. 2013. "Assessing the Impact of Entrepreneurship Education Programs: Challenges and Approaches." *Journal of Small Business Management* 51 (3): 394–409. doi:10.1111/jsbm.12024.
- Eckhardt, J. T., and S. A. Shane. 2013. "Response to the Commentaries: The Individual-opportunity (IO) Nexus Integrates Objective and Subjective Aspects of Entrepreneurship." *Academy of Management Review* 38 (1): 160–163. doi:10.5465/amr.2012.0192.
- Edelman, L. F., T. S. Manolova, and C. G. Brush. 2008. "Entrepreneurship Education: Correspondence between Practices of Nascent Entrepreneurs and Textbook Prescriptions for Success." *Academy of Management Learning & Education* 7 (1): 56–70. doi:10.5465/amle.2008.31413862.
- EU. 2008. *Entrepreneurship in Higher Education, Especially within Non-business Studies*. Brussels: European Commission.
- EU. 2013. *Entrepreneurship Education: A Guide for Educators*. Brussels: European Commission.
- EU. 2016. "EntreComp: The Entrepreneurship Competence Framework." Accessed 14 November 2017. <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101581/lfna27939enn.pdf>
- EU. 2016a. "A New Skills Agenda for Europe: Working Together to Strengthen Human Capital, Employability and Competitiveness." COM381, Brussels, 10 October. Accessed 25 January 2018. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0381>
- Fayolle, A. 2013. "Personal Views on the Future of Entrepreneurship Education." *Entrepreneurship & Regional Development* 25 (7–8): 692–701. doi:10.1080/08985626.2013.821318.
- Fayolle, A., and F. Liñán. 2014. "The Future of Research on Entrepreneurial Intentions." *Journal of Business Research* 67 (5): 663–666. doi:10.1016/j.jbusres.2013.11.024.
- Fretschner, M., and S. Weber. 2013. "Measuring and Understanding the Effects of Entrepreneurial Awareness Education." *Journal of Small Business Management* 51 (3): 410–428. doi:10.1111/jsbm.2013.51.issue-3.
- Garavan, T., and B. O'Cinneide. 1994. "Entrepreneurship Education and Training Programmes: A Review and Evaluation." *Journal of European Industrial Training, I & II* 18 (8): 3–12. 18 (11): 13–21. doi: 10.1108/03090599410068024.
- Gibb, A. 2005. "The Future of Entrepreneurship Education: Determining the Basis for Coherent Policy and Practice?" In *The Dynamics of Learning Entrepreneurship in a Cross-cultural University Context*, edited by P. Kyrö and C. Carrier, 44–46. University of Tampere, Research Centre for Vocational and Professional Education. Entrepreneurship Education Services, Tampere, 2/2005.
- Gibb, A. A., and J. Cotton 1998. "Entrepreneurship in Schools and College Education: Creating the Leading Edge." Background paper to the conference on Work Futures and the Role of Entrepreneurship and Enterprise in School and Further Education, London. December.
- Greene, P. 2011. "The Emergence of the Serious Game Industry: To Play or Not to Play." In *Entrepreneurship and the Creative Economy: Process, Practice and Policy*, edited by C. Henry and A. de Bruin, 148–168. Cheltenham: Edward Elgar.
- Hannon, P. 2006. "Teaching Pigeons to Dance: Sense and Meaning in Entrepreneurship Education." *Education + Training* 48 (5): 296–308. doi:10.1108/00400910610677018.
- Henry, C. 2013. "Entrepreneurship in Higher Education: Are Policy Makers Expecting Too Much?" *Education + Training* 55 (8/9): 836–848. doi:10.1108/ET-06-2013-0079.
- Henry, C. 2015. "Entrepreneurship Education Evaluation: Revisiting Storey to Hunt for the Heffalump." *Education + Training* 57 (8/9): 816–833. doi:10.1108/ET-05-2015-0035.
- Henry, C., F. Hill, and C. Leitch. 2003. *Entrepreneurship Education and Training*. Aldershot: Ashgate.

- Henry, C., and P. McGowan. 2016. "Embedding Entrepreneurship in Higher Education Institutions: Reconceptualising Entrepreneurship Education." *AISHE-J* 8 (1): 2741–2747.
- Henry, C., and L. Treanor. 2010. "Entrepreneurship Education in Veterinary Medicine: Enhancing Employable Skills." *Education + Training* 52 (8–9): 607–623. doi:10.1108/00400911011088944.
- HETAC - Higher Education and Training Awards Council. 2012. *Draft Guidelines and Key Criteria for the Review of Enterprise and Entrepreneurship Education (EEE)*. Dublin: HETAC.
- Hindle, K. 2007. "Teaching Entrepreneurship at University: From the Wrong Building to the Right Philosophy." In *Handbook of Research in Entrepreneurship Education*. 1 vol, edited by A. Fayolle, 104–126. Cheltenham: Edward Elgar.
- Honig, B. 2004. "Entrepreneurship Education: Toward a Model of Contingency-based Business Planning." *Academy of Management Learning and Education* 3 (3): 258–273. doi:10.5465/amle.2004.14242112.
- Hytti, U., and C. O'Gorman. 2004. "What Is 'Enterprise Education'? An Analysis of the Objectives and Methods of Enterprise Education Programmes in Four European Countries." *Education + Training* 46 (1): 11–23. doi:10.1108/00400910410518188.
- Jackson, E. L., and S. Hauser. 2016. "The Evidence Base for Developing a Veterinary Business Management Curriculum." *Veterinary Evidence On-line. June* 1 (2): 1–11.
- Johannisson, B. 2016. "Limits to and Prospects of Entrepreneurship Education in the Academic Context." *Entrepreneurship & Regional Development* 28 (5–6): 403–423. doi:10.1080/08985626.2016.1177982.
- Jones, C. 2016. "Enterprise Education: Towards the Development of the Heutagogical Learner." *AISHE-J* 8 (1): 2541–2547.
- Jones, P., C. Miller, A. Jones, G. Packham, D. Pickernell, and P. Zbierowski. 2011. "Attitudes and Motivations of Polish Students Towards Entrepreneurial Activity." *Education + Training* 53 (5): 416–432. doi:10.1108/004009111111147721.
- Jones, S. 2014. "Gendered Discourses of Entrepreneurship in UK Higher Education: The Fictive Entrepreneur and the Fictive Students." *International Small Business Journal* 32 (3): 237–258. doi:10.1177/0266242612453933.
- Kamovich, U., and L. Foss. 2017. "In Search of Alignment: A Review of Impact Studies in Entrepreneurship Education." *Education Research International* 2017: 1–15. doi:10.1155/2017/1450102.
- Katz, J. 2008. "Fully Mature but Not Fully Legitimate: A Different Perspective on the State of Entrepreneurship Education." *Journal of Small Business Management* 46 (4): 550–566. doi:10.1111/jsbm.2008.46.issue-4.
- Kauffman Foundation 2015. "The Evolution of Entrepreneurship on College Campuses." October. Accessed 20 November 2017. <http://www.kauffman.org/blogs/growthology/2015/10/the-evolution-of-entrepreneurship-on-college-campuses>
- Kuratko, D. F. 2005. "The Emergence of Entrepreneurship Education: Development, Trends, and Challenges." *Entrepreneurship Theory and Practice* 29 (5): 577–598. doi:10.1111/etap.2005.29.issue-5.
- Kyrö, P. 2005. "Entrepreneurial Learning Challenges Previous Learning Paradigms." In *The Dynamics of Entrepreneurship Learning in a Cross Cultural University Context*, edited by P. Kyrö and C. Carrier. Tampere: University of Tampere Entrepreneurship Education Series, pp. 44–66.
- Kyrö, P. 2015. "The Conceptual Contribution of Education to Research on Entrepreneurship Education." *Entrepreneurship & Regional Development* 27 (9–10): 599–618. doi:10.1080/08985626.2015.1085726.
- Liñán, F. 2004. "Intentions-based Models of Entrepreneurship Education." *Piccola Impresa/Small Business* 3: 11–35.
- Liñán, F. 2007. "The Role of Entrepreneurship Education in the Entrepreneurial Process." In *The Handbook of Research in Entrepreneurship Education*, edited by A. Fayolle, 230–247. Cheltenham: Edward Elgar.
- Lorz, M., S. Mueller, and T. Volery. 2013. "Entrepreneurship Education: A Systematic Review of the Methods in Impact Studies." *Journal of Enterprising Culture* 21 (2): 123–151. doi:10.1142/S0218495813500064.
- Martin, B., J. McNally, and M. Kay. 2013. "Examining the Formation of Human Capital in Entrepreneurship: A Meta-analysis of Entrepreneurship Education Outcomes." *Journal of Business Venturing* 28: 211–224. doi:10.1016/j.jbusvent.2012.03.002.
- Morris, M. H., J. W. Webb, J. Fu, and S. Singbal. 2013. "A Competency-based Perspective on Entrepreneurship Education: Conceptual and Empirical Insights." *Journal of Small Business Management* 51 (3): 352–369. doi:10.1111/jsbm.12023.
- Moylan, T., N. Gallagher, and C. Heagney. 2016. "Exploratory Studies on the Use of Experiential Learning in Entrepreneurship Education." *AISHE-J* 8 (1): 2531–25323.
- Mwasalwiba, E. S. 2010. "Entrepreneurship Education: A Review of Its Objectives, Teaching Methods and Impact Indicators." *Education + Training* 52 (1): 20–47. doi:10.1108/00400911011017663.
- Nabi, G., F. Liñán, A. Fayolle, N. Krueger, and A. Walmsley. 2017. "The Impact of Entrepreneurship Education in Higher Education: A Systematic Review and Research Agenda." *Academy of Management Learning & Education* 16 (2): 277–299. doi:10.5465/amle.2015.0026.
- Neck, H., and P. Greene. 2011. "Entrepreneurship Education: Known Worlds and New Frontiers." *Journal of Small Business Management* 49 (1): 55–70. doi:10.1111/jsbm.2011.49.issue-1.
- Neck, H., P. Greene, and C. Brush. 2014. *Teaching Entrepreneurship: A Practice Based Approach*. Cheltenham: Edward Elgar.
- Piperopoulos, P., and D. Dimov. 2015. "Burst Bubbles or Build Steam? Entrepreneurship Education, Entrepreneurial Self-efficacy and Entrepreneurial Intentions." *Journal of Small Business Management* 53 (4): 970–985. doi:10.1111/jsbm.12116.
- Pittaway, L., and J. Cope. 2007. "Entrepreneurship Education: A Systematic Review of the Evidence." *International Small Business Journal* 25 (5): 479–510. doi:10.1177/0266242607080656.

- QAA - Quality Assurance Agency for Higher Education. 2012. *Enterprise and Entrepreneurship Education: Guidance for Higher Education Providers in England, Wales and Northern Ireland*. Gloucester: QAA.
- Rasmussen, E., S. Mossey, and M. Wright. 2011. "The Evolution of Entrepreneurial Competencies: A Longitudinal Study." *Journal of Management Studies* 48 (6): 1314–1345. doi:10.1111/j.1467-6486.2010.00995.x.
- Rauch, A., and W. Hulsink. 2015. "Putting Entrepreneurship Education Where the Intention to Act Lies: An Investigation into the Impact of Entrepreneurship Education on Entrepreneurial Behaviour." *Academy of Management Learning & Education* 14 (2): 187–204. doi:10.5465/amle.2012.0293.
- Sewell, P., and L. Dacre Pool. 2010. "Moving from Conceptual Ambiguity to Operational Clarity: Employability, Enterprise and Entrepreneurship in Higher Education." *Education + Training* 52 (1): 89–94. doi:10.1108/00400911011017708.
- Shane, S. 2012. "Reflections on the 2010 AMR Decade Award: Delivering on the Promise of Entrepreneurship as a Field of Research." *Academy of Management Review* 37 (1): 10–20. doi:10.5465/amr.2011.0078.
- Sherman, S. 2013. "Training the Next Generation of Social Entrepreneurs." In *Creativity and Entrepreneurship: Changing Currents in Education and Public Life*, edited by I. Book and D. Phillips, 162–170. Cheltenham: Edward Elgar.
- Shinnar, R., M. Pruett, and B. Toney. 2009. "Entrepreneurship Education: Attitudes across Campus." *Journal of Education for Business* 84 (3): 151–158. doi:10.3200/JOEB.84.3.151-159.
- Short, A. 2016. "Learning to Be: Piloting the Use of a Role Playing Serious Game to Teach Operations Management." *AISHE-J* 8 (1): 2721–27213.
- Tautila, V. P. 2010. "Learning Entrepreneurship in Higher Education." *Education + Training* 52 (1): 48–61. doi:10.1108/00400911011017672.
- Thrane, C., C. Blenker, S. Korggaard, and H. Neergaard. 2016. "The Promise of Entrepreneurship Education: Reconceptualising the Individual-opportunity Nexus as a Competence Framework for Entrepreneurship Education." *International Small Business Journal* 34 (7): 905–924. doi:10.1177/0266242616638422.
- Van Gelderen, M. 2010. "Autonomy as the Guiding Aim of Entrepreneurship Education." *Education + Training* 52 (8/9): 710–721. doi:10.1108/00400911011089006.
- Vanevenhoven, J. 2013. "Advances and Challenges in Entrepreneurship Education." *Journal of Small Business Management* 51 (3): 466–470. doi:10.1111/jsbm.2013.51.issue-3.
- Volery, T., S. Müller, F. Oser, C. Naepflin, and N. Del Rey. 2013. "The Impact of Entrepreneurship Education on Human Capital at Upper-secondary Level." *Journal of Small Business Management* 51 (3): 429–446. doi:10.1111/jsbm.2013.51.issue-3.
- Winkel, D. 2013. "The Changing Face of Entrepreneurship Education." *Journal of Small Business Management* 51 (3): 313–314. doi:10.1111/jsbm.2013.51.issue-3.