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# International Reflections on the Challenges of Entrepreneurial Education Working with Small and Medium-Sized Enterprises

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ORIGINAL ARTICLE

# International Reflections on the Challenges of Entrepreneurial Education Working with Small and Medium-Sized Enterprises

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**Abstract**

With the European Council looking to Higher Education Institutions (HEIs) to help support the strategic goal of increasing small and medium-sized enterprise (SME) activity through increased entrepreneurial education, we reflect on the challenges facing both HEIs and SMEs through the lens of the European Commission's Horizon 2020 funded research and innovation staff exchange project 'Global Entrepreneurial Talent Management 3' (GETM3). This research generated data during the three-year duration of the project and through a mixed-methods approach. The effectiveness of entrepreneurial education against this strategic requirement and the barriers which need to be overcome to achieve it are considered. We observed that common ground between academia and SMEs is favoured where partnerships are interactive, agile and flexible. We finalise this paper by offering a series of recommendations and guidelines to help HEIs work more closely together to fuel further entrepreneurial activity.

## Introduction

In March 2000, the European Council met in Lisbon to agree on a new strategic goal: "*to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion.*" (European Council, 2000) Central to this goal was the creation of a small and medium-sized enterprise (SME) friendly environment to support innovative business practices, and the promotion of an entrepreneurial culture, as mechanisms to help facilitate this transformation. In 2010, the European Commission (EC) published a 10-year strategic plan for smart, sustainable and inclusive growth (European Commission, 2010), which identified entrepreneurship as an essential focus for educational curricula within the EU member states. In the report, SMEs were identified as being battered due to globalisation and a growing economic crisis, requiring support from both the commission and educational institutes to help rejuvenate them through the development of entrepreneurial culture.

To consider the effectiveness of entrepreneurial education within the context of the SME, and to extract recommendations for future activity, we devised a series of key research questions. Using a qualitative methodology, we worked within the EU

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funded Global Entrepreneurial Talent Management (GETM3) project. This is a multi-cultural, multidisciplinary project drawing on expertise in academia and SMEs across Europe and South Korea.

"*GETM3 is a European Union Research Innovation, and Staff Exchange (RISE) project investigating the HRD implications of the way existing and future talent can be managed at work, harnessing the entrepreneurial attitudes and skills of young people*" (Pearce et al., 2019) The project is a €1 million Euros multidisciplinary project that brings together academic and SME insights from participants in five countries (Ireland, UK, Slovenia, Poland, South Korea), with eight academic institutes and eight SMEs (including the Irish SME Association (ISME). The project co-ordinates over 100 members from various disciplines through a total of 270 month-long international secondments, organising 'sandpits' quarterly in each participant country to review entrepreneurship within each national context. GETM3 as a project provides a unique opportunity to exam the critical focus of this paper, to review the state of multidisciplinary entrepreneurial education, and to discuss the requirements of SMEs, their experience, expectations and requirements of entrepreneurship, all within a diverse cultural environment. The inclusion of South Korea within the project offered an additional cultural dimension potentially quite distinct from a European context.

The GETM3 sandpit model uniquely brings together academics and SMEs from across the project to meet in one of five partner countries for about a week on a rotating basis every three months. These 'sandpit' events are a series of discussions, interviews, meetings and visits with other academics and local SMEs to discuss entrepreneurship and talent management. Taking advantage of these collaborative sessions in each of the ten sandpits 2017–2020, the authors conducted participatory workshops, focus groups, semi-structured interviews, informal discussions and meetings with the GETM3 stakeholders (academic institutes, students, SMEs) to address the following key research questions:

1. Does an agreed understanding of entrepreneurship within academia and SMEs exist?
2. Does the SME community have a shared expectation of entrepreneurship education?
3. What are the characteristics of successful HEI/ SME partnerships?
4. What factors support successful entrepreneurship education?

Using each sandpit location as a specific cultural reference point, we aimed to explore the national perspective on each of these themes, seeking commonality of understanding, approach and requirement across the GETM3 stakeholders. As members of the GETM3 project, the authors' own expertise covers a diverse range of academic disciplines such as computer science, social science, design entrepreneurship and information systems. Their academic experience and responsibilities include curriculum development and innovation within SME and non-governmental organisation (NGO) industry contexts, as well as management and leadership experience in international partnerships in Asia and Europe (Lillis & Doyle, 2017). The authors also have over 40 years combined industry experience working with SME and NGO organisations, providing both industry and academic perspectives on entrepreneurship.

In this paper, we use sandpit discussions to explore entrepreneurship from multiple stakeholder perspectives and consider how well academic institutes are performing in servicing the SME requirement. We begin by reviewing the state of entrepreneurship education within the context of HEIs and SMEs, exploring the academic challenge in supporting the goals of the EU in creating entrepreneurial cultures within curricula, and matching the expectations of the SME as significant stakeholders in this relationship. We present recommendations for HEIs which can fuel SMEs engagement in the future. In section two, we briefly review the literature on entrepreneurship, entrepreneurial intention, value models and culturalism to understand existing theory. In section three, we describe the methodology employed, section four is a report of our findings and results, followed by section five, where we discuss these findings in more detail and make recommendations, and section six provides a summary conclusion and suggests areas for further research.

## 1 Literature review

Considering the importance of creating an entrepreneurial culture within the EC strategy, it is worth considering how entrepreneurship emerges. While much of the early literature has focused on entrepreneurial intention (Bird, 1988), seeking to understand the decision process that leads people from intention to action, more recent literature looks at values and motivations in entrepreneurship (Fayolle et al., 2014). When it comes to culture, the idea of cognitive models has been discussed as a factor that significantly impacts intention to start new businesses (Busenitz & Lau, 1996), and that venture creation decision making may include cognitive scripts that are cross-cultural (Mitchell et al., 2000).

With entrepreneurship seen as a strategic imperative for increased economic activity within the EC, the focus has been to look to Higher Education Institutions (HEIs) to become a significant source of entrepreneurial development in Europe. But with many definitions to choose from, entrepreneurship as a term may have subtle or substantial differences in meaning to different groups: "*entrepreneurship is about taking risk*" (Knight, 1921), "*someone who demonstrates initiative and creative thinking, is able to organise social and economic mechanisms to turn resources and situations to practical account and accepts risk and failure*" (Hisrich, 1990), and "*is the practice of starting new organisations or revitalising mature organisations, particularly new businesses generally in response to identified opportunities.*" (Onuoha, 2007). Given the proliferation of definitions, we propose that for this paper that "*entrepreneurship —or entrepreneurial behaviour-could be defined as the discovery, evaluation and exploitation of an opportunity*" (Shane & Venkataraman, 2000), which articulates a definition which can apply to the creation of a new venture, or activity within an SME.

In addition to the vast array of definitions, multiple models exist which describe the process and conditions under which entrepreneurship intention turns to action. For example, historical research has focused on the traits of the individual (McClelland & Mac Clelland, 1961), demographic variables, such as age/gender/education (Reynolds et al., 1994) and the use of social cognitive approaches (Bandura, 2001) to explain entrepreneurship (Hmieleski & Baron, 2009). With multiple models to choose from, educational approaches to entrepreneurship also differ based on the model to which they align.

There are numerous case-studies demonstrating varying pedagogies, including action-based entrepreneurship education in Sweden (Rasmussen & Sørheim, 2006), the application of design thinking as a means for promoting entrepreneurial skills (Val et al., 2017) and the proposal that a perspective of "*entrepreneurship as an everyday practice*" should be adopted (Blenker et al., 2012). Blenker et al. suggest that an individualistic teaching approach should be adopted rather than considering entrepreneurial education as universalistic. Jones and English (2004) describe a student-centric learning approach arguing that a different learning environment is required to support the study of entrepreneurship within an HEI setting. There is a growing call for not only a new approach to entrepreneurial education, but also a new paradigm (Gibb, 2002).

Attempts to measure entrepreneurial education's effectiveness suffer from a lack of definition of a criterion against which to measure. Using the Malcolm Baldrige National Quality Award (MBNQA) evaluation, Vesper and Gartner (1997) conclude that additional criteria are required against which we want to evaluate. A more recent study (Liu et al., 2020) draws on the Triangulation model, looking at measuring improvements in competencies and reducing barriers to entrepreneurial intention as measures of effectiveness. In this paper's context, the important criterion for entrepreneurial education is the effectiveness of entrepreneurship education in support of SMEs. This aligns with the objective of the "promote entrepreneurship" EC policy, which requires that those pre-disposed to create new ventures are supported and encouraged to do so, and that increasing numbers of students should start considering this option (Liñán et al., 2011).

Much of the focus on entrepreneurial education and discussion is focused on stimulating entrepreneurial behaviour in the context of new venture creation (Raposo & Paco, 2011). However, existing SMEs can also benefit from HEI entrepreneurial education with enterprise education centred on developing enterprising people with an attitude of self-reliance. Kompf (2012) and Shockley (2009) further suggest that entrepreneurship and enterprise education should be separated, with the former being taught to individuals seeking to create a business and the latter being delivered across HEIs. It has also been proposed that learning for entrepreneurship within HEIs must take place outside of the classroom environment in a more experiential setting, challenging many of the pedagogical approaches currently in use (Rae, 2010).

SMEs are uniquely positioned to provide experiential environments to facilitate learning, allowing the student to work on real-world, tangible problems within an entrepreneurial environment. Higgins and Elliott (2011) suggest that the learning should be action-oriented, thus helping students become practitioners, and add that "real life" cannot be adequately taught using formal modes of passive education, which are unlikely to have a significant impact on the development of potential entrepreneurs. With SMEs within the European economic zone making up 99% of the 16 million companies in existence and accounting for more than two thirds of the total workforce, there are significant opportunities for HEIs to engage with meaningful experiential learning activities as part of entrepreneurial education.

## 2 Methodology

This research is based on qualitative data generated through a mixed methods approach (Hesse-

Biber, 2010) in which academics and SME stakeholders worked together, over the 3-year duration of the GETM3 project, to develop an understanding of entrepreneurial education and the role of HEIs in talent development. From the outset, the core approach of the GETM3 project was a commitment to participatory workshops, referred to as 'sandpits', and the importance of capturing rich, detailed qualitative data (Geertz, 1973) that would support the development of new knowledge, shared understanding and innovative approaches to entrepreneurial education.

Participatory workshops, of the kind used here, draw on methods developed in participatory rural appraisal (PRA) approaches in the 1970s (Chambers, 1994; Mukherjee, 1993) in which groups of stakeholders are supported to work together to develop solutions to problems and issues at a local level. Reflecting on the initial PRA approach in the global South, Chambers (2015) captures the main thrust of the approach: "In PRA, outsiders convene and facilitate. Local people are the main actors. It is they, typically in small groups, who map, diagram, observe, analyse and act" in relation to "natural resource management, agriculture, programmes for equity, empowerment, rights and security, community-level planning and action and participatory statistics" (p.31).

Such an approach provided a platform and inspiration for the participatory sandpits used in GETM3. However, instead of 'outsiders' facilitating group activities, sandpits were developed and facilitated by the GETM3 team as inclusive multi-stakeholder events. In most cases, sandpits lasted for five days and involved a range of participatory activities, including: project planning, concept development, visual mapping, visual–haptic activities, scenario building, interactive exercises, best practice modelling and case study capture. In addition, more conventional qualitative methods of data collection were employed, including semi-structured interviews (Kvale, 1996) and digital qualitative surveys (Braun et al., 2020; de Vaus, 2002).

Whilst participatory workshops were constructed as ways to engage often vulnerable or excluded stakeholders in project development and delivery, there has been a shift in recent years to recognising the potential role of participatory workshops as a source of data collection in their own right (Ørngreen & Levinsen, 2017) and in a variety of contexts. Ahmed and Asraf (2018), for example, recognises the ability of such an approach to provide (a) spaces for facilitated engagement, (b) space to work with multiple stakeholders, (c) support for sustained researcher observation as well as (d) opportunities for participant observation.

As a result, each sandpit generated tangible outputs, including sandpit reports as well as notes and reflections, audio-video materials, visual maps and diagrams and interactive resources. Furthermore, those participating in sandpits were involved in one-to-one qualitative interviews in which they were asked to reflect on the themes of the project, their learning and development and all participants. As a condition of involvement in the project, they were asked to complete semi-structured online surveys to capture in detail their own learning and capacity building as a result of involvement in the project.

In total, there were ten sandpits (two in the UK, three in Ireland, one in Poland, three in Slovenia and three in South Korea) each with between 25 and 60 participants with academic and SMEs present in all sandpits. Each sandpit adopted a specific project-related theme related to talent management and the role of SMEs. To participate in sandpits, prospective participants were provided with project information sheets and were asked to complete data consent forms relating to all sandpit activities. All participants were given the right to withdraw from the project at any point. In keeping with the European Commission's expectations, all project data are, where possible, anonymised and stored electronically and accessible only by the project team. The GETM3 project has received ethical clearance from all HEIs involved in the project and meets the stringent EU ethics and data governance procedures set out in the funding terms.

The outcome of this project is a wealth of qualitative material that captures not only the experiences of workshop participation, but of the challenges academic and SME staff see concerning entrepreneurial education. In keeping with the qualitative nature of this project, the findings and reflections included in this paper emerge from the extensive data set generated through this project as well as the reflection of the authors, all of whom are core members of the GETM3 project team who have participated in sandpits.

## 3 Results

The following section outlines the results for each of the key research questions identified in the introduction. These emerged from three years of qualitative data collection and analysis. All data were collated and, if necessary, translated into English. An iterative thematic analysis approach was employed to reveal the emerging themes (Miles & Huberman, 1994), patterns and deviations (Braun & Clarke, 2006). The initial coding and thematic

mapping were developed by two researchers in tandem and then reviewed by the other two. The analysis comprised close review of the various materials, coding meaningful fragments and framing codes into themes and subthemes. Indicative quotations from the data were assigned to each subtheme. These were then discussed to identify experiences and reflections in the context of these research questions. It is important to note that these results are interrelated and overlapping (Yin, 2011), as is often the case with qualitative data. The key findings are summarised in Table 1.

### 3.1 There is No common language, No common understanding

> *"The problem with the term entrepreneurship is that I don't know any two people who would agree with its definition. Is there a difference between entrepreneurial behaviour, entrepreneurialism, entrepreneurship or is it all the same thing? … it's all too vague"* (Polish academic interviewee, 2017)

A central finding that emerges in all the discussions is the challenge of language and etymology; what do we mean by the concepts we use to describe this kind of education and how are different concepts understood by different participants. Ultimately, we find that entrepreneurial education is not a single unified, homogenous activity as there is no agreement on what it is trying to achieve. The terms are many and the understanding is diverse. Our results demonstrate that there is a need for a common agreed language for this area of activity.

### 3.2 There is No common requirement from SMEs

> *"We just need people who can do the job and grow with us!"* (Korean SME focus group participant, 2019)

Here we find that there are many assumptions made by HEIs on what SMEs want, what they need and, as a result, what HEIs should deliver. Through further interrogation, however, we ascertain that SMEs either want very different things or, as was the case with several GETM3 partners, what they want is particularly vague. The above quote demonstrates, with some frustration, what a particular SME leader really wanted from a HEI graduate after much discussion about entrepreneur attitudes, skills and dispositions. An implication of this is that SMEs are often unable to articulate their needs in a way that HEIs can understand and support.

### 3.3 Common ground emerges where partnerships are interactive

> *"Where it works, it really works. But that requires us [SMEs] to work with you [HEIs] properly, over a long period of time to establish a real understanding and then we can get them [students]into the right frame of mind … to make a difference."* (Slovenian SME interviewee, 2018)

Here it is clear that success in entrepreneurial education emerges through effective partnerships between HEIs and SMEs and, as a result, between the SME and the student. An effective, open and interactive three-way partnership of this kind overcomes the challenges of language to create opportunities for genuine SME requirements to emerge in real time, rather than in a preconceived vacuum. At its core, what we find here is that we need to move from an abstract discussion or understanding of entrepreneurial education to a practical engagement between the education and the real-world.

### 3.4 Agility and flexibility in education supports effective partnerships

> *"If we weren't so hamstrung by module descriptors, learning outcomes and one size fits all approaches to education then we'd be able to be more responsive in how we support our students and, ultimately, the businesses that they work with."* (Irish academic interviewee, 2019)

Table 1. *Key research questions and results.*

| Research Question | Result |
| --- | --- |
| Does an agreed understanding of entrepreneurship within academia and SMEs exist? | 3.1 *There is no common language, no common understanding.* |
| Does the SME community have a shared expectation of entrepreneurship education? | 3.2 *There is no common requirement from SMEs.* |
| What are the characteristics of successful HEI/SME partnerships? | 3.3 *Common ground emerges where partnerships are interactive.* |
| What factors support successful entrepreneurship education? | 3.4 *Agility and flexibility in education support effective partnerships.* |

To make entrepreneurial education work effectively we need agile systems and processes within HEIs. A single module, one-size-fits-all approach to the uniform construction of modules/units, programmes, assessments and timetables, all monitored through key performance indicators (KPIs), limits the amount of what one of our members of the academic team described as, 'educational wiggle room'. Our contention here is that we need agile education, not a single model, which can match the changing requirements across disciplines, cultures, SME requirements and domains. There has to be flexibility and contextual education which may mean there is no one solution, but rather a broader educational approach that permeates HEI approaches to developing and delivering entrepreneurial education.

Whilst this section has outlined four key interrelated findings that have emerged from GETM3 sandpits, formal interviews and informal conversations that are critical of current practice, there is also a wealth of findings that capture what works and the positive work that is happening within between HEIs and SMEs. The GETM3 project is an example of a successful initiative that brings together academics and SMEs to discuss best practices and to share experiences. The diversity of approaches and varying levels of success underpin the findings presented.

## 4 Discussion

As demonstrated in the previous section, the key findings from the GETM3 project have all demonstrated a disconnect at the heart of entrepreneurial education, irrespective of location and context. What emerges from these findings, however, are the implications for practice and how HEIs move forward in the construction of entrepreneurial education. Therefore, the following discussion picks up on each point, exploring these challenges in more detail and exploring how, through an evidence-based rethinking of the processes and practices of entrepreneurial education, we can respond to these challenges. In doing so, we support the work of SMEs more holistically. Each of the following points offers reflections on the way forward and presents a contention or proposal for further development.

### 4.1 The need for a common language

We have shown in the literature that there are multiple definitions for entrepreneurship. There are even different variations of the term, which may have subtle differences when used. With the literature trying repeatedly to define this term, we sense we are working with a shifting understanding of something with no definitive definition within academia If so, how can we assume there is consistency within SMEs, government or even the general population of what these terms mean in practice. As discussed throughout the project, it is important to recognise that entrepreneurship has long been the preserve of business and management studies and that this is something that has potentially shaped the way we define it.

The implications of this, however, is how we turn a loosely defined concept into a module, programme or, more broadly, a set of pedagogical practices. If we allow multiple definitions, then how can we agree what we are trying to achieve within an educational context? It is this challenge that scholars such as Val (2017), Blenker et al. (2012) and Rasmussen (2006), amongst others, are seeking to address. A core reflection of the GETM3 project is that if we have multiple goals based on our understanding of what this is all about, it stands to reason that we will attempt to achieve that goal using different means and different pedagogical approaches. There is clear evidence from the literature that we are doing exactly that - trying to achieve a goal which is unclear, diverse and shifting. So how can we possibly succeed?

A common language provides a common basis of communicating requirements. Terms without common understanding which are open to interpretation provide false states of comfort which when actualised can result in outcomes vastly different from one party's expectations. If entrepreneurial education is to delivery on its full potential, then we need to be clear what the educations requirements are and are not. To do this we, as a multidisciplinary sector, require more clarity in terminology.

### 4.2 The need for nuanced understanding of what SMEs are looking for

Even if the academic community within business management, and outside of business management agrees with these terms, the next thing to consider is if this has anything to do with supporting the SME. As stated already, SMEs need also to agree on what they need, which in many cases may not be entrepreneurial traits of talents, but possibly skills that can be honed like teamwork, initiative, communication, ingenuity, cultural awareness and problem-solving. Some SMEs, however, may need more specific behaviours to reinvent their business

model, seeking new opportunities in the marketplace and creating new value for customers. It is more likely that an SME will define their requirements based on specific competencies, traits or behaviours, rather than using terms like entrepreneurship.

If the goal is to support the SME through entrepreneurial education, then the variability in the definition of terms, the variability in the needs of SMEs and a lack of a common language to describe all of this must be resolved. We need to be much more precise in our education goals or we will continue to observe a mismatch between educational activity and SME requirements.

It is also worth considering that entrepreneurial education does not have to be a single course or programme. The skills required to support the SME may be already built within many courses and modules. Suppose the aims of the EU are solely for business creation. In that case, there are already existing courses that focus on this as a specific outcome, which some might describe as enterprise education rather than entrepreneurial education. It could even be argued that entrepreneurial intention converted to entrepreneurial action in the form of innovative business creation is, in fact, the correct articulation of the EU requirement. With an agreed objective, we could then begin creating fit-for-purpose education programmes that have measurable key performance indicators.

What this reflects is a broader challenge facing HEI academics involved in real-world link up education. As educators and GETM3 project members, much of our planning for employer-focused education is based on assumptions about the market, the requirements of future employers and, in the case of entrepreneurial education, the expectations of SMEs who, we all believe, have specific aims and needs. Yet these needs and expectations are elusive and difficult to pin down. Whilst this reflects the broader challenges of the HEI industry partnerships (see Dada & Fogg, 2016; Decter et al., 2011; Huggins et al., 2008 for examples) are a specific challenge in working with SMEs.

A potential reason for this over-complication lies in the tendency to conflate entrepreneurship and enterprise education (Kompf, 2012; Shockley, 2009) and, as was discussed throughout the project, the drive to create business construction and product development initiatives (approaches prominent in design, engineering and business programmes). What such an approach does is drive entrepreneurship through a specific disciplinary context rather than through a broader set of entrepreneurial traits or competencies.

### 4.3 Dynamic partnerships are key

When we do not have common terms, or when we are not sure of the requirements, then when it comes to working with SMEs, we need to get students into the SME workplace. Here they can start to experience a sample of a real-world environment and we can begin to build, in real-time, our own knowledge and understanding of settings, expectations, needs and requirements, essentially adopt an action learning approach (Revans, 1982) to placements and other forms of experiential learning.

What GETM3 stakeholders have demonstrated is that placement programmes as work-based activities are excellent for demonstrating requirements which are often poorly articulated. Notions such as 'company fit', for example, are frequently used phrases but become obvious when working within a company. By having the academic team involved in a review of placement with the company and the student, relevant feedback can be obtained on how well suited the students are to the next steps in their career.

Industry mentoring is also another way of bridging the gap between the student and their careers. The SAER (old Gaelic for craftsman) industry mentorship program at the Technological University Dublin is an exemplar of early career mentoring for students.120 students are being mentored by 60 industry managers who are being trained by the HEI to help students understand the work environments ahead of them and to help them focus on how to be successful in the future. This is an example of a non-practice-based dynamic partnership where students, HEIs and industry can work together to create dynamic relationships.

Because industries and companies can have different needs, successful partnerships are those that bring multiple SMEs into the academic world to see how students are educated. But they also bring academics into industry to see what the students will do once they graduate, what skills they need, in what areas they are strong, and what areas need additional focus. We must blur the lines and create value-added partnerships where students are better prepared for their future careers, institutes have a better understanding of the SME requirements, and SMEs provide feedback on their needs.

### 4.4 Towards agile education and flexible HEIs

Looking for ways for academic teams to interact with SMEs and with students is a very effective way to obtain real-time feedback into courses, which can then be brought to programme committees to

review. However, feedback and change are different things. HEIs should seek ways to embed transversal skills e.g. innovating thinking, critical thinking and reasoning into all aspects of their programmes as a matter of course. Reinforcing learning outcomes (LOs) across modules to support higher level LOs which include synthesis and analysis is just good practice.

Often, quality assurance procedures within the HEIs, which are there to support and ensure academic integrity of programmes, may also be barriers to agile and rapid changing of modules, courses and LOs. It may be that we do not need to change a module, we just need to introduce core LOs which are 'entrepreneurial' in nature throughout our courses. The challenge, however, is that an HEI sector which is being shaped towards a consumer model has developed systems, processes and structures that limit agile/flexible approaches to the construction of learning. This, in turn, limits the reflexivity of practice.

In the case of English HEIs, the move to higher tuition fees (in some cases tripling) and enforcement of consumer rights has cemented the notion that students are *consumers.* As a result, power has shifted away from HEIs as providers of education to students as consumers of education (Tomlinson, 2014). The impact noted by GETM3 participants was a shift towards quality education in which centralised KPI-driven processes result in slow change and development. This is out of step with the needs of SMEs and other industry partners.

## 5 Conclusion

In summary, this paper captures the central challenges that lie at the heart of entrepreneurial education in its conceptual construction and how this shapes subsequent practices. In drawing on the experiences within the GETM3 project, this paper demonstrates a clear need for a more holistic understanding of entrepreneurial education. It should, we argue, draw on a language and approach that is cognisant of the challenges and structures of HEIs and the needs of SMEs. To do this a further multidisciplinary dialogue is required, seeking to push entrepreneurial education outside of traditional disciplinary silos and to respond to the following challenges.

A) *A need for a typology of practices in support of the multitude of entrepreneurial behaviours and traits which make up the spectrum of entrepreneurial education.* Such an approach would recognise that one size does not fit all and that perhaps we need formally to recognise the multiplicity of approaches and understandings of entrepreneurship. This is, after all, in keeping with the diverse body of literature outlined in this paper that captures the diversity of practice. A mapping of behaviours, traits, competencies and transversal skills to education practices could help HEIs in the creation of more flexible and dynamic education which can react to changing requirements.

B) *A need for dialogue between SMEs and HEIs to innovate beyond the transactional placement provision approach.* It is important to acknowledge that there are extensive examples of dynamic and innovative partnerships but that these approaches need to become the norm at an institutional level and beyond specific disciplinary borders. Dynamic partnerships that create space for dialogue with SMEs and industry partners are essential, we believe, to capturing the role of the contemporary HEI and the importance of both local and global connections.

C) *The need for responsive, flexible and agile educational approaches within HEIs which can be both innovative and creative in support of educational development.* At the heart of this recommendation is recognising that HEI leaders can, and in some cases already do, trust programme teams to generate opportunities that meet programme aims/learning outcomes whilst also giving space for new ways of working. There is, of course, a risk to this and ultimately quality assurance and KPIs should be used to monitor the effectiveness and success of such changes.

From the discussions and reviews within the GETM3 project sandpit environments, it was evident that there is significant activity ongoing in support of the EC strategy to grow SME capability within Europe. This activity is highly varied in nature, reflecting the broadly varying approaches seen within the literature. Further research is required to provide greater alignment between the efforts of the HEIs in the development of entrepreneurial education and SME and EU expectations. With articulate, commonly agreed definitions, the match of requirements and expectations can be achieved but only if the relationships between HEI and SME remain innovative, flexible and agile in nature.

### 5.1 Limitations and future directions for research

This paper sets out to respond to the challenges identified by the European Council in 2000, using new data, ideas and recommendations around

entrepreneurship education. The generalisability of these findings is limited, however, by the pre-defined project population within the context of the GETM3 project, so further research beyond this project network would enhance the overall understanding of the effectiveness of entrepreneurial education across different countries, HEI groupings and SME sectors.

More specifically, further research could address the need for clearer common agreement on terminology to facilitate discussion of shared goal setting. This could start to bridge the gap between SMEs' and HEIs' expectations. Further investigation into each of our key findings would enable a more nuanced understanding of how to develop better practice in the construction of more productive partnerships between SMEs and HEIs. Further mapping of the behaviours, traits and competencies within both local and national contexts would allow HEIs to service better the needs of SMEs through more targeted entrepreneurial education.

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