Value Creation Programmes: Lessons from an early stage implementation

Abstract

There is limited research addressing the development of action-based entrepreneurship education, and in particular, learning through venture creation (Ollila and Williams Middleton, 2011, Jones et al., 2014; Lackéus et al., 2016). These Venture Creation Programme's (VCP) are practice-oriented degrees, which focuses on the development of the students' entrepreneurial effectiveness (QAA, 2012). This is achieved by embracing the concept of 'learning by doing' (Gibb, 2002) which ensures students are acquiring real knowledge, using a range teaching pedagogies (Rae, 2005; Kyrö, 2008; Gibb, 2002) to ensure the curriculum enhances the learning of all students both in the startup and in group learning environments.

These VCP programmes can take significant time to develop, due to institutional, programmatic and pedagogical challenges (Thursby et al., 2009). Nonetheless, pedagogic foundations and programme design for venture creation focused education have been proposed (Gibb, 1993, 2011; Ollila and Williams Middleton, 2011) and applied by a number of Universities.

The aim of this paper is to present the lessons learnt from this early stage implementation to invigorate the discussion surrounding VCPs by exploring a number of issues central to the successful implementation. These include curriculum design, experiential learning activities, types and methods of assessments, and online learning environments for entrepreneurial students.

This paper leads the educator to a more comprehensive understanding of designing a VCP programme and more broadly, the development practice-oriented modules in entrepreneurship. We believe that by doing so they can contribute important insights to the broader ongoing discussion surrounding the development of experiential entrepreneurial education programmes (Jones et al., 2014; Lackéus et al., 2016), their impact (Kozlinska, 2016) and the ways in which university-based entrepreneurship programs, incorporating real-life venture creation, can bridge the gap (Lackéus and Williams Middleton, 2015) between entrepreneurship education and venture creation.

Introduction

In September 2016 the University of Worcester became one of only a small number of institutions in the UK to launch a degree in Entrepreneurship where venture creation is a central, assessed, element of learner participation. This focus on learning 'for entrepreneurship' means that students study the mindsets, skills and practices of entrepreneurs while working in their own companies, building and developing them alongside their academic study.

There is limited research addressing the development of these kinds of action-based entrepreneurship education programmes; in particular learning through venture creation (Ollila & Williams Middleton, 2011; Jones et al., 2014; Lackéus et al., 2016). As the newest Venture Creation Programme (VCP) in the UK we felt that their experiences, the challenges we have faced, the successes and failures and our reflections upon these might make a useful contribution to the literature especially for anyone considering creating a similar programme.

Our Philosophy

Our programme focuses not on learning 'about entrepreneurship' characterised by the academic study of entrepreneurial activity. Instead, it positions the student to learn 'for entrepreneurship' (QAA, 2012) meaning that they are challenged to develop not only their knowledge and understanding of entrepreneurship and, its related skills and abilities but, also, the practice of entrepreneurial activity. This is achieved by embracing the concept of 'learning by

doing' (Gibb, 2002) contextualising and individualising learning experiences so that these synchronize (Bozward & Rogers-Draycott, 2017) with key moments in the students venture development. This allows for the immediate application of knowledge and skills to the venture, the usefulness of which can then be reflected on and, built upon depending on the students needs.

We decided not to use the QAA (2012) definition of entrepreneurship because we found it to be limiting in its scope and context. Instead we chose to draw on a broader literature (Bruyat & Julien 2001; Fayolle 2007; Savasvathy & Venkataraman 2011; Lackéus 2016; Shane & Venkataraman, 2007; Moberg, Stenberg & Vestergaard, 2012) eventually focusing, specifically those authors who have addressed the action of venture creation in a similar educational context more directly and whose approaches we felt complimented our goals for the programme (Fayolle 2007; Jones et al., 2014; Lackéus, 2016) this led us to decide that, in our particular context, entrepreneurship would be defined as follows:

'Entrepreneurship is finding and developing opportunities to create value.'

This frames Entrepreneurial activity in very broad terms and focuses it on the creation of 'value' (Lackéus, 2016) a term which has been left deliberately ambiguous to give students an opportunity to develop ventures which encompass a broad range of entrepreneurial action; not just the generation of revenue or profit.

The definition is also permissive rather than prescriptive, it assumes nothing and allows students a 'freedom' to explore their entrepreneurial selves (Farmer et al., 2011) without the constraint of a specific direction. Instead, we provide a framework of activities which can be completed with a number of outcomes as long as progression toward to overarching learning goals can be evidenced.

This means that the experience of learning through the programme is most definitely not a 'spectator sport' (Tinto, 2003) students are actively challenged to participate across the curricula. This forms the basis of the pedagogical methods applied across all of the modules either directly, as content, or indirectly, through an influence on programme design and structure.

Programme Design & Structure

Programme Design

The BA (Hons) Entrepreneurship Programme (UCAS: N106 & 107) is targeted at students who wish to combine study towards an honours degree with the opportunity to start their own venture in a supported environment with guidance from specialist lecturers and practising entrepreneurs.

The programme focuses on the active experience of business creation underpinned by relevant academic knowledge and the development of a broad base of entrepreneurial skills and capabilities. This is delivered through a mixture of dedicated sessions, simulations, work-based learning, enterprise events and interactions with entrepreneurs.

To position the degree in an international best practice context, other VCPs were reviewed during the programme design; this along with input from the business community and the latest guidance from the subject benchmarks statements (QAA, 2012) and Business and Management (QAA, 2015) formed the academic discipline foundation and provided a means for students and, the wider community to understand and, compare, the context and characteristics of the programme.

The programme schedule has been designed with formal sessions on one full day each week thereby maximising the time spent 'on task' with other days set aside for additional support (mentoring, business clinics, events and team work) and for students to develop their ventures. To foster an authenticity of experience all of modules within the

programme are taught by experienced entrepreneurs (Hopkins & Feldman, 1989) with further engagement from local business practitioners who provide mentoring and other associated support..

To develop a coherent learning narrative throughout the degree we have designed a staged approach to entrepreneurial development (Bozward, & Rogers-Draycott, 2017) which draws on the work of Kuratko, Morris & Schindehutte (2015) to break the entrepreneurial effort into nine specific steps each step comprising a number of focal competencies which have to be addressed as part of the students entrepreneurial development. This framework forms the operational core of the degree, an easily identifiable map of key 'waypoints' for educators and students which must be achieved for progression to take place. This in turn helps to coordinate learning activities to the differing stages of venture development across the degree and within individual modules.

To facilitate this development it is recognised that reflection (Jack & Anderson, 1999; Harvey & Evans, 1995) plays a crucial role in entrepreneurial development, as part of the programme students reflect both on their own development and that of their ventures. To facilitate this they are required throughout the programme to assemble a journal of critical reflections (Cope & Watts, 2000; Mezirow, 1990) addressing their experiences at regular intervals. This use of reflective journals in the development of professional best practice, especially in Nursing and Education has been embedded within the curriculum for many years, as it encourages students to integrate theory with practice, appreciate the world on their own behalf, and turn every experience into a new potential learning experience (Wong et al., 1995). The programme uses the incubation work-based learning modules to develop this practice as these run throughout the degree, providing a longitudinal point for reflection.

The work-based modules and simulated projects are not only a key differentiator of the programme they a crucial to the development of core venture skills (Timmons & Spinelli, 1999; Zhong-wei, 2008) linking the theory and practice of entrepreneurship together in practical endeavours. These have been structure with varying levels of staff intervention to match the progression of the students. In earlier years there is a greater element of 'control' (Jones et al., 2014) and risk mitigation to provide a 'safe space' (Jones et al., 2014) in which the student can experience failure and reflection in a supported environment and be guided through the process. As they progress through the degree these 'training wheels' are removed and students are actively challenged, for example by developing international business relationships and academically with negotiated modules which push the students learning and business horizons.

Finally, every student is provided a place in the University's business incubator, they have access to this for the duration of the programme. Facilities include a 24/7 open working area, postal address and access to meeting rooms. This location also acts as a hub for the broader degree community to engage with the students. The development of a community (Zimmer, 1986; Kilkenny, Nalbarte & Besser, 1999) around the programme was seen as very important in embedding the students within the local business ecosystem. The cornerstone of this strategy was recruiting 15 Entrepreneurs in Residence (EiR) from a diverse range of businesses. These individuals mentor the students, provide weekly business clinics and a facebook Q&A forum service. All students are offered at least one mentor to support their personal growth, one mentor (Megginson, 2006) to support the developmental stage of their business and, another to provide local support relating specifically to the industry or physical location of their business. Perhaps, most importantly, these people provide invaluable links between the university and the local business community helping the students to network and integrate.

Programme Structure

The three year programme is split into two streams which focus on the development of

1. The Entrepreneur; and

2. The Business Venture.

The table below provides a breakdown of the taught modules and the split between the two streams.

Table 1: Taught Modules in BA Entrepreneurship Programme

Taught Modules (15 Credits) 7.5 ECTS	Entrepreneur	Business Venture
Year 1 - Level 4	- Cultivating the Entrepreneurial Mindset - Managing Communications in a Start-up	- New Venture Formation - Business Plan Laboratory
Year 2 - Level 5	- Applied Leadership & Management - Leading and Managing Teams and Individuals	- Finance for Entrepreneurs - Selling and Sales Management for Entrepreneurs - Advertising theory and practice - Startup Advancement (Negotiated module)
Year 3 - Level 6	- Managing Innovation in the Startup Organisation - Focusing on Results and Change Management - Managing Financial Decision Making - Decision Making for Improved Performance	- Digital and Social Marketing - International Trade (Negotiated module)

The programme is designed to provide flexibility in the final year so that students can tailor their modules and, assessments to suit the needs of their developing business. These negotiated modules allow the students to formulate the learning outcomes over the module period rather than from outset, recognising that even at this stage both business and personal needs might rapidly develop. The programme is structured around 50% of the credits each year being achieved from Work Based Learning (WBL) modules (Boud & Solomon, 2001; Raelin, 1997).

Table 2: Work Based Learning Modules in BA Entrepreneurship Programme

|	Work Based Learning Modules (20 Credits / 10 ECTS)
Year 1 - Level 4	- Team-based Incubation Project - Business Startup Research
Year 2 - Level 5	- Business Operations - Customer Acquisition
Year 3 - Level 6	- Negotiated Module - Investment Readiness / Growth Project

Assessment Strategy

The available assessment strategy within Higher Education has generally diversified (Fry, Ketteridge & Marshall, 2008) and best practice (Rust, 2002) from a number of sources is available; Draycott, Rae and Vause (2011) for instance, addressed the challenges of assessing enterprise education programmes and proposed a series of principles. These included a flexible pedagogy, outcomes for assessment which are relevant and meaningful to the learner and, clear links between learning experiences and assessments.

A number of other researchers (Bird, 1995; Man, 2007; Rasmussen, Mosey, & Wright, 2011; Sanchez, 2011) have found value in the concept of 'competence' to support the structuring of entrepreneurial education and assessment. Competence, in this form, has a wide-ranging conception encompassing: knowledge, skills, attitudes, behaviours, work habits, abilities and personal characteristics (Le Deist & Winterton, 2007). We (Bozward & Rogers-Draycott, 2017) have set a series of focal competencies for each stage of business creation which are operationalised in a staged framework. This makes it clear what competencies should be assessed at different stages of development.

Across the programme a mixture of assignments is intentionally set in order to maximise opportunities for all students to perform and develop skills relevant to both future study and/or business development. It is important to use both a diverse and a consistent set of assessment types throughout the programme. A consistent set of assessments allows the students development to be meaningfully measured and also ensures the students ability to master this assessment type is supported. A diverse set helps to challenge the students development and provides the opportunity for them to evidence their learning in different contexts which is key part of the degrees philosophy. Consequently this programme uses assessment for learning as well as assessment of learning with a clear view to ensure inclusivity. Figure 1 demonstrates the mixture of assessments types used on the Programme.

Figure 1: Distribution of Assessment Type across the programme
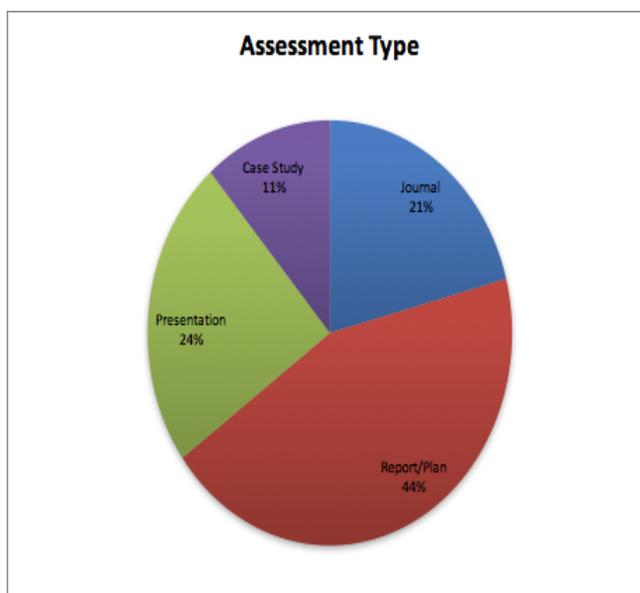
Programme Reflections

In an effort to provide something 'more' which might be of use to practitioners other than philosophy, programme design and assessment structure we felt that it would be appropriate to share some of our reflections on the development of the degree and, in doing so, provide insights into the successes and failures of the programme to date.

To achieve this we took materials we had already gathered from their own reflections (diaries, journals etc.) and added to this with feedback from the students, colleagues and the external examiner. This process led them to identify three groups of reflective data which emerged as the data was collated:

1. Positive Reflections - reflections where content and experience was generally positive;

2. Neutral Reflections - reflections where content and experience were mixed; and

3. Negative Reflections - reflections where content and experience were generally negative.

From these three groups six elements began to coalesce, these presented as key learning moments (Rae, 2012) in the first year of the degree as they addressed important concerns, challenges, achievements and realisations which have affected the programme and will have a distinct impact on its future form and direction (Table 3).

Table 3: Key Reflections

Positive	Neutral	Negative
● Programme Structure ● Degree Community	● Reflective Practice ● Virtual Learning Spaces	● Group Work ● Student Engagement

Programme Structure

The three year programme starts by establishing the business idea and providing the basic skills to start the business. The second year focusses on the sales and operations of the business. The final year develops a sustainable business venture.

When we compare VCP's across the world ("Venture Creation Programs List | We List Venture Creation Programs") there would seem to be an accepted balance between the time spent in the classroom and the time spent focusing on the learners venture. Therefore 50% of the module credits are from work-based learning and 50% from academic study and scholarly activities. This creates a clear narrative focusing the student to work in and on their business, developing the core philosophies of the programme throughout.

This programme does not use examinations as an assessment type and thereby developing a more coherent constructive alignment (Biggs, 2003) which creates a learning environment that supports the learning activities appropriate to achieving the desired learning outcomes and ultimately the assessment tasks. All Law and Accounting accredited modules use exams as the main assessment type and therefore careful selected or re-purposing of the modules was needed to ensure they maintained the programme philosophy and design.

The taught element is scheduled over the same day each week (Wednesday for first years), so that students can maximised the time spent on their business while also having dedicated space to study and develop their other skills. Tuesday's were set aside for support for work-based learning, which included webinars, business clinics and mentoring sessions. Friday were set aside for the first year students for running the market stall in the first semester. The students like this arrangement and most students attended Tuesday and Wednesday throughout the year. Those that didn't attend the Tuesday's gained support via the webinars and telephone mentoring.

The team was made up of one programme leader, Enterprise Manager and six part-time staff. All of whom have entrepreneurship experience starting and running businesses and therefore are academic entrepreneurs (De Silva, 2016). The part time members are practicing entrepreneurs who were portfolio working with a proven academic teaching background. All members of the team were provided opportunities to both teach and research entrepreneurship. The diversity of their backgrounds and current experience encouraged the students to develop greater empathy and respect from the offset. The use of part-time academic staff did create an additional administrative burden on the programme leader.

Setting out a clear structure, timetable and expectations from the start provided a set of assumptions which the students understood and also appreciated. This has generated positive feedback on open days and also through the 1-2-1 academic tutoring sessions where students discuss planning their time and business meetings they are arranging. This 'learning agreement' was seen as one of the core successes between the student and programme as

it provides a basis for understanding and development (both student and programme) which both parties can move forward with over the three years.

The Degree Community

Worcestershire has one University (UoW), one Local Enterprise Partnership (WLEP), one Worcestershire growth hub (WBC) and one County Council (WCC) and therefore the local Entrepreneurship Ecosystem is a simple one in which to encourage the development of a community around such a programme. Initially, we developed the Worcestershire entrepreneurship ecosystem map and shared this with stakeholders, this promoted awareness of what was happening throughout the region while simultaneously promoting our programme. Every one of the 200 organisations on this map we had a working relationship with. The map used the structure and findings from the Babson entrepreneurship ecosystem project research (Fetters, Greene & Rice, 2010; Isenberg, 2010; Isenberg, 2011) to develop the entrepreneurial capacity in defined localities; bringing together the policies, structures, programs and climate that foster entrepreneurship. This tool is used in a number of ways:

- **Mentoring Sessions** - The map is provided to all mentors so they can provide a consistent set of support and also discuss openly what is available with the mentee; and
- **Business Clinics** - When discussing any one aspect of support which is being supplied we can first show the entire ecosystem before drilling down into the details of one aspect. This ensures that the students gain an understanding of the whole.

We advertised for a volunteer Entrepreneurs in Residence (EiR) to provide support to the programme and received 7 applications. Rather than interview them we invited them for drinks and networking with staff and some final year students from other programmes who were currently starting their businesses. This event proved very successful and we decided to take them all on, the only issue being they were all white males and we wanted to have greater diversity. We now have 15 EiR's who are from very diverse industries, backgrounds and experience. As a group they have a broad and varied network, which includes many resources, skills and contacts that have benefitted the students.

This is evidenced by one student's comments "One of the best things I've got out of this course so far is the amount of access to key people in my industry. The connections I make on a weekly basis through the BA in entrepreneurship course are incredible." The EiR's have invested financial in the Entrepreneurship cohort and also in other graduates during this first year of operations. The basic service they provide is student mentoring and a weekly tuesday drop-in business clinic (where no question is a wrong question) which is open to all students. They also have provided 1-2-1 skills development such as telephone cold-calling skills, business process mapping and even gone with students to supplier meetings.

The diversity of the students, their ideas and their business requirements can not be meet by one person or a single organisation and its only through this community that we as educators can provide the ultimate student experience and learning outcomes. Its no longer acceptable to just manage a classroom experience. In Entrepreneurship there is very often conflicting advice and views and it's only through knowledge, mentoring, experimentation and experience that a way can be found for the individual student entrepreneur. We facilitated this and did not constrain it and our community is supporting us in more ways that we can ever image.

Reflective Practice

The programme assumes that learning is best when it is active, when it incorporates experience and when it can be shared and supported through collaboration. As such, there is a strong focus on problem based learning (Hung, Jonassen & Liu, 2008), use of authentic assessment and reflective writing.

Critical reviews of the assessment strategies used in universities and of reflective practice in general (Elton & Johnston, 2002; Findlay, 2008; Palomba & Banta, 1999) assert that reflection and reflective practice are lacking in the

development of a large number of students but that this can be difficult to encourage as it requires the development (on the students part) of a broad range of skills and faculties to enable them to engage with the process effectively.

With that in mind it was decided that a reflective journal would be used in the two work-based learning modules each of the three years. To support this we added reflective writing sessions in the research work-based learning module and reflective practice in the mindset module and linked these together using the VLE's journal entry subsite using additional material and videos.

A number of students began to adopt the habits of a reflective practitioner early in the programme and developed a useful weekly reflective journal which, they felt, supported their entrepreneurial development. These students were getting feedback from four members of staff on a regular basis and, in their writing, acknowledged the benefits that reflexivity had on their learning and also on the development of their businesses.

However, there were a group of students for whom reflection did not come so naturally and further development was required. This, in itself, is a 'reflection' on the nature of reflective practice; it is a lifelong process and an experiential one (Kolb & Kolb, 2005) through which we are developing and redeveloping learning. No one student approaches it from the same starting point and most require different levels of support to achieve something meaningful. This means that even with support de-engagement can be difficult to avoid, in our context it was apparent through poor quality reflections and, a lack of development in some members of the student population..

After speaking to the affected students about the reasons they didn't fully engage with the reflective processes we identified a number of issues. The first was about being judged, both personally and about their business, something which they at times found difficult to accept. The second was that the students personal life can take priority over both academic and business development and, they can also find this difficult to share as they believe it will affect their marks adversely to admit difficulties. The third issue was about reflective writing style which did not come naturally to some of the students. All of these have, at their core, a common element which is that as this was coursework, they thought it had to be 'right' to pass. In fact, reflection is about the journey not just about what was right or wrong and this was the most difficult transition for most to adjust to.

With these in mind we plan to add mid module review sessions both in-class and, individually during personal tutoring sessions. These discussions will be directed toward how reflective practice can support the students learning and ultimately their effectiveness (QAA, 2012) as an entrepreneur. This can be contextualised to the needs of different students and would ensure that we are defining the scope of the reflective practice to their business, the programme and their personal development.

We also intend to use a professional reflective and reflexive facilitator (from a different subject area such as Nursing or Education) who will organise regular individual and group sessions and more informal review sessions where students can regularly discuss reflective issues and investigate different ways of approaching their reflective practice. Using staff in a different subject area with many years of experience will mean a focus on reflective practice and not on their business idea or entrepreneurial endeavours.

Virtual Learning Spaces

A key element of the degree is the use of virtual learning spaces such as the university's VLE (Blackboard) to host material including pre-recorded lectures, sessional activities, reading and extensions tasks. The idea behind this was to allow for 'flipped' (Sams & Bergmann, 2013) approach to learning through both online and in class delivery maximising the one day that students had on campus and extending the learning environment beyond this physical limitation allowing for more delivery via video or audio stream, for example.

To facilitate this, early in the degree design process formats for delivery were created and circulated, VLE areas were established and best practice was shared between staff. However, while some lecturers championed the format and developed for it with ease some resisted this because of time, comfort or technical skills. This immediately sent mixed

messages to the students as delivery and experience was not consistent. As a result, some disengaged with the process at this stage and, only re-engaged sporadically or when forced to for assignments meaning that key elements of the 'flipped' programmes had to be re-calibrated at the last minute to ensure that students who were not engaging online didn't miss any delivery. This in turn led to repetition and also frustration for the students who as 'early adopters' had engaged fully with the online experience.

The most noticeable effect of these issues was on the video based delivery which, having been planned as a key element of one of the modules had almost totally collapsed by the end of the first semester because students found it hard to adapt to a method which, in the end, only one of the staff could use with competence. This meant that timetabling and staffing levels also had to modified to cover classed which had been planned to be delivered distance or via video.

Having spoken to staff and students it became clear that students saw the VLE as a positive but, the mixed delivery methods were confusing and staff saw it as too time consuming even given the formatting help and support that was provided to them. However, the first year of a module has considerable amount of development and subsequent years have less.

In future we intend to provide a video introduction for the students on how to use the VLE on the programme homepage and additional support during the sessions throughout the year. Also, we intend to experiment with a 'flipped light' version of the delivery process which create a lower bar for staff to achieve and also provide a consistent approach across the teaching team, this will be more of a blended approach allowing staff with the skills to do more and staff who find it difficult to be supported and, take other routes to achieving an engaging product. The key to this will be that it is clear to the students how each module will approach the issue and that this will remain consistent across the delivery of that module.

Based on student feedback we have also decided to deliver one of the first modules in the programme via a portfolio assessment based solely within the VLE. We hope that this will ensure that the students engage within the VLE more fully during the crucial early part of the degree. To achieve this we have planned a structure which means that the students will be completing regular tasks toward their assignment promoting engagement, familiarity and development within the structure.

Group Work

The team based project module began in the induction week so that insurance and other logistics could be resolved before the teams moved forward. Students were provided with a module manual which detailed the structure of the module including the standard module information plus additional information such as company structure, insurance requirements, locations, programme timings, team processes and contact details. However, the module itself didn't start until late October, a month or so later. The delay had been designed to allow the student to gain some theoretical knowledge from the venture creation module which it was felt might support the group work however, because the link between theory and practice wasn't yet clear in the students minds a lot of this work was wasted as they didn't really see how the elements linked together.

This 'gap' in delivery was further compounded by new students joining the programme late and others leaving it within the first few weeks of term all of which meant that the team formation processes were never really completed; this led to a lack of team structure within the groups throughout the module.

Additionally, the selection of products to sell on the market stall was left up to the teams. This created problems as the team was newly formed and personalities dictated what got sold and not a logical approach based on customer needs and market demand. Each team purchased stock to sell which never sold and detracted from the core tasks of the module of sales and marketing and led the team into a negative mindset and leadership issues.

Finally, the leadership of the groups moved from one person to another as the module progressed and it was clear that this enabled the team to used the skills to their advantage but also shifted responsibility from one to the next without a clear set of reflections on what went wrong.

It was evident that teamwork and this group based assignment needed further development. Therefore as part of the wider curriculum review, a research project was developed across all Entrepreneurship modules to evaluate how we could improve Entrepreneurship team based modules which consisted of 131 students. The core findings of the research project have led to the following future actions for this team based project modules:

- A lecture session and video will be created to introduce the teamwork aspects of the students. Three core aspects will be covered, 1) what makes a good team member 2) what makes a good team and 3) why good teams get good marks;
- A team building activity will be built into the module. Once this is concluded no other members will be allowed to join;
- Team size will be between 2 and 4 people, starting with 4;
- Facebook will be used for internal communications from the start. (The groups which used this were more successful in their grades);
- It is intended to use a similar system as in the Apprentice TV programme, were a limited selection of products will be presented to the teams and they then pitch for and then buy the products using their own money; and
- A monthly formal board meeting in our board room whereby the company reports to the shareholders and publishes minutes. These will then form part of the formative assessment. Non-attendance and non-contribution then get reported regularly.

Student Engagement

Engagement has emerged as a key metric measure (Kahu, 2013) of higher education impact over the last decade. It has become a catch-all term most commonly used to describe a compendium of behaviours characterising students who are said to be more involved with their university community than their less engaged peers. Engagement refers to the time, enthusiasm and resources students devote to activities both in and outside the curriculum to enhance learning whilst at university. In our programmes these activities typically range from lectures, tutorials, online VLE, webinars, personal academic tutoring, team activities, through to mentoring, business clinics and events.

Ahlfeldt, et al., (2005) found that the level of engagement was typically higher in those classrooms with more Problem Based Learning (PBL) and that engagement increases as programme level increases. As a result we expected that, as the programme was targeted to encourage learning 'for entrepreneurship' (a PBL approach) we would have a better result but, because we had only completed a first year, this might be balanced by students "finding their feet" and not yet fully engaging.

It was expected that truly entrepreneurial students will be hard to keep in a classroom and, as a result that we might find it more difficult to foster a learning community. However we did not anticipate:

- One student in week three gains a contract for £18,000 which meant they were away in South East Asia for over one month;
- Two students had childcare issues for over one month which were the result of student loans being delayed;
- One student had to go and manage their father's estate after being incapacitated, so they left for another month; and
- One student was diagnosed with diabetes and learning difficulties and had over one month off dealing with these issues.

Student engagement is not a static metric and nor is it a single entity which can be easily quantified. The level of engagement changes on a weekly basis and student engagement is physically, mentally and also virtually. Therefore,

student engagement has to be measured and evaluated continuously to gain feedback and develop an ongoing understanding of the situation. The tools used included:

- **VLE - Blackboard** - through the evaluation/performance dashboard we can see who has logged in and how long they spend with the material. For the flipped classrooms this shows the student's level of engagement, which can then be discussed face to face. On average students accessed the VLE system on a weekly basis, however depth of engagement in this sense has to be measured;
- **Surveys** - we ran a number of surveys through each semester, the majority being at the start of the module to understand the students competencies and knowledge base and which enabled us to pitch the module at a level which would engage and keep the student;
- **Session Sign In Sheets** - if students have not turned up for a two weeks we email/telephone them and offer a meeting to try and understand the issues they might be having. This keeps a connection that is important in developing the learning effectiveness;
- **Class Appraisal** - to develop a level of the students understanding of the weekly topics we run an verbal appraisal, normally putting a few multiple choice questions on PowerPoint and getting the students to discuss and select the right answer. This is a very good way of understanding who has understood last week's material or taken the time to view the videos;
- **Post-it Feedback** - another method we use is provide post-it notes at the beginning of the class, students can then write feedback, comments, suggestions or just smiley/sad face on the note and stick it to the wall on the way out. It's anonymous and provides an immediate session feedback opportunity. These notes are then answered, either via a Blackboard announcements (e.g. where is the assignment brief) or in class (e.g. please explain again as I didn't understand…). This feedback process ensures students feel engaged and are able to get support on many levels;
- **Module Evaluation** - mid and end of module evaluations provide a more formal way of recording the effectiveness of teaching practices and student engagement. It is important to act on that feedback and ensure the students could see a connection between feedback and action on the part of teaching team to promote engagement;
- **Personal Academic Tutoring** - these 1-2-1 sessions allow the opportunity to ask for feedback on particular sessions and how they could be improved and also get to discuss how engagement could be improved; and
- **Programme Meeting** - the student (STaR) representatives provide another method of gaining feedback. There are two programme committee meetings each year where the STaR provides feedback and this is minuted.

As in many programmes there was a direct correlation between those attending classes and the grades achieved at the end of the year. Extra curricular activities were attended by around 50% of the students on a weekly basis which for some programmes is extremely high but as it is part of a work-based learning programme, it was felt this could be improved.

To develop both higher student engagement and also be able to monitor this in a less intrusive manner we have developed the following action plan:

- The extra-curricular activities will be added to the reflective journal so that it is part of the assessment, even though we don't want to but good behaviour needs to be rewarded early on in the programme to develop good habits;
- The first year, first semester Mindset module will use a portfolio assessment which will require students to attend each session to be able to complete the portfolio. This will ensure students are active throughout the first semester and engaged in this innovative and thought provoking module;
- Mentoring sessions will require the completion of form which highlights the tasks the student will complete before the next session. This will be handed in to the Enterprise Manager, uploaded to the VLE and will be followed up before the next mentoring session; and
- Each day of the week will have a stated theme from the first week of year 1, so that they understand what they should be doing on each of the work-based learning days:

- **VLE Monday**: catch up on new material on VLE and pre-reading for taught classroom sessions;
- **Business Tuesday**: for work-based learning, which included webinars, business clinics and mentoring sessions';
- **Taught Wednesday**: scheduled over the same day each week (Wednesday for first years);
- **Business Development Thursday**: work on your business and contact stakeholders; and
- **Market Friday**: set aside for the first year students for running the market stall in the first semester. Write your reflection for the week and plan for the following week.

Conclusions

The design of the programme was based on reviewing other VCP around the world and incorporating their best practice using guidance from subject benchmarks and current entrepreneurship education research. This has created a programme which uses a series of pedagogies, technologies and techniques which have not previously be brought together in one entrepreneurship programme. The programme has run for one year and therefore we should expect a series of adjustments, however one data point does not create a trend and we are cautious of making radical changes.

The programme structure in terms of the academic content and also the timetabling and student expectations are a clear asset for the programme from both the viewpoint of the students and academic team. The overall programme structure will stay the same in the next few years with some developments to add additional modules to cover e-business, international trade and using digital currency as these subjects could support faster growth and development of the entrepreneurs ventures. The development of the scheduling to ensure opportunities to learn both within taught and work-based learning setting will be continued to be explored based on student feedback and cohort analysis.

It is clear that a more structured and strategic approach is required in certain areas, such as the virtual learning spaces and the design of group work activities. For the group work we need to create more touch points around the start of the module (such meetings, interviewing suppliers, arranging product logistics) and then follow up with minuted board meetings throughout the module as both a module reporting and business best practice approach.

The VLE is another which we recognise requires more support. This will be introduced as part of the induction week for all first year students, with further online material made available with the sole aim of developing their skill and understanding of how to use the VLE. Student engagement of the VLE will be monitored with the view of demonstrating how to use the tool to those who do not use it on a weekly basis. The development of material for the virtual learning environment will continue based on student feedback and the programme's strategic aims.

We also expect student engagement to be an issues which requires a constant agile process to manage the individual student, class, subject and tutor issues. This will be standing item on the programme management committee and a wide range of tools (online, events, personal tutor & mentoring sessions and academic sessions) will be used to ensure that students get the best experience and therefore opportunities to engage.

Finally, The use of reflective practice will continue with support from other subject programme tutors who have used this successfully over many years within their professional practice (such as Nursing and Education) and who will provide additional sessions and support to the students. Reflection is a key part of many professions and the development of this as an assessment and also a life long learning tool is important in developing the field of entrepreneurship education and research.

We hope to report back in another year on the developments from this programme!

Areas for Further Study

There is a considerable amount of work to be done in developing a programme which supports the entrepreneurial development of people from diverse backgrounds, ages and locations. The three key aspects which we believe should be addressed for further study are:

- **Remote learning degree**: We will always have students who need to be at another location (either due to Child Care or a business contract) and therefore the ability to deliver the knowledge to the student at their location is important in developing a truly entrepreneurial programme. However this must be balanced with being part of a community and gaining knowledge from their peers;

- **Individual learning pathways**: We have students who are 18 years old and never developed a business, nor have their parents or any family member and those who are in the mid 50s who were born into a family business and now developing their 10th business. This provides issues in developing a single learning journey which requires us to be both challenging and supportive for every member of the cohort; and

- **None scheduled Assessments**: Universities are set up so the programme leader has to set a date and time for when an assessment is required. For a degree of this type, the formal taught learning has clear timings, but the work-based learning does not and therefore scope should be put in place to be flexible.

References

Ahlfeldt, S., Mehta, S. and Sellnow, T., (2005) 'Measurement and analysis of student engagement in university classes where varying levels of PBL methods of instruction are in use', Higher Education Research & Development, 24(1), pp.5-20.

Bennis, W.G. and O'toole, J., (2005) 'How business schools lost their way', Harvard business review, 83(5), pp.96-104.

Biggs, J., (2000) 'Aligning teaching for constructing learning', Higher Education Academy, pp.1-4.

Bird, B.J., (1995) 'Towards a theory of entrepreneurial competency, Advances in Entrepreneurship, Firm Emergence and Growth', Volume 2, pp. 51-72.

Boud, D. and Solomon, N., (2001) Work-based learning: a new higher education?. McGraw-Hill Education (UK).

Bozward, D. & Rogers-Draycott, M.C. (2017) Developing a Staged Competency Based Approach to Enterprise Creation. In: 10th International Conference for Entrepreneurship, Innovation, and Regional Development, 31st August - 1st September, Thessaloniki, Greece.

Bruyat C., and Julien P.A. (2001) 'Defining the field of research in entrepreneurship', Journal of business venturing,6(2), pp. 165-180.

Cope, J. and Watts, G., (2000). 'Learning by doing–an exploration of experience, critical incidents and reflection in entrepreneurial learning', International Journal of Entrepreneurial Behavior & Research, 6(3), pp.104-124.

De Silva, M., (2016). 'Academic entrepreneurship and traditional academic duties: synergy or rivalry?'. Studies in Higher Education, 41(12), pp.2169-2183.

Dimitratos, P., Amorós, J.E., Etchebarne, M.S. and Felzensztein, C., 2014. 'Micro-multinational or not? International entrepreneurship, networking and learning effects', Journal of Business Research, 67(5), pp.908-915.
Vancouver

Draycott, M., Rae, D. and Vause, K., (2011) 'The assessment of enterprise education in the secondary education sector: A new approach?', Education + Training, 2011; Volume 53(8/9), pp. 673-691.

Elton, L.R.B. and Johnston, B., (2002). Assessment in Universities: a critical review of research.

Farmer, S.M., Yao, X. and Kung Mcintyre, K., (2011) 'The behavioral impact of entrepreneur identity aspiration and prior entrepreneurial experience', Entrepreneurship Theory and practice, 35(2), pp.245-273.

Fayolle, A. (2007) 'Entrepreneurship and new value creation: the dynamic of the entrepreneurial process' , Cambridge, Cambridge press

Fetters, M., Greene, P.G. and Rice, M.P. eds., (2010) The development of university-based entrepreneurship ecosystems: Global practices. Edward Elgar Publishing.

Finlay, L., (2008) Reflecting on reflective practice. PBPL paper, 52, pp.1-27.

Fry, H., Ketteridge, S. and Marshall, S., (2008) A handbook for teaching and learning in higher education: Enhancing academic practice. Routledge.

Gibb, A.A., (1993) 'Enterprise culture and education: understanding enterprise education and its links with small business, entrepreneurship and wider educational goals', *International small business journal*, *11*(3), pp.11-34.

Gibb, A., (2002) 'In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge', International Journal of Management Reviews, 4(3), pp.233-269.

Gibb, A., (2011) 'Concepts into practice: meeting the challenge of development of entrepreneurship educators around an innovative paradigm: The case of the International Entrepreneurship Educators' Programme (IEEP)', *International Journal of Entrepreneurial Behavior & Research*, *17*(2), pp.146-165.

Harvey, M., and Evans, R. (1995) 'Strategic windows in the entrepreneurial process', Journal of Business Venturing, 10, 331-347.

Hopkins, T. and Feldman, H., (1989) 'Changing entrepreneurship education: finding the right entrepreneur for the job', Journal of Organizational Change Management, 2(3), pp.28-40.

Hung, W., Jonassen, D.H. and Liu, R., (2008) Problem-based learning. Handbook of research on educational communications and technology, 3, pp.485-506.

Isenberg, D.J., (2010) 'How to start an entrepreneurial revolution', Harvard business review, 88(6), pp.40-50.

Isenberg, D., (2011) 'The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship', Institute of International European Affairs, Dublin, Ireland.

Jack, S.L. and Anderson, A.R., (1999), 'Entrepreneurship education within the enterprise culture: producing reflective practitioners', International Journal of Entrepreneurial Behavior & Research, 5(3), pp.110-125.

Jones, C. et al. (2014), `Claiming the future of enterprise education`, Education + Training, 56(8/9), pp. 764 - 775, doi: 10.1108/ET-06-2014-0065

Kahu, E.R., (2013) 'Framing student engagement in higher education', Studies in higher education, 38(5), pp.758-773.

Kilkenny, M., Nalbarte, L. and Besser, T., (1999) 'Reciprocated community support and small town-small business success', Entrepreneurship & Regional Development, 11(3), pp.231-246.

Kolb, A.Y. and Kolb, D.A., (2005) 'Learning styles and learning spaces: Enhancing experiential learning in higher education', Academy of management learning & education, 4(2), pp.193-212.

Kozlinska, I., (2016) *Evaluation of the outcomes of entrepreneurship education revisited evidence from Estonia and Latvia* (Doctoral dissertation).

Kuratko, D.F., and Morris, M.H., Schindehutte, M. (2015) 'Understanding the dynamics of entrepreneurship through framework approaches', Small Bus Econ, 2015; Volume 45(1), pp. 1-13.

Kyro, P., (2008) 'A theoretical framework for teaching and learning entrepreneurship', *International journal of business and globalisation*, *2*(1), pp.39-55.

Lackéus, M. (2016) Value Creation as Educational Practice-Towards a new Educational Philosophy grounded in Entrepreneurship?. Chalmers University of Technology, 2016. ISBN: 978-91-7597-387-6.- 281

Lackéus, M. Lundqvist M., and Williams Middleton K. (2016) 'Bridging the traditional-progressive education rift through entrepreneurship' , International Journal of Entrepreneurial Behavior & Research, 22(6), pp.777-803, doi: 10.1108/IJEBR-03-2016-0072

Le Deist F.D. and Winterton J., (2007) 'What is competence?' Human Resource Development International, 2007; Volume 8(1), pp. 27–46.

Man, T.W.Y., (2007) "Understanding entrepreneurial learning. a competency approach", International Journal of Entrepreneurship and Innovation, Volume 8 (3), pp. 189-98.

Megginson, D., (2006) 'Mentoring in action: A practical guide', Human Resource Management International Digest, 14(7).

Mezirow, J., (1990) 'How critical reflection triggers transformative learning'. Fostering critical reflection in adulthood, 1, p.20.

Ollila, S. and Williams-Middleton, K., (2011) 'The venture creation approach: integrating entrepreneurial education and incubation at the university', International Journal of Entrepreneurship and Innovation Management, 13(2), pp.161-178.

Pittaway, L. and Edwards, C., (2012). 'Assessment: examining practice in entrepreneurship education', Education+ Training, 54(8/9), pp.778-800.

Palomba, C.A. and Banta, T.W., (1999). Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education. Higher and Adult Education Series. Jossey-Bass, Inc., Publishers, 350 Sansome Street, San Francisco, CA 94104.

Quality Assurance Agency (QAA), (2012). Enterprise and Entrepreneurship Education. Guidance for UK Higher Education Providers.

Rae, D. (2005). 'Entrepreneurial learning: a narrative-based conceptual model', *Journal of small business and enterprise development*, *12*(3), 323-335.

Raelin, J.A., (1997) 'A model of work-based learning', Organization Science, 8(6), pp.563-578.

Rasmussen, E., Mosey, S. and Wright, M., (2011) ''The evolution of entrepreneurial competencies: A longitudinal study of university spin off venture emergence', Journal of Management Studies Special Issue: Revitalizing Entrepreneurship, Volume 48(6), pp. 1314-1345.

Rigby, J. and Ramlogan, R., (2013). The impact and effectiveness of entrepreneurship policy. NESTA Working Paper Series.

Rust, C., (2002) 'The impact of assessment on student learning: how can the research literature practically help to inform the development of departmental assessment strategies and learner-centred assessment practices?', Active learning in higher education, 3(2), pp.145-158.

Sams, A. and Bergmann, J., (2013) 'Flip your students' learning', Educational leadership, 70(6), pp.16-20.

Sanchez, J.C., (2011) 'University Training for Entrepreneurial Competencies: Its Impact on Intention of Venture Creation', International Entrepreneurship and Management Journal, 2011; Volume 7(2), pp. 239-254.

Sarasvathy, S. D. and Venkataraman, S. (2011), 'Entrepreneurship as Method: Open Questions for an Entrepreneurial Future', Entrepreneurship Theory and Practice, 35(1) pp. 113-135, doi: 10.1111/j.1540-6520.2010.00425.x

Schwarzkopf, J., Lévesque, M. and Maxwell, A., (2010) How entrepreneurs-in-residence increase seed investment rates. Venture Capital, 12(1), pp.65-81.

Shane, S. and Venkataraman, S. (2000) 'The promise of entrepreneurship as a field of Research`, Entrepreneurship, 25(1), pp. 217-226, doi: 10.5465/AMR.2000.2791611

Shane, S. and Venkataraman, S., (2007) The promise of entrepreneurship as a field of research. In Entrepreneurship (pp. 171-184). Springer Berlin Heidelberg.

Sterling, H.K. and Selesnick, H.L., (1988). Teamwork Effectiveness Self-Assessment Questionnaire.

Thursby, M. C., Fuller, A. W., & Thursby, J. (2009) 'An integrated approach to educating professionals for careers in innovation', *Academy of Management Learning & Education*, *8*(3), 389-405.

Timmons, J.A. and Spinelli, S., (1999) New venture creation: Entrepreneurship for the 21st century.

Tinto, V., (2003) 'Learning better together: The impact of learning communities on student success', Higher Education monograph series, 1(8)

"Venture Creation Programs List | We List Venture Creation Programs". http://www.Vcplist.com. (Accessed: 26 July 2017).

Vestergaard, L., Moberg, K. and Jørgensen, C., 2012. Impact of entrepreneurship education in Denmark-2011. The Danish Foundation for Entrepreneurship–Young Enterprise, Ejlskovsgade D, 3, p.5000.

Wong, F. K., Kember, D., Chung, L. Y. F. and CertEd, L. Y. (1995) 'Assessing the level of student reflection from reflective journals', Journal of Advanced Nursing, 22: 48–57. doi:10.1046/j.1365-2648.1995.22010048.x

Zhong-wei, L.H.S.C., (2008) 'An Empirical Study of the Relationships Between Emotional Conflicts and Entrepreneurship of Top Management Team and Business Growth Performance', Finance and Trade Research, 2, p.018.

Zimmer, C., (1986) Entrepreneurship through social networks. The art and science of entrepreneurship. Ballinger, Cambridge, MA, pp.3-23.