



Can working on an
entrepreneurial project
within a Level 7 fashion degree course improve

entrepreneurial self-efficacy and career readiness?



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Photograph: Im, onlsm e for the study intervention,

**Can working on an entrepreneurial project within a
Level 7 fashion degree course
improve entrepreneurial self-efficacy and career readiness?**

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Dissertation in Partial Fulfilment of the Requirements for the Degree of
Master of Arts in Learning and Teaching

Presented to:

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Disclaimer 1

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Abstract

The purpose of this study is to revise the current educational pedagogy on a Level 7 fashion degree module, by introducing an experiential entrepreneurship project to understand if it can encourage a greater entrepreneurial self-efficacy and career readiness. Many third level colleges and universities proudly fly the flag of promoting entrepreneurial education within courses, however, many fail to recognise that what makes an entrepreneur is a mindset. To address entrepreneurial education, it is preferable that provision is made for real-life entrepreneurial experience that brings the outside world to the classroom rather than relying solely on theory (Jones *et al*, 2017). This study is important because it investigates an intervention to improve entrepreneurial self-efficacy which is fundamental to an entrepreneurial mindset.

In this action research study, six students participated in an experiential entrepreneurial project that required the cohort to plan, make for and launch an upcycled fashion pop-up shop. A focus group and a before and after questionnaire which was based on the linkage with entrepreneurial skills and capabilities with 'the big five personality traits' were analysed. The results of the study determined that the project did encourage a growth overall in self-efficacy in four out of the five personality traits and also in entrepreneurial self-efficacy.

It is becoming increasingly apparent that entrepreneurial skills are regarded as critically important for career readiness (Delgatto 2020) not just within the fashion industry but within all career choices. Further research could explore how the intervention could be adapted to work within other discipline curricula.

Acknowledgements

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1. Introduction and rationale

Section One: Introduction and rationale

1.1 General introduction for the essay

The main purpose of this research study is to gain a better understanding of how student engagement in an experiential entrepreneurial project in a level seven fashion degree course could impact on a student's entrepreneurial self-efficacy and career readiness. Cong Doanh *et al* (2019) define entrepreneurial self-efficacy as an "individual's confidence in their ability to successfully master the entrepreneurial process" with entrepreneurial self-efficacy being regarded as the best predictor of an individual's entrepreneurial intention and entrepreneurial success (Wilson *et al* 2009). Entrepreneurs are defined as creative and innovative individuals who may choose to work as employees (labelled intrapreneurs) or in a self-employed capacity. Employees with an entrepreneurial mindset are valued as essential to the economy and to businesses that wish to remain competitive, they drive innovative product development in fast-moving environments and create new and grow existing business (Unay *et al* 2012; Zhao *et al* 2018; Doanh and Bernat 2019; Delgatto 2020). Additional information linking an entrepreneurial mindset with fashion career readiness is discussed in section 2.4.

1.2 Introduction to the study intervention

The participants of this action research study, which focused on implementing a teaching intervention, are all second year fashion students, currently enrolled on a Level seven BA Fashion with Promotion course at a third level Irish Institute of Technology. The six students who agreed to participate were asked before and after the study to rate their level of confidence with thirty-one questions, which I designed to link the likelihood of entrepreneurial intention with the 'big five personality traits' and entrepreneurial self-efficacy; the questionnaire (see Appendix 2) takes approximately five minutes to complete. Following the implementation of the intervention and completing the second questionnaire, five participants took part in a focus group to discuss their experience and questionnaire responses.

1.2.1 The teaching intervention

Over a five week period, participants worked as a team to design, create and sell a range of ladieswear tops made from recycled fabrics. It was anticipated that this style of experiential learning which required the students to solve and react to problems in real time and be responsible for selling their garments in a pop-up shop, was the most appropriate to grow their entrepreneurial mindset. Moynan *et al* (2016) assert that experiential learning initiatives not only improve student entrepreneurial activity, they also improve learner engagement within that particular module.

1.2.2 Study data collection

The students were asked to complete an identical questionnaire (to the first questionnaire completed) for entrepreneurial self-efficacy four days after their pop-up shop. This highlighted any changes in their perception of their self-efficacy in each area giving a percentage of difference for analysis (quantitative). On the following day, a focus group (qualitative study) was arranged with the participating students to encourage them to reflect on what they have learned about themselves. They considered their responses to each of 'the big five personality trait' questionnaire sections (the alignment of the big five personality traits with entrepreneurial intention is detailed in section 3.3.1), their entrepreneurial self-efficacy and what might have influenced their responses.

1.4 Rationale for the study

Since September 2015, I have been working as part of a programme team to develop a fashion degree course with a view to preparing students for a fashion industry that is braced for many future changes including ethical issues, sustainability, emerging technologies and new shopping patterns (Amed *et al* 2018; Zhao *et al* 2018). Central to the course development is a constant readdressing of how best we can prepare our students to be equipped for the demanding requirements and opportunities of working within a fast-evolving fashion industry. Our aim is that our graduates will be regarded as among the most intrapreneurial and entrepreneurial from all the fashion design graduates in Ireland. There is a greater need now for fashion courses to

focus on entrepreneurial education not only to encourage business start-ups but also to address the wider context of ensuring that fashion graduates are career ready (Zhao *et al*, 2018). The study forms part of the delivery for a fifteen credit module “Design Development Two” in semester four (see module descriptor in Appendix 8), it forms part of a bigger entrepreneurship education strategy for the level seven fashion degree students. Information on the entrepreneurship education provision within the course curriculum is detailed in Appendix 12.

As a staff member working to achieve our Institute’s vision, we must consider, explore and develop innovative teaching strategies, to maximise the potential for student innovation and achievement. The Institute’s strategic plan (2019, p.15) identifies a dedication to “achieving smart solutions to emerging challenges and to facilitate the development of the Institute’s innovative capacity” within its college values. Keaveney (2014) states the necessity for creative design courses within Institutes of Technology and Irish Universities to produce entrepreneurs who will inspire and start new employment opportunities.

1.5 Rationale for the entrepreneurship focus

Entrepreneurship education is stressed as being ‘critical’ for fashion courses due to the inherent innovation and the constant demand of the fashion industry to be “creative, resourceful, confident, imaginative and full of new ideas” (Unay and Zehir 2012; Zhao *et al* 2018, p.29). The majority of studies suggest that many disciplines include entrepreneurship education within their curricula (Zhao *et al* 2018); on closer inspection, it would appear that they have ticked that box merely by including a module on entrepreneurship or business theory (Shi 2012). Keaveney’s study of design students in Ireland stated that only forty-three per cent believed that there was a ‘culture of entrepreneurship’ in their course but that was explained exclusively by their course participation in design competitions, which would not seem to address the demands of entrepreneurship education (2014, p.48). To encourage an entrepreneurial self-efficacy that can lead to an entrepreneurial intention, we need to go further and this study investigates an alternative intervention that could be implemented within a structured entrepreneurship education provision. Moynan *et al* (2016) and Jones *et al* (2017) propose that the most successful way to influence how an individual thinks and acts, is to make the learning experience experiential. As illustrated in figure 1.1 below, to improve the entrepreneurial self-efficacy of an

individual, you need to improve their belief in their entrepreneurship skills and attributes and their self-belief of their ability to be successful with enterprising ventures (entrepreneurial self-efficacy). Entrepreneurial self-efficacy connects with entrepreneurship skills and attributes to form an entrepreneurial mindset. Entrepreneurial education should connect entrepreneurial mindset with entrepreneurship knowledge to support and shape entrepreneurial ambition. Research providing insight into how entrepreneurial self-efficacy can be facilitated within a curriculum at third level education is currently very limited. An intervention that considers the entrepreneurial skills, attributes and aims to improve entrepreneurial self-efficacy to maximise a graduate's potential and entrepreneurial intention would provide an indication on how other disciplines could adopt similar strategies at third level.

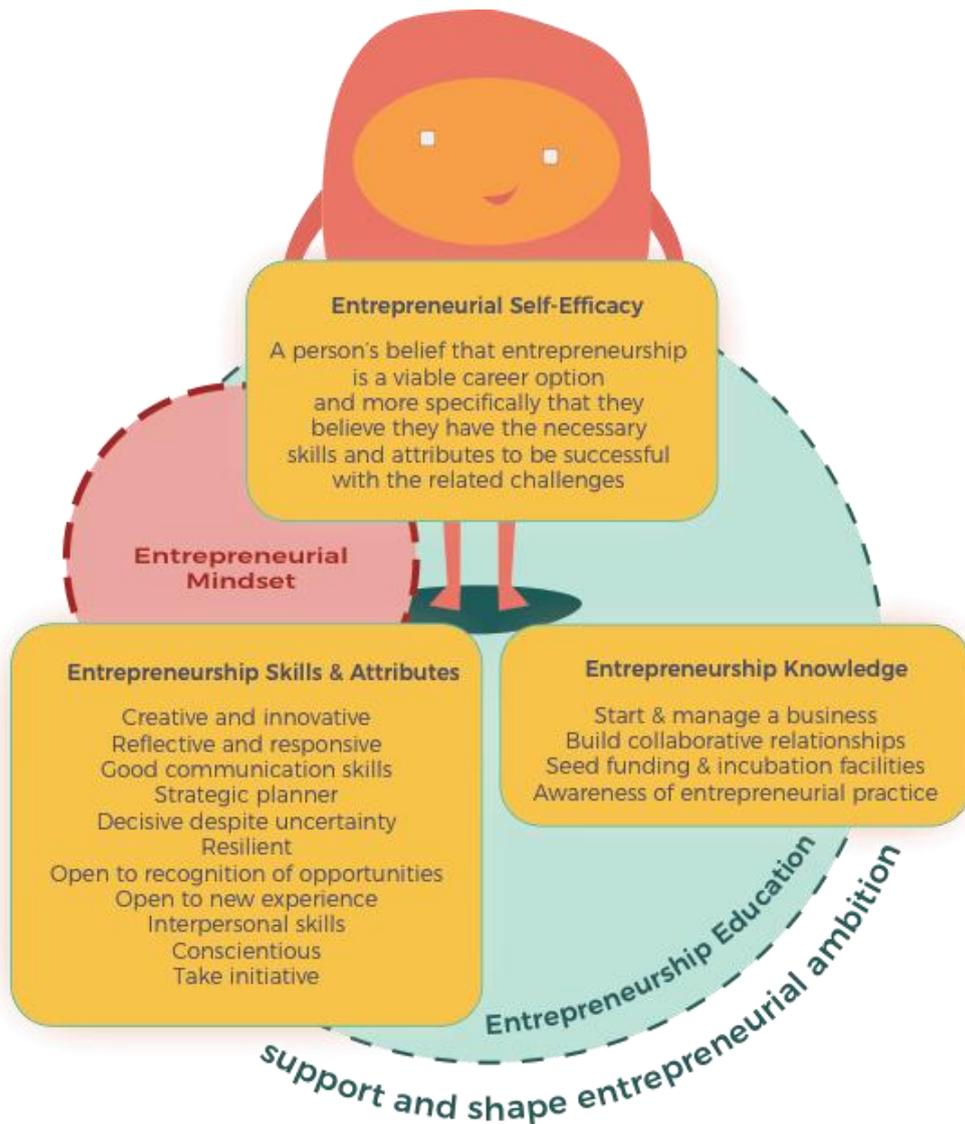


Figure 1.1: Connecting entrepreneurial self-efficacy with skills and attributes, knowledge and entrepreneurial education.

Source: Adapted from Keaveney 2014; Trivedi 2016; Sui et al 2017; Sahin, Karadag and Tuncer 2018; Advance HE QAA Framework for Enterprise and Entrepreneurship Education (2019, p.5); Hunt 2019; Shahab et al 2019; Kim and Strimel 2020.

1.6 Research aims

The aims of this research study is to determine if levels of entrepreneurial self-efficacy and career readiness improve for students enrolled on a Level 7 fashion degree course following engagement with an experiential entrepreneurship teaching intervention and how the

intervention would form part of an effective entrepreneurship education provision for the female dominated programme.

With that in mind, the literature review that follows (see figure 1.2) will consider entrepreneurial self-efficacy, self-efficacy and how to improve it, third level entrepreneurial education, what is expected of a career ready fashion graduate and finally the literature will touch on female entrepreneurship which may influence the subjective norms and attitude of the participants involved. More information regarding entrepreneurship within the creative industries and entrepreneurship opportunities is available in Appendix 13. Chapter 3 provides detail on the methodology used and the results and analysis of the study. Chapter 4 presents a conclusion and recommendations.

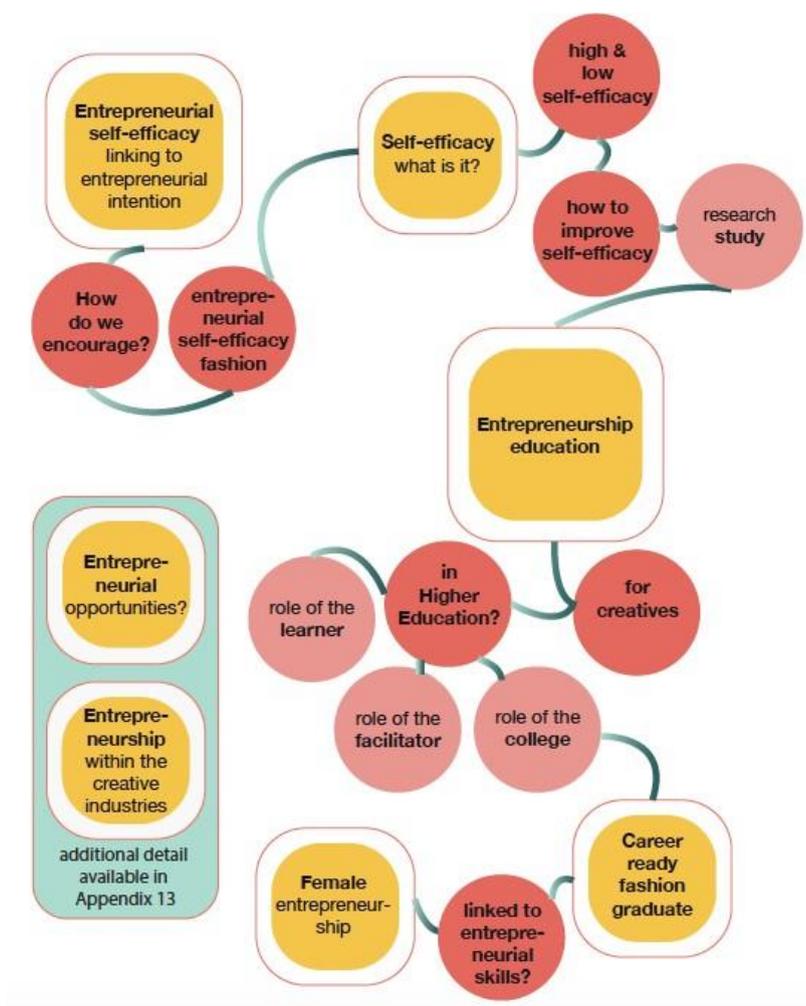


Figure 1.2: A roadmap of the literature review explored within the study.

2. Literature review and critique

Section Two: Literature review and critique

2.1 Literature review introduction

The purpose of this literature review is to gain an understanding of what entrepreneurial self-efficacy is, the impact self-efficacy has on student learning and the factors that could influence the entrepreneurial self-efficacy and career readiness of the cohort within the study. It also aims to present an insight into how the intervention would form part of an effective entrepreneurship education provision for the female dominated level seven fashion degree programme. The review begins with theories around entrepreneurial self-efficacy, how it may be addressed and encouraged. It is supported with Bandura's theories on self-efficacy and how a student's level of self-efficacy contributes to the level of academic achievement. The chapter explores what might constitute a 'career ready' fashion graduate and how that links with entrepreneurship and intrapreneurship. The review delves into entrepreneurship education for creatives and how it can be managed within the Higher Education system. It concludes with exploring female entrepreneurship as a factor that may influence entrepreneurial self-efficacy for the participants. Other influences including entrepreneurship within the creative industries and entrepreneurial opportunities are available in Appendix 13. Whilst there is considerable literature available with regards to all aspects of entrepreneurship, the literature does not discuss interventions or how to integrate teaching methodologies to improve entrepreneurial self-efficacy within a structured entrepreneurial education provision for a third level course.

2.2 Entrepreneurial self-efficacy

Entrepreneurial self-efficacy is a person's belief that entrepreneurship is a viable career option and more specifically, that they believe they have the necessary skills and attributes to be successful with the related challenges (Hunt 2019). Shahab *et al* (2019) argue that individuals with entrepreneurial self-efficacy will have the ability to implement their ideas and strengthen their intention towards entrepreneurship. They will persist, despite the precarious nature of starting a business or lack of resources, utilising different behaviours to overcome the hurdles and constraints (Sui *et al* 2017; Shahab *et al* 2019).

Entrepreneurial self-efficacy is the essential conduit between entrepreneurial intention and entrepreneurial education. If we can advance entrepreneurial self-efficacy, then entrepreneurial education has the greatest potential to develop entrepreneurial intention, which would lead to a greater number of entrepreneurs (Puni *et al* 2018). However entrepreneurial education should not only inspire the process of starting a business, it should stimulate creative minds and present entrepreneurship as an accessible way to be employed (Trivedi 2016; Keaveney 2014).

2.2.1 Encouraging an entrepreneurial intention

If we wish for our students to be entrepreneurial then we should apply the ‘theory of planned behaviour’, which in turn will encourage entrepreneurial intention. The ‘theory of planned behaviour’ which is considered under the headings of perceived behaviour control, attitude and subjective norms, was used as a framework by Trivedi (2016) and later by Doanh and Bernat (2019) for both of their studies to analyse levels of entrepreneurial intention from university students in India, Singapore, Malaysia and Vietnam. Trivedi (2016) purported that from the headings, perceived behavioural control (which included: access to the relevant resources, entrepreneurial opportunities and entrepreneurial self-efficacy), as being the most important determinants of entrepreneurial activity. In the illustration below (*figure 2.1*), I have combined the thinking from the theory of planned behaviour from Trivedi (2016) with the influential factors that Zhao *et al* (2018) suggest, which influence entrepreneurial intention. I have also added to the illustration how I believe entrepreneurship education should connect behavioural control, attitude and entrepreneurship skills and attributes, all of which will influence each other.

Trivedi (2016) stated the purpose of his study is to ‘foster entrepreneurship and incubate more start-ups’ for students, he provided an overview of a study of entrepreneurial intention gathered from results of a questionnaire but it did not address the grassroots changes that need to happen to accelerate entrepreneurial intention or improve entrepreneurial self-efficacy. Consequently, with this study, the focus is on how we improve students entrepreneurial self-efficacy as it has been sighted as the most important predictor of entrepreneurial intention (Farrukh *et al* 2017; Shahab *et al* 2019) and as a crucial component in recognising entrepreneurship as a career choice (Wilson *et al* 2009).

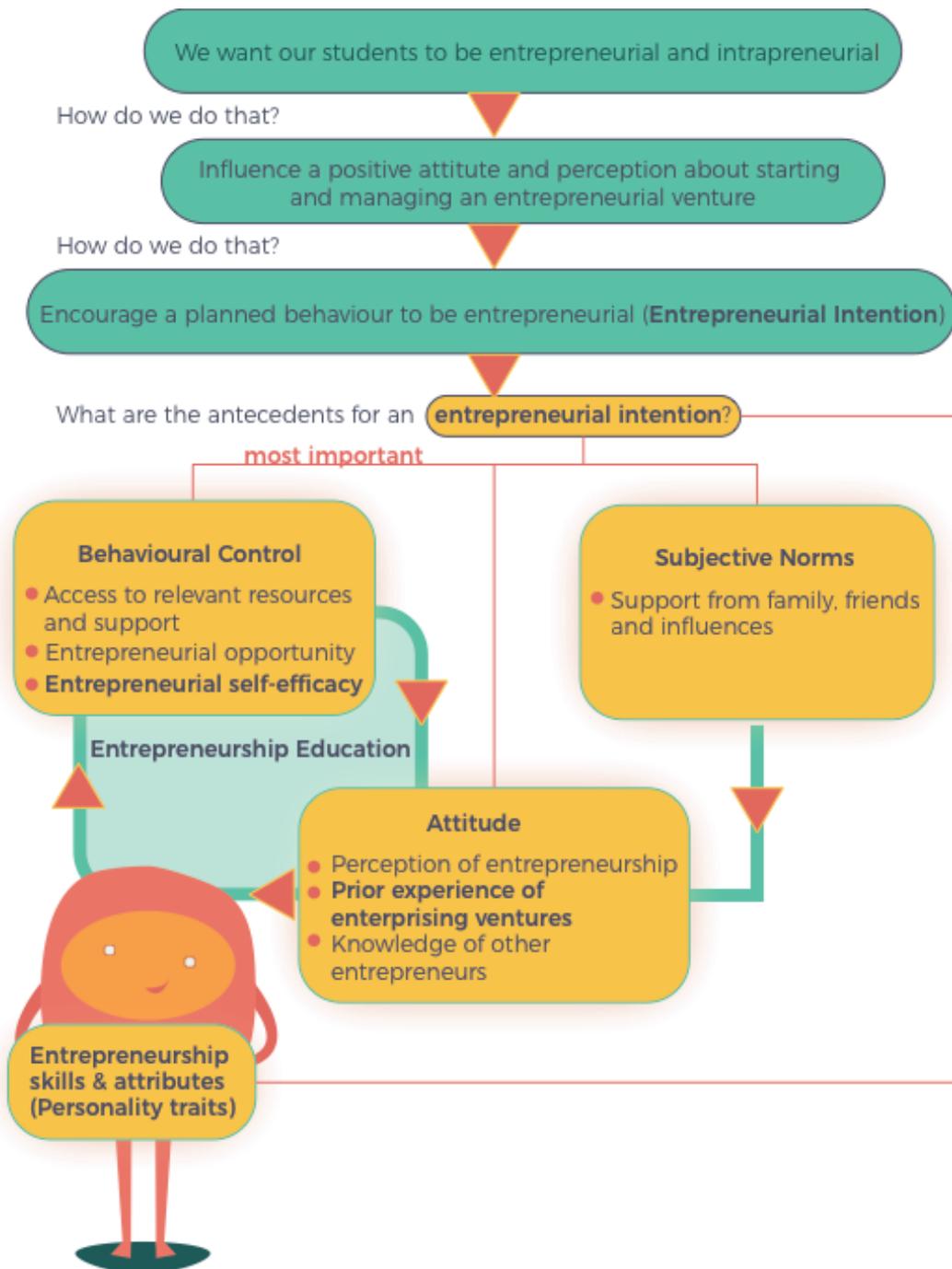


Figure 2.1: Antecedents affecting entrepreneurial intention using Trivedi’s application of the theory of entrepreneurial planned behaviour combined with factors affecting entrepreneurial intention adapted from Zhao et al 2018 and personality traits aligned with entrepreneurial intention adapted from Poon 2001; Unay et al 2012 and Sahin et al 2019.

2.2.2 Encouraging fashion entrepreneurial intention

There is very little knowledge on what promotes entrepreneurial intentions among fashion students, as the majority of studies are focused on business or unspecified students (Zhao *et al* 2018). Zhao *et al* (2018) go on to suggest that entrepreneurial intention is influenced by internal and external factors including entrepreneurial education, social network, support from family and friends, personality traits, creativity, perceived desirability and feasibility. Whilst this insight does give a very broad overview to factors that affect entrepreneurial intention for fashion students, it does not clarify how it could be promoted and integrated into fashion education. The study also fails to acknowledge the impact of entrepreneurial self-efficacy, which conflicts with other studies on the subject. Universities are one of the most influential factors in encouraging entrepreneurial intention (Trivedi 2016), but it is critical that we educate our students to believe they can do it (entrepreneurial self-efficacy). If we wish to gain a deeper understanding of how to improve entrepreneurial self-efficacy, we first need to understand self-efficacy and how to improve it.

2.3 Self-efficacy

The level of self-efficacy an individual has can directly influence their level of motivation, stress, engagement, creativity (Tierney and Farmer 2002), risk-taking, the goals they set and the level of perseverance and commitment to achieve them, their social popularity and their overall academic achievement (Bandura 1977, 1993, 1994; Sitzmann and Yeo 2013). Bandura (1993) explains that self-efficacy directly affects a student's regulation of learning, how they master learning activities, which in turn, determines their individual aspirations, motivation, determining their academic accomplishments and ultimately their industry readiness (figure 2.2). Individuals with high self-efficacy are more likely to display entrepreneurial behaviours and pursue interests relating to entrepreneurial activity (Trivedi 2016; Bandura 1994).

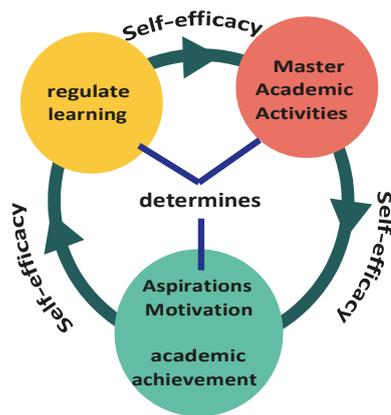


Figure 2.2: How self-efficacy influences academic achievement adapted from Bandura (1993)

Self-efficacy is the self-belief a person has with regards to how well they can master particular tasks or functions. Both self-efficacy and the ‘big five personality traits’ are predictors of academic and entrepreneurial intention but self-efficacy is not bound by the ‘big 5 personality traits’ (Stajkovic 2018). Self-efficacy is judged on a person’s experience with a task, knowledge or challenge and can be influenced positively or negatively (Bandura 1994). A focus of improving self-efficacy from low self-efficacy to high self-efficacy within the student body should be at the core of what we do, because it has considerable impact on so many aspects of their learning for life and work.

2.3.1 High and low self-efficacy

Individuals with a high sense of self-efficacy engage with difficult tasks with the intention of mastering a challenge, whilst individuals with low self-efficacy avoid difficult tasks because they believe that failure is inevitable and it will highlight their personal deficiencies (Bandura 1994). High self-efficacy fosters intrinsic interest in activities which leads to setting challenging goals, the perseverance to achieve them and a greater ability to manage the related stress (figure 2.3). Consequently, failure is seen as a stepping stone and not a stumbling block, therefore failure is perceived as part of the learning and they quickly recover from it (Bandura 1993, 1994; Achor 2010). In contrast, Individuals with low self-efficacy (figure 2.3) often focus on their shortcomings, give up quicker and are slow to recover from failure (Bandura 1993, 1994). Students with the same level of knowledge and skill can experience different levels of success

depending on their levels of self-efficacy (Gist 1992; Bandura 1993, 1994). Bandura concludes that self-efficacy is a valid indicator of future performance, however, Sitzmann and Yeo (2013) argue in their meta-analytic investigation of ‘within person’ self-efficacy, that confidence is likely derived from previous success and it is only a moderate predictor of future performance. Although Bandura’s theory indicates that past performance is part of how ‘performance accomplishments’ is formed and ‘performance accomplishments’ are one of four areas we need to address to improve an individual’s self-efficacy.

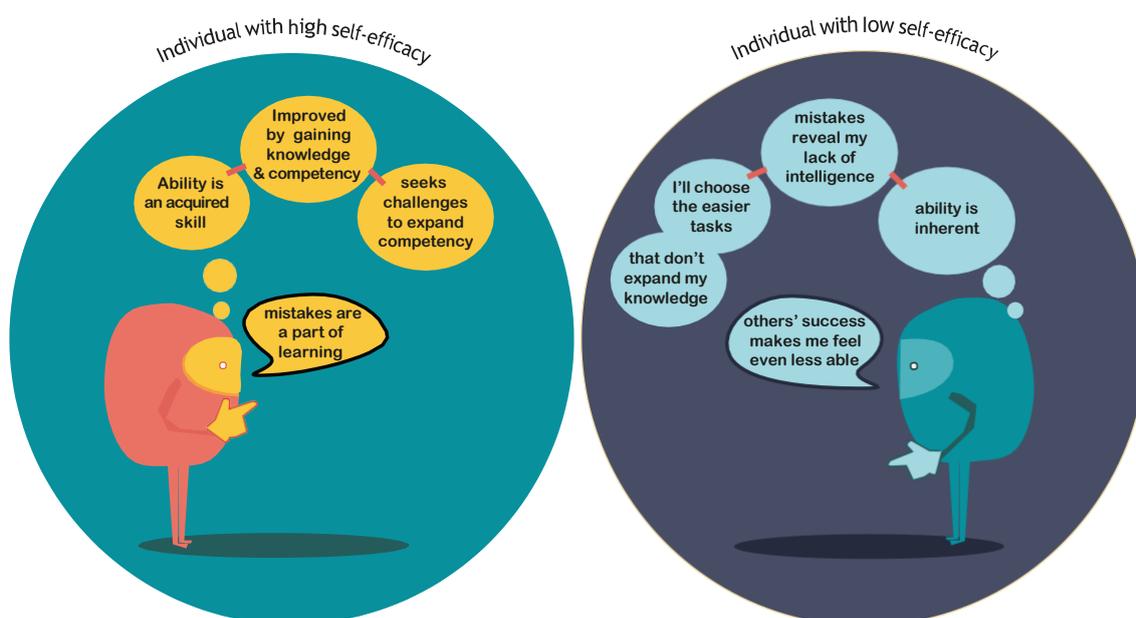


Figure 2.3: Illustration of the beliefs of individuals with high and low self-efficacy adapted from Bandura 1993, 1994.

2.3.2 Improving self-efficacy

Bandura (1977, p.195) explains that our self-efficacy for a particular task is evaluated from “four sources of information: performance accomplishments, vicarious experience, verbal persuasion and physiological states”. The first and most important, *performance accomplishment*, is based on what experience or level of mastery we have of the task in question. How much practice have we had for the set task and how did we perform with that or similar tasks in the past? From this, we form a judgement of the capability we have to perform future similar tasks. The task needs to be sufficiently difficult with risk of failure to influence an individual’s self-efficacy. This would

suggest that to improve student entrepreneurial self-efficacy, students would need to have had experience or believe they have a good level of mastery in entrepreneurial activities.

Vicarious experience is observing others, who are similar to us, being successful performing the task in question by applying effort and perseverance (Hunt et al 2019). This observation gives us the confidence that we can mirror their actions and be successful also in completing the task. Inspiring designers fuel entrepreneurial ecosystems, their success creates the vicarious experience that drives new designers to take the entrepreneurial risk and aim for the top (Hassen et al 2019).

Social/ Verbal persuasion is how a student can be verbally encouraged, assured and convinced that they can be successful mastering a task. This may be in the form of a lecturer giving encouraging feedback or peer encouragement. Self-efficacy can also be influenced by pressure from others in terms of subjective norms, culture, relationships or stereotypes (Bandura 1977).

Finally, *physiological states* refer to the emotions a student has regarding the task, how they perceive their anxiety level with regards to different situations surrounding the task. If a student experienced a particularly stressful, anxious time, their self-efficacy would suffer as a result (Bandura 1977). When a student's perception of their entrepreneurial self-efficacy is being evaluated, all of the four sources of information would be considered and it would be difficult to imagine that they would have sufficient experience to draw from if they only had been involved in an entrepreneurial theory module.

2.3.2.1 An intervention to improve self-efficacy

Aro et al (2017) assert that positive changes in self-efficacy occurred in an intervention targeting self-efficacy in reader fluency, with children in grades 3-5, in two schools in Finland. They focused on improving self-efficacy by employing the teachings from Bandura. They gave opportunity for *performance accomplishment* by presenting suitably challenging tasks whilst giving regular explicit feedback showing their improvement. Teachers provided *verbal persuasion* by discussing the children's practice, effort and improvement. *Vicarious experience* was provided by organising

groups of similar reading levels and encouraging the children to observe the improvement their peers were making. Comparisons were made only between their own performances and not between participants. Their *psychological state* was eased by filling in a self-rated emotional checklist at the beginning and end of each session where they could express their feelings about the tasks ahead. The intervention measured self-efficacy from a questionnaire based on Bandura (2006) at the beginning and end of the intervention. The intervention was measured against another group intervention that solely targeted reading fluency. The growth in reading fluency self-efficacy was noted during the intervention, however the control group (the non-self-efficacy group) also showed equal improvement in reading fluency, which questions Bandura’s theory. Perhaps the focused intervention adequately ensured improvement or perhaps the self-efficacy group would further improve as time progressed? Could this style of intervention sit within an entrepreneurship education provision in higher education and how should we structure entrepreneurship education at third level?

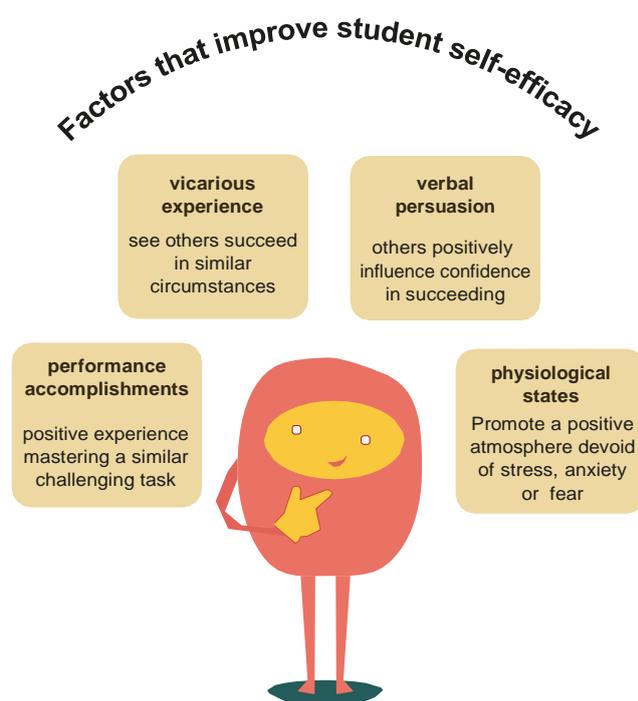


Figure 2.4: Adapted from an interpretation of Bandura’s theory (1977) and the study from Aro et al (2017)

2.4 Entrepreneurship education

Advance HE explain third level entrepreneurship education as the ‘development and application of an enterprising mindset’ (2019 p.2). An entrepreneurial mindset can be defined by how an individual thinks about an entrepreneurial opportunity and what actions they choose to respond with. They tend to seek out opportunities, work to overcome challenges, exhibit resilience and decisive determination and learn from mistakes (Kim and Strimel 2020). Minister of state for Higher Education, Mary Mitchell O’Connor, stressed the importance of Irish educational institutions becoming more ‘entrepreneurial and innovative’ and recognised that entrepreneurial skills are essential for graduates to be successful in a competitive jobs market (OECD 2017). Ireland’s National Skills Strategy 2025 states that it is committed to developing entrepreneurship education in Ireland. The strategy is based on a vision that educates a nation of people to be responsive to change, entrepreneurially agile and technically adept to grow enterprise. Entrepreneurship education is not only a focus with the Irish education system, it is one of the salient topics in higher education trends worldwide (Sui *et al* 2017). According to Sui *et al* (2017, p.853), entrepreneurship education can develop entrepreneurial potential for students but it must equip students with “entrepreneurial skills, attributes and behaviours” and when it does it will enhance the self-belief and confidence (entrepreneurial self-efficacy) required for students to persevere with new business start-ups (Shahab 2019).

2.4.1 Entrepreneurship education for creatives

Should entrepreneurship education be tailored to meet the specific needs of individuals studying design? Nielsen *et al* (2018) highlight the identity conflict experienced with traditional entrepreneurship education within higher educational art and design schools, as at odds with the creative identity the students have formed with their design education. This conflict is explained by Clews (2010) in that the act of being creative is a greater motivation for people working in creative businesses than the financial reward. Entrepreneurship education is often given in a simplistic, linear, business school style which limits the designer’s individuality and expression. This linear approach, dilutes the reason that their design was unique in the first place, creating a void between the creative identity of the designer, with being an entrepreneurial business designer. Aronsson (2004) asked David Birch what skills does an entrepreneur need to have.

Birch replied that there are “three skills that an entrepreneur needs to know and master: selling, managing people, and creating a new product or service. None of them are taught at business school” (Aronsson 2004, p.290). Birch suggests that all of these three skills must be addressed if we wish to deliver entrepreneurial education.

Nielsen *et al* (2018) recommend that creatives need entrepreneurial education and training tailored to suit a designer’s reflective approach, reasoning, creative practice and also work with the design process. Entrepreneurship education must yield entrepreneurial skills, attributes and behaviours and their facilitation must be tailored to specific target groups (Sui *et al* 2017). The Technological Higher Education Association (THEA 2019) in their ‘Submission of Creative Industries Roadmap’ have recognised this requirement and one of their suggested initiatives is to offer targeted entrepreneurial training to students enrolled on design/creative arts and technology programmes. However, the roadmap does not give guidance on how that entrepreneurial training would be delivered or if it would it be tailored to improve self-efficacy? This would definitely be welcomed and worthwhile because entrepreneurs with high self-efficacy and strong creativity skills are recognised as being more perceptive of new opportunities (Shahab 2019). Keaveney (2014) asserts that real world experience significantly contributes to entrepreneurship education when placed within formal education. In addition, if we aim to fully engage students in preparation for an evolving workplace, experiential teaching strategies which include problem-based learning, bringing the outside world into the classroom and facilitating a learning experience that allows students to find the answer when the answer is not apparent, must be included (Mc Queen 2018).

2.4.2 Facilitating entrepreneurship education in Higher Education

If entrepreneurial education facilitates entrepreneurial knowledge and skills, the student is more likely to launch a unique project or present creative ideas that have been concealed in their minds (Shahab *et al* 2019). With that said, entrepreneurship education is about more than developing entrepreneurs, it also contributes to developing students’ skills and intrapreneurial behaviour that can be utilised in a wider employment context (Shi 2012)

Advance HE published a very clear framework (*figure 2.5*) to assist embedding enterprise and entrepreneurship in Higher Education. The framework clarifies the journey of the students, with the role of the educator and the facilitating college. The smallest inside teal green circle on *figure 2.5* refers to the student journey, the petrol blue refers to the role of the educator and the peppermint green outer circle outlines the role of the Institute/college. The role of the learner, educator and college are discussed in greater detail in the next sections.

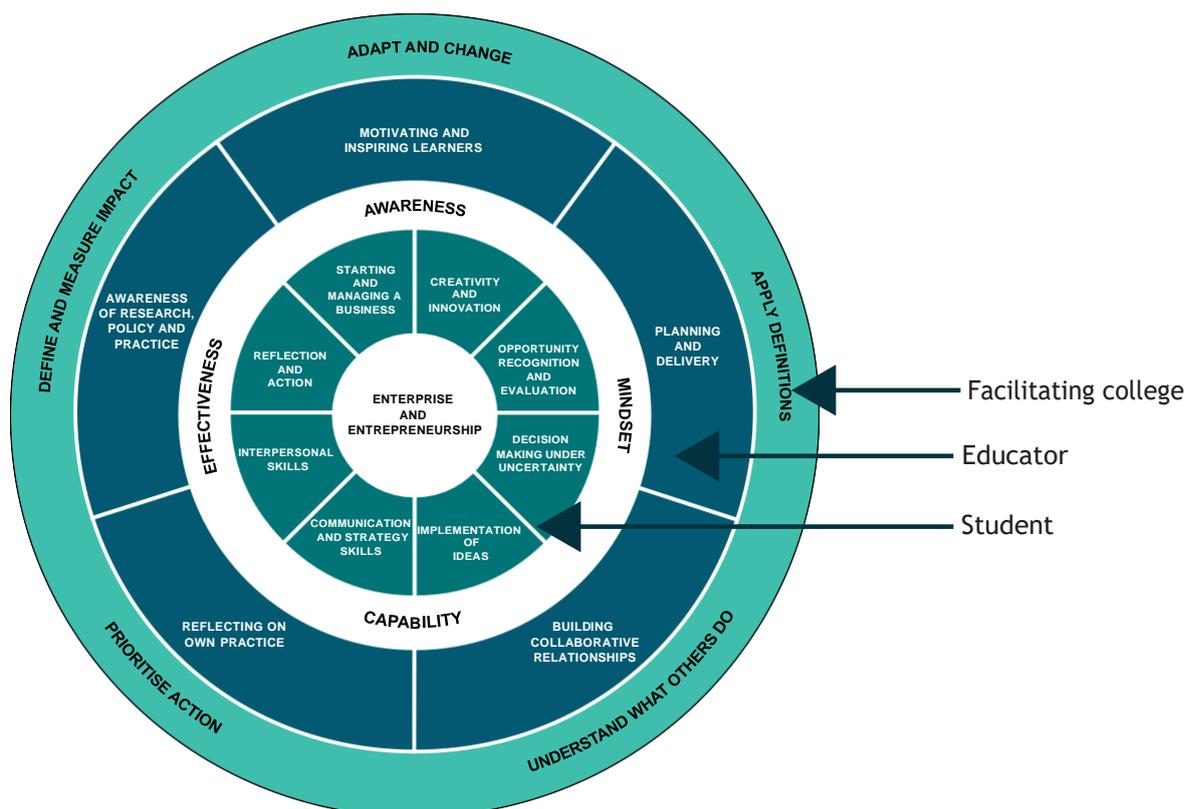


Figure 2.5: Advance HE QAA Framework for Enterprise and Entrepreneurship Education (2019, p.5)

2.5.1.1 The role of the learner for entrepreneurship education

The learners' experience will vary depending on their previous experience, interests and motivation. Three different approaches have been highlighted as important for the student's entrepreneurial education, 'learning about', 'learning through' and 'learning for' (Advance HE 2019). Working from the recommendations of the Advance HE framework, the student should *learn about, learn for and learn through* enterprise by starting and managing a business,

recognising and evaluating opportunity, making decisions despite uncertainty, implementing new ideas, reflecting and responding, communicating and strategizing as a team and the interpersonal skills, creativity and innovation that are connected to the tasks required from starting and managing a business (Advance HE 2019).

2.5.1.2 The role of the facilitator for entrepreneurship education

The role as a facilitator and educator is key to the success of student's entrepreneurial education and journey. Lecturers need to challenge the mindset of the 'digitally demanding' student to encourage entrepreneurial creativity and innovation (Jones *et al* 2017, p.197). The role includes motivating the learners to develop the entrepreneurial skills, designing and delivering a curriculum to promote entrepreneurship, building collaborative links with others and encouraging reflective practice through being a reflective practitioner (Advance HE 2019). Jones *et al* (2017, p.156) takes that further by suggesting that lecturers should not only deliver content but they need to "incorporate experimental, experiential and existential learning activities". The framework does not present recommendations on how to encourage creative and innovative entrepreneurial skills or for a curriculum that promotes entrepreneurship so there is still more detailed direction required. They do not suggest how to implement entrepreneurial experiential learning into a curriculum, before we understand how that can be planned we need to explore what experiential learning means.

2.5.1.2.1 Entrepreneurial experiential learning

Experiential learning, or learning through experience allows the learner to build meaning and also is heavily linked to building employability skills (Moon 2005). Moylan *et al* (2016) maintain that experiential learning is the most appropriate pedagogy for entrepreneurship education because students learn about entrepreneurship, the skills to become an entrepreneur, how to grow their entrepreneurial mindset and also take responsibility for their own learning and career. Experiential learning is explained by Gentry (1990, p.20) as being "participative, interactive and applied", it is learning that makes "contact with the environment, and exposure to processes that are highly variable and uncertain". Kolb (1984, p.38) stresses the important difference between

experiential learning and learning experienced in traditional teaching methods in that experiential learning emphasises the “process of adaptation” whereas traditional learning is focused on the outcome or delivered content. If we intend to improve a student entrepreneurial mindset, entrepreneurial intention or entrepreneurial self-efficacy, all of which are grounded in how the student thinks, believes, behaves, adapts and responds, it would suggest that ‘living’ the entrepreneurial experience in an experiential learning style delivery would be the most appropriate method. Gentry (1990) also emphasises the significance of student’s evaluation of their experience, reflecting on how they experience their feelings and how their experience compares with their prior knowledge, to grow their self-efficacy.

2.5.1.2.2 Reflective practice within experiential learning

The reflective process floats between and connects learning and thinking (Moon 2005). Therefore the importance of reflective practice being integrated into entrepreneurial experiential learning is to engage the entrepreneurial mindset which as we have already discussed is a way of thinking and responding. “We reflect in order to learn something, or we learn as a result of reflecting” (Moon 2005, p. 80). In fashion education, student reflection is central to the creative design process and creative learning, both in terms of critique and also reflection-in-learning (James 2007). During a sustainable fashion project, Kennedy and Terpstra (2013) noted that students believed that their reflective annotations on difficulties they faced, satisfactory resolutions and team work helped them become more effective problem solvers and better team players. It was noted that when the reflection was deep and professional, the learning was ‘transformative’ (Kennedy and Terpstra 2013, p.129). To encourage an entrepreneurial mindset, Jones *et al* (2019) recommend that educators promote the students drive for self-improvement which follows on from effective reflection. With effective reflection, students feel empowered to recognise and address their own need for personal growth; this links with best practice for entrepreneurship education as it focuses on what entrepreneurs do instinctively (Jones *et al* 2019).

To support the role of the lecturer and student, the higher education college needs to create a clear framework on how entrepreneurial education should be integrated within each course curriculum.

2.5.1.3 The role of the college for entrepreneurship education

According to Jones *et al* (2017), Higher Education works more towards producing employees rather than employers and to counteract that, they recommend that entrepreneurship education should be integrated into daily learning. UCLan University have achieved many graduate career and employability accolades but admit that their enterprise education is generic in that employability and enterprise is embedded into all courses with flexibility in how it is contextualised within each subject (Shi 2012). However, the only reference to enterprise education for fashion is how the course links with external stakeholders through real-life briefs which is what many fashion colleges incorporate within their curriculum (including the fashion degree course within this study).

The Advance HE framework (2019) addresses that information and clarifies how an Institution or college should identify, map, prioritise and measure entrepreneurial activities to understand their impact, provide for required resources and communicate their value with a view to promoting a culture of entrepreneurial practice. The recommendation for our Institute, who are currently working on its transition to becoming a technological university, would be to create a positive, aspirational focus towards entrepreneurship and strengthen its engagement in activities to support the development of regional socioeconomic enterprises and communities (Advance 2019). This would empower graduates considering entrepreneurial activity and furnish them with knowledge of available resources to support their business venture (Trivedi 2005). Entrepreneurial education does not require an entrepreneurial label, the learning outcomes of the discipline can be tailored to combine entrepreneurial experiential activity without the student feeling side-tracked from their chosen discipline learning (Williams 2019; Phillips 2020). It is important that as education providers, that we firstly acknowledge what is required of the career ready graduate before integrating entrepreneurial education into the curriculum.

2.5 The career-ready fashion graduate

To understand if we can improve a fashion graduate's career readiness, we first need to understand how the fashion industry defines what a successful fashion design graduate is. Polan and Tredre (2009) summarised the responses made from fifty-three leading fashion designers in

2001, to the question posed by Women's Wear Daily (WWD, an American fashion industry trade magazine), of who are the three most important fashion designers of the last ninety years. The recurrent theme from their replies highlighted an appraisal of a fashion designer's skill in marketing and business, as equal to their design skill. When we consider what makes good fashion, we know that innovative design must present a unique quality to the product, however, it is about more than how the garment looks, how it functions and the meaning it suggests (Loschek 2009). Regardless of a designer's fashion design skills and abilities, if their designs cannot work to sustain continuous business, then their ability to influence will be curtailed. In the Daily Mail article, Irish veteran fashion designer, Paul Costelloe explained the secret to his success as being able to understand the business side and plan with the bigger picture in mind (Harrington 2019).

Clothing requires promotion before it can become fashion and clothing is only regarded as fashion when it is worn by a specific group or is sought after by many (Loschek 2009). Consequently, fashion students should be prepared to be both entrepreneurial and career ready (intrapreneurial) because they must pique their customer's interest by designing and supplying fashion that exceeds their customers' expectations with an agreeable yet profitable price tag. Sahin *et al* (2018) describe an entrepreneurial individual as having "intellectual curiosity for new concepts, ideas and beliefs", willingness to try new and unprecedented challenges, scores high on openness to experience, has a vivid imagination, highly creative outlook and a curiosity for all things new; this description perfectly sums up the ideal career ready fashion graduate as illustrated by *figure 2.6*



Figure 2.6: My vision of what makes a successful fashion graduate with particular emphasis on personality traits

2.5.1 Career ready linked with entrepreneurial and intrapreneurial skills

Should the career ready graduate have entrepreneurial/intrapreneurial skills? Yildirim and Yener (2014) summarised their research of the skills that categorises an intrapreneur, as an individual who is innovative, risk-taking, pro-active, who seeks autonomy, self-renewal, organisational renewal and is motivated to launch new enterprise. Significant research also links these skills with job satisfaction. In a study exploring how creative graduates could be more employable and career ready, Haukka (2011) identified a number of recommendations, one of which was to have creative courses that promote an understanding of enterprise sustainability, market targeting and requirements, new technologies and opportunities for financial support, which are all areas categorised under entrepreneurship education. In addition, Delgatto (2020) explains that an entrepreneurial mindset is a crucial component of career readiness, as one in three U.S.

employers are actively seeking to recruit employees with entrepreneurial experience (intrapreneurs).

Frequent criticisms that employers make of all graduates is in reference to their lack of skills in communication, time management, team work, project management and problem solving (Haukka 2011). The challenge is to ensure creatives have the right skills, attributes and knowledge. Once in employment, creatives should have access to support for a sustainable career (Shi *et al*, 2012), again supporting the premise that fashion graduates with high entrepreneurial self-efficacy are also more career ready. The Future of Jobs Report 2018, from the World Economic Forum, outlined a sharp increase in demand for employees with skills including “creativity, originality and initiative, critical thinking, persuasion and negotiation, resilience, flexibility and complex problem solving”, which are the skills and attributes associated with entrepreneurship. To further escalate the importance of entrepreneurship skills for a career ready graduate, Yildirim *et al* (2014) maintain that the entrepreneurial ability to influence changes, initiate processes and advance development will be the most important factors to create wealth in contemporary business, with creativity being the most important facilitator for business success.

2.6 Female entrepreneurship

To understand if we can improve entrepreneurial self-efficacy within a course where eighty-three percent of the students are female, we need to gain a better insight into other potential influences that may affect a student’s attitude and one contributing factor would include awareness and knowledge of female entrepreneurship.

Wilson *et al* (2009) cited entrepreneurship education as having a more positive influence for women than for men. Female entrepreneurship has been recognised as a key target to encourage global development according to the World Economic Forum (Hunt *et al* 2019). Donegal Local Enterprise have been focusing on encouraging more female entrepreneurs. Brenda Hegarty, Assistant Head of Enterprise commented that women in enterprise are underrepresented in Ireland and Donegal, with men being twice as likely to start a business (Korbel 2018). Hunt *et al* 2019 reports that women view entrepreneurship as a male construct that benefits from masculine values and attributes which forces them to question their ability to be successful. In

Donegal Local Enterprise, only 16% of their client base are female (Korbel 2018) which may have a knock on effect with regards to how success stories could inspire potential entrepreneurs and their ambition (Hassen and Tremblay 2019). Research suggests that women are less likely to engage in behaviours that are perceived as risky, so when the economy is experiencing uncertainty or instability and when business start-ups are required to stabilise the economy, women are less likely than men to start-up a business (Dean *et al* 2019). From all the categories of business, fashion is considered high risk and uncertain because of the constant change and volatility (Hassen and Tremblay 2019).

Literature critiquing female entrepreneurship states that when male and female entrepreneurship is compared like for like, that female entrepreneurs are less successful than their male entrepreneurs with regards to economic performance (Dean *et al* 2019). However, it is also argued that most female entrepreneurial underperformance is more likely due to the fact that their businesses tend to be in the service industry or retail, both of which are notoriously difficult with regards to growth and profitability, thereby limiting economic performance. In addition, female entrepreneurs experience greater motivation to solve their own problems or the problems of others, more than their motivation to pursue profit (Lin *et al* 2018).

Could this misleading assumption about the success of female entrepreneurs affect the vicarious experience or social / emotional states element of building self-efficacy? Considerable research has tried to establish differences between female and male entrepreneurs but Dean *et al* (2019) state that there are more similarities than differences. The main attributes with both sexes include, a need for independence, achievement and autonomy with the female leadership style favouring a less hierarchical structure and nurturing strong relationships in the organisation (Dean *et al* 2019). Family support is crucial in both the start-up and growth of female businesses to provide confidence that she can balance her role within the family home with her role as an entrepreneur (Lin *et al* 2018). Trivedi (2016) also refer to the role of subjective norms and the influence of family and friends as being integral to an individual's entrepreneurial intention (figure 2.1, page 21). There are many factors that can influence potential female entrepreneurs and the complexity of that is beyond the scope of this research.

2.7 Concluding remarks

Zhao *et al* (2018) ask the question of what entrepreneurship-focused education should look like and suggests that if we could understand fashion students entrepreneurial intention more it would help educators and university administrators.

The literature is assured with regards to the benefits of improving student self-efficacy, there is an undeniable advocacy for the importance of producing entrepreneurial designers and we can understand the importance of entrepreneurial self-efficacy in promoting entrepreneurial intention and an entrepreneurial mindset. However, the main aim of this proposed study is to experiment with a teaching intervention to understand if the particular experiential learning methodology works to facilitate an improvement in entrepreneurial self-efficacy and career readiness within a group of fashion students and secondly to understand how the intervention would form part of an effective entrepreneurship education provision for the female dominated programme. The majority of the theories available to us for entrepreneurial self-efficacy are mostly based on meta-analysis. Many universities believe they are addressing entrepreneurship education by delivering the facts about enterprising activity, however Jones *et al* (2017) clarify that what makes an entrepreneur is a mindset, so entrepreneurial education needs to be a lived experience which brings entrepreneurial self-efficacy, skills and attributes into the mix (figure 2.1). There is very little research available that shines a light on teaching strategies to improve entrepreneurial self-efficacy in third level education. How can we manage a 'lived experience' within our curricula and can we be confident in its justification? This study presents a potential intervention that aims to improve entrepreneurial self-efficacy and narrow the research gap, an intervention that could be modified to use within many design or practical third level course curricula.

3. Implementation and Evaluation

Section Three: Implementation and evaluation

3.1 Research aims and objectives

The aims of this action research study is to determine if levels of entrepreneurial self-efficacy and career readiness improve for students enrolled on a Level seven fashion degree course following engagement with an experiential entrepreneurship teaching intervention and how the intervention would form part of an effective entrepreneurship education provision for the female dominated programme. The fashion course in question, intends to prepare the most entrepreneurial and intrapreneurial fashion graduates in Ireland because research suggests that the associated entrepreneurial skills, attributes and behaviours are essential to a fashion designer's success. Henry (2007, p.78) states that designers share "many of the entrepreneurial personality traits cited in the academic business literature" including innovation, creativity, risk taking, locus of control and achievement motivation. 'The big five personality traits' that have been used to assist the prediction of future entrepreneurial behaviour and career readiness (Zhao *et al* 2018).

3.1.1 Research Objectives:

1. To ascertain if participants perceive a change in their self-efficacy for each of 'the big five personality traits' and entrepreneurial self-efficacy after they engage in the intervention.
2. Review recent literature regarding entrepreneurship education to establish how an experiential project can contribute to an effective third level entrepreneurship educational provision.
3. To ascertain if the participants of the study had particular views on female entrepreneurship and how that may influence their entrepreneurial aspiration.

3.2 Research methodology

To meet the research objectives, students completed a Likert-scale questionnaire informed by the 'big five personality traits' and entrepreneurial self-efficacy before and after they engaged in the intervention. The results of both questionnaires and participant views were reviewed and

discussed during a focus group. This chapter aims to discuss the methodology used and the detail of the research study.

The study worked with a interpretivist ontology and epistemology which dictated the choice of methodology and the data collection methods used for the research (Cohen *et al* 2011). The research methods are informed by the aims of the study and what is being studied (Tonuchi 2019). There are many stages involved in research and the progression we choose through those stages assist us in designing our research methodology. Saunders *et al* (2007) have created the research onion, which was used as a guide to develop the proposed research (*figure 3.1*)

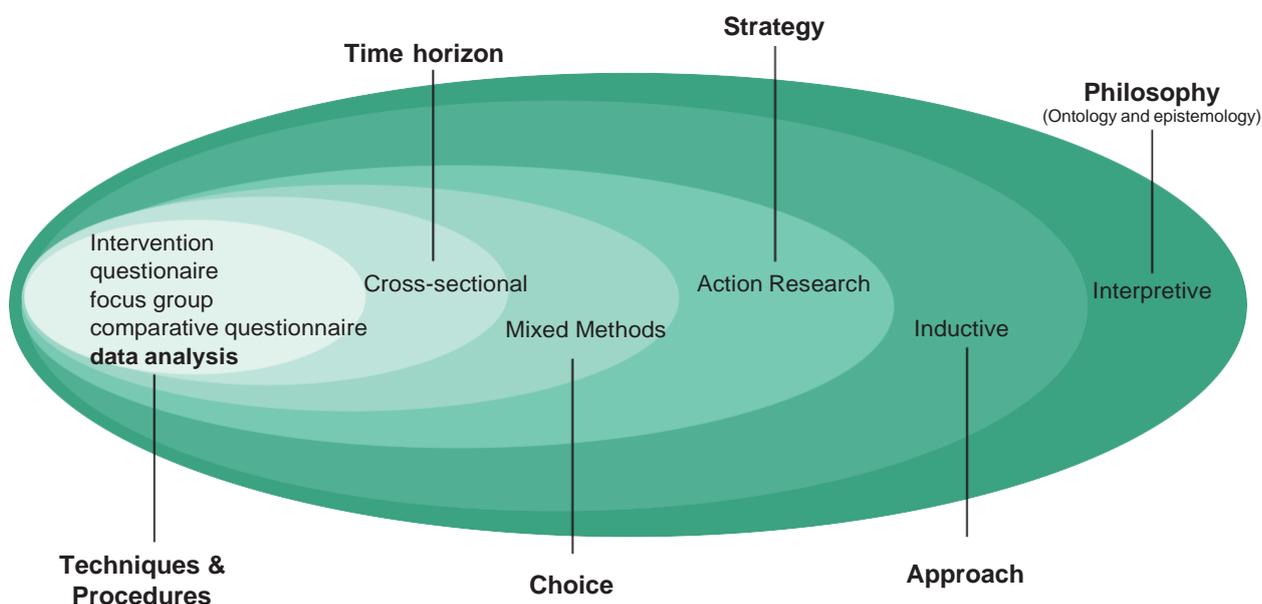


Figure 3.1: Research stages for the study adapted from the research onion from Saunders *et al* 2007.

3.2.1 Research philosophy

The research philosophy method of *interpretivism* has influenced the choice of methodology throughout the study. The research is subjective and hermeneutic as the study is concerned with gaining rich insights from the research data grounded in the student experience (Saunders and Tosey 2012). Variables which may impact the participant’s response to the research need to be factored into the results, these include external influences affecting their individual attitude to entrepreneurship and subjective norms (figure 2.1, p.23). Results have been interpreted from the Likert questionnaire (quantitative response) combined with the themed analysis from the

focus group (qualitative response) which aims to tease out the external variables that may have influenced the participant's self-efficacy. *Interpretivism* presents an opportunity to understand the participants views, how they have interacted with the intervention and why they have made assumptions about their entrepreneurial self-efficacy (Tonuchi 2019).

The researchers 'beliefs, values and interpretations' may have affected the research results as this research is personal, and the researcher was involved with the subject which means that the study subscribes to an 'anti-positive or post-positive' viewpoint (Cohen *et al* 2011). Positivism would be considered an unsuitable philosophy and epistemology for this proposed type of social science research which is studying the complexity of human behaviour (Cohen *et al*, 2011) as the generated results cannot be accurately measured, independent of understanding external social influences (Baumfield *et al* 2012).

3.2.2 Research approach

The *inductive approach* has been used because the participants self-efficacy is somewhat dictated by their own personal experience and social interaction with their studies and external influences. In order to fully understand the responses given, it is essential to consider these external factors and to do that requires an inductive approach (Baumfield *et al* 2012). An inductive approach is used to condense raw data from various sources to help establish underlying influences that impact on the study (Thomas 2003). The before and after questionnaire results were given back to the participants prior to the focus group interview where each of the questionnaire sections were discussed to ascertain what social influences may have informed their decisions and why.

3.2.3 Research strategy

Action research is a "specific method of conducting research by professionals and practitioners with the ultimate aim of improving practice" (Koshy 2009, p.1) and was deemed the most appropriate strategy for the proposed intervention because of the requirement to understand, test, improve and make positive changes within the researcher's role as a facilitator of learning.

By testing a small scale intervention, the researcher has gained a fuller understanding that will inform how the course curriculum is structured and provide a pathway to ease the gap between theory and practice (Cohen *et al* 2007).

Mc Niff (2014) emphasises the participatory nature of *action research*; research that can produce knowledge that may assist professional development. Mc Niff's (2014) definition that action research does not start with a 'desire to change others' but instead focuses on a 'change with others' particularly resonates. When working on an action research project, the implied knowledge becomes explicit and informs the knowledge in practice (Mc Niff 2014). When adopting an action research approach, the researcher's aim was to learn through action, observing, reflecting and responding to it, to lead to an insightful development that would benefit the particular issue being researched (Koshy 2009). Figure 3.2 below illustrates and clarifies the particular process adopted for this action research.



Figure 3.2: Action research process for study.

(Source: Adapted from Cohen *et al* 2007; Koshy 2009; Baumfield *et al* 2012 and Creswell 2012)

3.2.3.1 Action research preparation

Once the target area for improvement was identified, research and analysis of the information available informed how to plan for and structure the most appropriate intervention. The potential participants were consulted prior to writing the project brief regarding the nature of the intervention to give them ownership of the work and they welcomed the concept enthusiastically. Koshy (2009) recommends that action research should be participative and collaborative working towards a common purpose. The participants welcomed an opportunity for more time to work on their garment making skills, they agreed what garment style and size range they would offer and they also had an input into the nature of the project assessment. An email was also sent out to the college students and staff, requesting donations of second hand clothing to upcycle in the creation of their range of ladieswear tops. The entrepreneurial project formed one of two projects delivered as part of a fifteen credit module and was delivered over a five week period.

The fashion students agreed on a brand name (Sequel) and identity that they could work with and this added to the professionalism of their entrepreneurial business. Stickers, labels and white tissue paper to use for their pop-up shop were ordered during week one (Figure 3.3)

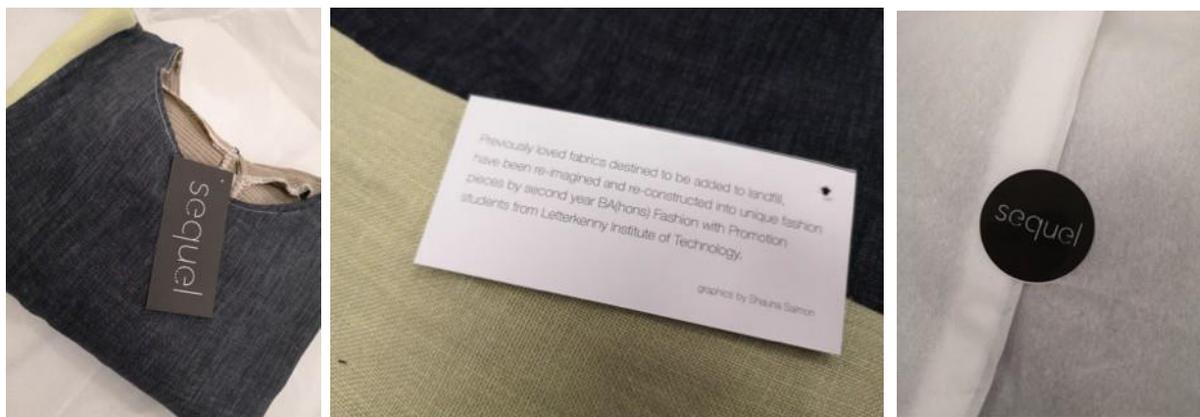


Figure 3.3: Photographs of graphics used for the entrepreneurial pop-up shop.
(left to right) garment with swing tag, back of swing tag and tissue paper and sticker wrapping.

A statistical baseline for the participant's entrepreneurial self-efficacy and the personality traits associated with entrepreneurial intention was established by asking the participants to complete a Likert-scale questionnaire.

3.2.3.2. In-action reflection

The intervention was actioned, observed and reflected upon by both the participants and the researcher (the researcher reflection is available in Appendix 12). The entrepreneurship project presented the opportunity for the students to put skills and knowledge learned to date into practice. The students were tasked with working as a team to produce an upcycled marketable ladies wear top (which was constructed using cut up donated fabric assembled in a patchwork effect) and used their acquired pattern cutting and sewing skills. The group were responsible for sourcing the material, cutting the pattern pieces, product construction, preparing for retail, marketing, selling the product in a pop-up shop and reflecting on their individual input into the success of the group project. If we consider the skills, attributes and behaviours associated with an entrepreneurial mindset (listed in figure 1.1, page 16), it was obvious throughout the intervention that these were being exercised. Problem-solving, creativity and innovation was constantly required in the arrangement of the patch-work fabric and finish of the garment. Students were challenging conventional garment making decisions and enjoying resolving issues with unconventional design solutions (figure 3.4). Decisive and strategic action was taking place regarding marketing, display and retail price. Interpersonal skills were required from each team member to work respectfully within the group, with clear communication skills adopted to ease tension. There was a real fear of starting the pop-up shop, a fear of not being able to produce desirable products and publicly failing, however, there was a distinct recognition among the cohort that they could start and manage a business, it was a viable option and they were open to other possible business start-up concepts.

The classroom took on a different and more conversational atmosphere where the students worked in an environment more akin to the 'factory' style of garment making with open communication about design decisions being made, providing a welcomed alternative to conventional classroom teaching and learning.

It was impressive to see the students assume different leadership roles within the team, it provided an insight into how the participants would be as employees or employers. This understanding of that side of their personalities will inform how to best facilitate their remaining academic studies to bring their best to the fore.



Figure 3.4: *Unconventional detailing on sleeve and patchwork.*

The most impactful in-action reflection was related to how much the participants grew in confidence from the compliments paid to them by lecturers and students who were unfamiliar to them, when they were hosting the pop-up shop.

3.2.3.3. In-action student reflection

Reflection is not only an essential part of action research, it also is an extremely important inclusion for effective experiential learning, entrepreneurship education and fashion education (Gentry 1990; James 2007; Moylan *et al*, 2016; Williams 2019). Students need to be given the opportunity to articulate what they feel they have learned as an extension from their prior learning and also their feelings in relation to their learning (Gentry 1990). A specific 'visual journal' sheet asking "what have you achieved today? What worked well for you, what frustrated you, what did you master or learn, what would you like to do different, what thoughts do you

have about the class?” was designed and given to each of the participants to complete at the end of each class. The visual journal as illustrated in figure 3.5 (full template available in appendix 10) provided evidence of their work, teamwork tasks and preparation of the garments for the pop-up shop and was submitted for assessment. Assessment was not affected by their involvement in the study which students were fully aware of from the outset.

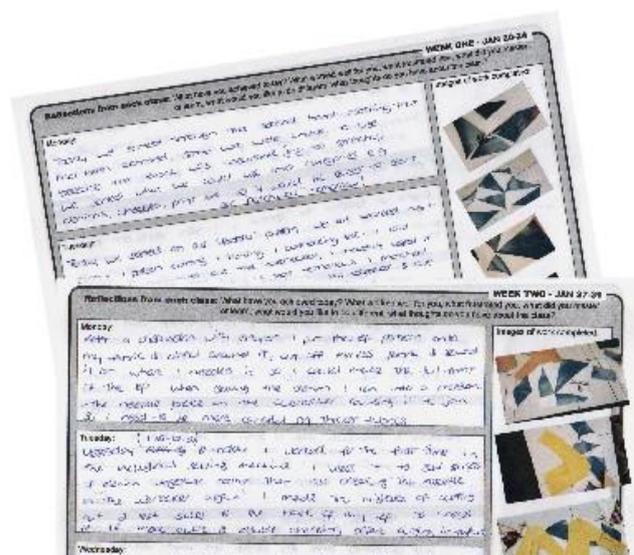


Figure 3.5: Example of a completed visual journal

3.2.3.4. Student assessment within the action research

Feedback for the assessment was framed by how progress was evaluated to avoid a negative impact on the learner’s self-efficacy. According to Bandura (1993), if a focus is placed on the shortcomings, then self-efficacy can be lowered. The learning environment can promote self-efficacy and academic achievement, if it supports the belief that ability is an acquirable skill, avoids using social competitive comparatives and instead focuses on the student’s personal improvement (Bandura 1993). Assessment feedback comments focused on what the learner had achieved, celebrating progress made when they worked hard at a particular role, task or garment construction.

3.2.3.5. Analysis of data collection

After the intervention, the students completed an identical questionnaire (to the first) to ascertain if there were any changes to their self-perception of their personality traits or entrepreneurial self-efficacy. The difference between both Likert-scale questionnaires gave a quantifiable result to establish any differences from before to after the intervention. These results were analysed, reflected upon and used to inform the questions posed during the focus group interview. The students reflected on both their questionnaires, considered the differences and suggested during the focus group interview why they felt they had a difference in their results. Both mechanisms of the quantitative (questionnaires) and qualitative results (focus group) were analysed and considered in relation to the researched literature. Two of the six participants were absent on the day the second questionnaire was completed. Instead they completed theirs just before the start of the focus group interview but unfortunately, that meant that their difference in data was not apparent to the researcher when the focus group interview was taking place. A recommendation would be to allow more time between both stages to allow preparation for the focus group.

The study presented interesting findings that do problem-solve the issue raised, namely to improve the entrepreneurial self-efficacy and career readiness of the fashion graduate. The results are not conclusive but it will inform an improvement in practice, an improved fashion curriculum, and has the potential to positively influence how entrepreneurial education is integrated into other curricula (Koshy 2009).

3.2.3.6 On-action reflection

The intervention and its implementation as a project set within a fifteen credit module was considered very successful and it will definitely be repeated in future years. The researcher's role became more observatory and on occasions it seemed more similar to that of a factory production manager, the researcher appreciated the ability to observe this student-centred approach. The researcher learned about the participants and their leadership qualities whilst observing them working within the group, which also provides an insight into how to best motivate their future learning.

With regard to recommendations to improve the intervention, a larger class of participants would allow for a more successful factory-styled production line with clearer defined roles and responsibilities for each of the students. This would have reduced some of the bottle neck issues that occurred in the finishing of the garments and would have given greater ownership to achieve higher quality standards. It would also have presented an opportunity for each of the participants to repeatedly practice particular processes to enhance various garment construction skills. The researcher had not anticipated the complexities experienced with arranging the patchwork fabric and would be more cognisant of ensuring that students had a particular process to follow to minimise certain construction issues without removing the flexibility to innovate.

3.2.4 Research choice

The researcher has adopted a *mixed method design* for this research proposal: using *quantitative research* to collect statistical data of students perception of their entrepreneurial self-efficacy (broken into the personality traits as identified by Sahin *et al* (2018), followed by *qualitative research* and data collection from a focus group, discussing the same topics as the quantitative study, to provide a deeper individual understanding for their response. The qualitative method is most effective in revealing the student perspective and their insight regarding their experience (Creswell 1998). Mixed methods present a deeper understanding of the research problem than purely considering the results of either a quantitative result or a qualitative result (Creswell 2012). The researcher had chosen to follow an interpretivism ontology and epistemology stance which could have been solely qualitative research, however, the researcher chose to also use quantitative research in the form of the Likert-scale questionnaire to provide a structure that would guide the focus group questions (qualitative research) and give the participants data to reflect on. Mixed research methods also established an improved reliability and validity for the study which is discussed in greater detail in 3.2.6 section below.

3.2.5 Time horizon

The final layer of the research onion deals with the time allowed for the proposed research study. I have carried out a 'snapshot' study with a small group of six students over a short period of five weeks in a cross-sectional style (Saunders and Tosey 2012). The researcher targeted the second

year cohort as the most appropriate group to work with, with a view to resolving the issue targeted by the study. The study also only addresses some of the learning outcomes identified in the module descriptor so the study had to be completed before the introduction of another project that would address the remaining learning outcomes of the module. Both modules needed to be completed within the thirteen week semester which would allow a maximum of six weeks for the cross-sectional styled research study.

3.2.6 Validity and reliability

Validity refers to “whether or not a study actually achieves what it says it will do” (McNiff 2014, p.119). The study set out to improve entrepreneurial self-efficacy and career readiness so it was important to establish an accurate baseline for levels of entrepreneurial self-efficacy and self-efficacy of the related personality traits before and after the intervention took place. The researcher chose to collect that data with the help of the Likert-scale questionnaire. Briggs *et al* (2012) state that a source of internal invalidity that could occur is the participants not completing the questionnaire accurately. Briggs *et al* (2012) suggest that the validity can be checked by interview, which, for this proposed study took the form of a focus group. The focus group was also chosen because it was deemed the most appropriate to collect data regarding external influences that may have affected their perception of their self-efficacy. With regards to validation problems for the focus group, Briggs *et al* (2012) discuss the potential source of bias that the interviewer may sway the responses with, but the researcher was conscious to remain supportive to the comments made without leading responses or the direction of the comments.

Triangulation or the comparison of two or more sources of data is the most appropriate form to establish validity (Briggs *et al* 2012). For this reason, the researcher has used methodological triangulation; the use of mixed methods or strategies to corroborate data from the questionnaires with the data from the focus group (Briggs *et al* 2012). The validity is substantiated by the convincing evidence from the mixed methods approach in that both the quantitative and qualitative results all point in the one direction (Baumfield *et al* 2012).

The researcher was also aware that if an individual became conscious of their self-efficacy, could that influence their behaviour? However, the students were not consciously considering their

learning as entrepreneurial which would imply they were not conscious of that self-efficacy. Bandura (2006) also clarifies that levels of motivation, personal attainment and reactions are the same regardless of whether they are formed prior to self-efficacy judgements. Mc Niff (2014) cautions an awareness of the researcher's attitudes and approaches, and how it could influence the action research. The researcher worked closely and collaboratively with the participants and there was a conscious effort to ensure that the researcher's influence on the data was minimised.

To ensure reliability of the study, the researcher must ensure that the integrity of research, the appropriateness of the research methods and the soundness of the conclusions reached are appropriate for how the information will be applied (Noble and Smith 2015). It was intended that the application of a statistical method of research (Likert-scale questionnaire) would provide some rigour to the qualitative research and improve its trustworthiness. Both qualitative and quantitative research findings support each other which also demonstrates a sense of reliability. The researcher did aim to keep personal biases from influencing the study findings but the reflective nature of action research that informs how the study evolves will always have some influence on the study and its findings. Baumfield *et al* (2012) argue that as a result of the influence of the integration of reflection within an interpretivist action research methodology, that reliability can suffer due to the priority placed on validity. The researcher kept a reflective diary which demonstrates the thought processes which informed the study methodologies, data analysis and conclusions made.

3.3 Strategies for data collection

Data was collected through a Likert scale questionnaire and also a focus group interview. The questionnaire was specifically designed by the researcher and was given out before and after the intervention. The questionnaire given to the participants before and after were identical. Both questionnaires were compared and analysed and the findings were discussed during a focus group interview with the participants.

3.3.1 Questionnaire

The researcher has designed the self-efficacy questionnaire (see Appendix 2) with a Likert rating scale which provided a self-estimated quantitative percentage of perceived self-efficacy. The premise was that any perceived change in self-efficacy noted between both questionnaires could be attributed to working on the project. The 'big five personality traits' (*Barrick and Mount 1991*) have been aligned with entrepreneurial self-efficacy (Poon 2001; Unay *et al* 2012 and Sahin *et al* 2018) to inform each of the sections of the questionnaire to ascertain the student's entrepreneurial intention.

The 'big five personality types' are classified under the headings: conscientiousness, openness to experience, emotional stability, extra version and agreeableness (*figure 3.6*) and identifies personality as five clusters of behavioural habits (Poon 2001, Stajkovic *et al* 2017) that can assist prediction of future entrepreneurial behaviour or entrepreneurial intention (Zhao *et al* 2018). Personality traits common with entrepreneurship to that of a career ready designer also influenced the questions and how they were structured. Most importantly the questions posed, address the purpose of the study in establishing the entrepreneurial self-efficacy of the participants (University of Leeds 2008) and are suitably framed and non-leading (Cohen *et al* 2007).

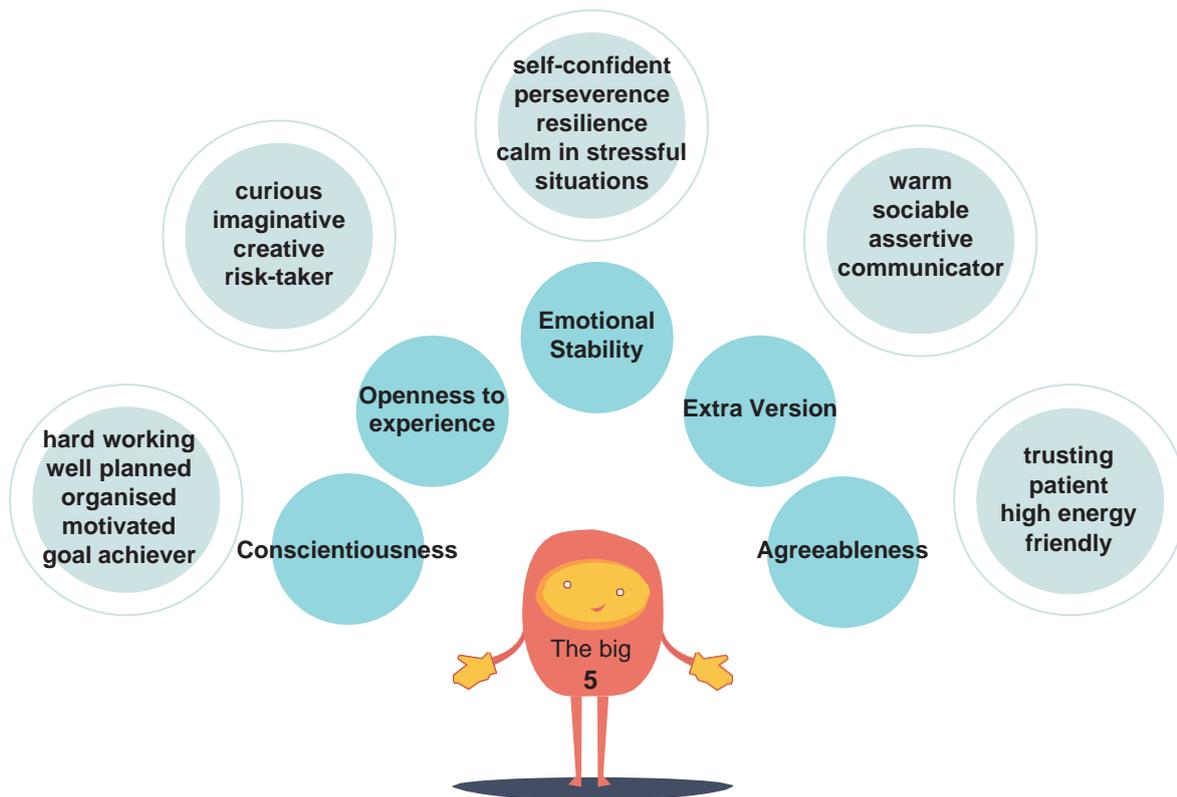


Figure 3.6: The ‘big five personality traits’ aligned with entrepreneurial intention, adapted from Barrick and Mount (1991); Sahin et al (2018)

3.3.2 Focus group

Due to the exploratory inductive nature of the study, a focus group was deemed appropriate to gain an understanding of the effectiveness of the intervention. Focus groups or a group interview, facilitate an interaction within the group when discussing the topics that the researcher has posed (Cohen *et al* 2007). The group dynamic provided a more encouraging space that empowered the participants to share their opinions, it provided a collective response to clarify if or why changes have occurred in their self-efficacy and it promoted the participants views over the researcher’s agenda (Cohen *et al* 2007). The researcher sought to understand the role the intervention may have had, in effecting any change in the participants self-efficacy questionnaire and also to gain an insight into the experience participants had to inform future planning and establish good practice (Breen 2006). The focus group provided a platform to hear the student voice and explore, share and compare the student experience.

3.3.2.1 Reflection on Focus group

At the start of the focus group, the researcher introduced the session with an introduction explaining that the aim of the focus group was to have a discussion on what their experience was of their last project and discuss the detail of their questionnaires. The participants were asked to silently reflect on what fears, thoughts or anticipations they had before starting the project and note them down on a post-it they were given. They were also asked to consider if they learned anything about themselves during the project. It was important that the students had time to self-reflect and establish their own thoughts, as one of the difficulties that can exist with focus groups is that some of the participants may feel a social pressure to follow another participant's train of thought which can side-track less confident voices (Breen 2006).

Five out of the six participants were present for the focus group. They were given both their first and second questionnaires, so they could see if any differences existed. They were given time to analyse and compare before the researcher opened the conversation about each of the sections in turn within the questionnaire. Each participant was able to reflect on any change to self-efficacy that was recorded. The focus group interview sought to provide justification to substantiate the quantitative data gleaned from the Likert questionnaire.

Reliability was assured somewhat, based on the extent to which the participants agreed with each other with regard to general experience discussion (Breen 2016). The researcher remained encouraging but maintained a neutral tone, allowing time for all participants to voice their thoughts and avoided influencing or moderating the discussion.

Reflection is considered important for experiential learning and also within action research, however, the researcher did not anticipate the extent of the reflective learning experience that participants were rewarded with through the focus group. It was the first time that the participants genuinely reflected on the entrepreneurial learning that they had experienced with the intervention. The activity of sharing and generating ideas and thoughts deepened their appreciation of how they had developed with regards to their skills, attributes and behaviours.

3.3.3 Data analysis

The focus group audio was transcribed and then analysed with the data collected from the questionnaires using thematic analysis (TA). Before the focus group interview took place the researcher had planned out the introduction and then thematically organised the questions to fit with the different sections in the questionnaire (see Appendix 6). A focus group interview generates considerable data and to process the information into a succinct analysis, it is beneficial to identify the key themes (Breen 2016). TA offers a flexible six-part process (*figure 3.2*) to analyse data: get familiar with the data collected, highlight phrases or sentences and assign a code to it, search for themes by identifying patterns in the code, ensure that the themes are useful and accurate, name and define themes and use that information to produce the report (Braun and Clarke 2012).

The themes identified were linked to the sections informed by 'the big five personality traits' and entrepreneurial self-efficacy, the four stages of encouraging self-efficacy, female entrepreneurship and general comments about the project. It was anticipated that information for these themes would clarify if there was an improvement in entrepreneurial self-efficacy and influences that may affect their entrepreneurial self-efficacy. As already established (see figure 1.1, page 16) entrepreneurial self-efficacy is the belief that entrepreneurship is a viable career options and that they believe they have the necessary skills and attributes to be successful with the related challenges (Hunt 2019). Each of the themes targets the comments regarding entrepreneurship viability, the personality traits, skills and attributes, and the influences that might impact on their entrepreneurial self-efficacy. General comments were also important to understand what worked within the project to help future planning for a repeat of the project. The quantitative information from the Likert questionnaire which were also themed with 'the big five personality traits' and entrepreneurial self-efficacy was substantiated by comments made during the focus group to give a more in-depth data insight.

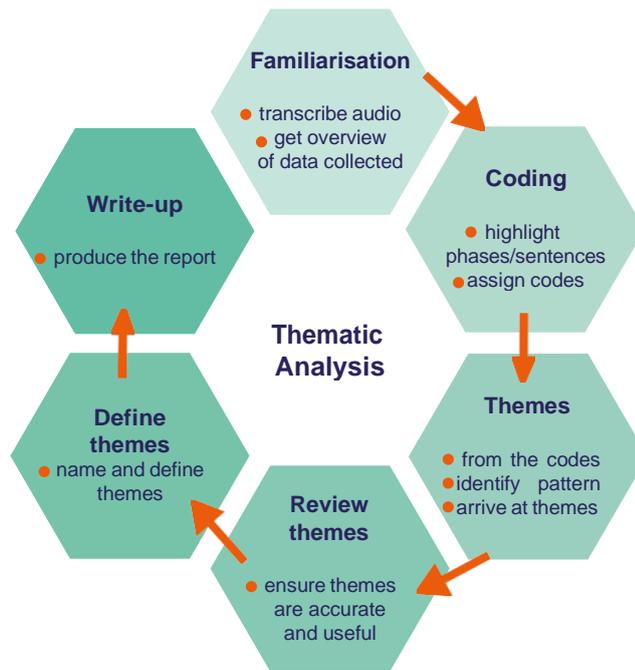


Figure 3.7: Six-part process for Thematic Analysis (adapted from theory from Braun and Clarke 2012)

3.4 Ethical considerations

To ensure effective, respectful and ethical research, BERA (2018) recommend a constant review of issues and situations throughout the research, from the initial planning, the data collection and reporting. Cohen *et al* (2007) cautions to be aware of the ‘confidentiality and personal respect’ issues that can arise particularly with action research due to the researchers embedded involvement.

The Institute’s School of Business Ethics Committee require that a research proposal is submitted for approval prior to the researcher commencing any studies. The committee assessed my proposal against the Institutes codes of ethics, codes of practices and relevant national and international guidelines, however, the Institute’s codes and guidelines are currently under review and are not available to support and guide researchers. Prior to the commencement of the study, ethical approval was granted by the Institute (see Appendix 1).

Students who were taking part in the study were given a typed explanation of the proposed intervention and research study, clear information about its purpose and how data would be gathered, utilised and stored (Appendix 3). In line with the principal of informed consent, the participants in the study have the right to “freedom and self-determination” (Cohen *et al* 2007, p.52). Students were made aware that their participation was not compulsory and that even if they took part in the study, they may withdraw from it up until the time that the data is collated for analysis (24th February, 2020). All six students gave their consent for their personal data to be collected and handled in accordance with the Institute’s GDPR Article 7 (Wilson 2019).

3.4.1 Ethical process in line with the Institute’s ethical code of practice

Before the entrepreneurial self-efficacy questionnaire was issued to the group, students were given an information sheet outlining the purpose and details of the study. The cohort were then asked to complete a participant consent form (Appendix 4), in line with the Institute’s ethical process of gaining informed consent. Ethical conduct was assured throughout the process.

Cohen *et al* (2007) reminds us to give consideration to what effect the research may have on the participants and where possible, we must prioritise a responsibility to the participant’s dignity over the outcome of the study. The information provided by the participants would not be considered particularly sensitive and there was a willing agreement from all participants to use the information they provided. The identities of the students involved are anonymised as much as possible, however with such a small cohort within an easily identified subject group and year, there would be some risk in individuals being identified through “combining data” from the study (Cohen *et al* 2007, p.64). The students were made aware of that possibility and it was also explained in their consent document. The students pulled a fruit name out of a jar (Berry, Cherry, Clem, Orange, Pear and Plum were selected) which was used to track their questionnaires and focus group response. Alignment of the fruit name with the student number is stored as an encrypted file, on a password secured college laptop, separate from the questionnaire and focus group information. The hard copy questionnaires have been confidentially shredded using the Institute’s confidential waste bins following the digital recording of results.

Permission was sought and given in advance of the study from the only gatekeeper, the Head of Department, to ensure that the Department is supportive of the proposed teaching intervention and research (Appendix 5).

The focus group was video recorded to help me identify who contributed particular responses. The video recording was destroyed immediately after the information was transcribed; the transcription is stored onto an encrypted file on a password protected college laptop and will remain there for five years. Questions asked during the focus group are available in Appendix 6.

A power imbalance existed within the study as the researcher is the cohort's main lecturer and also responsible for assessing their project. The power imbalance was addressed by clarifying that assessment of the project is based solely on their reflections of the work completed for the pop-up shop within the visual journal. Whilst the visual journal is part of the study, it isn't considered in the context of measuring their entrepreneurial self-efficacy and is not analysed for the research study. The student consent form which was signed by all participants (who were aged eighteen and over) stated that their choice to participate or not, would have no impact on their assessment for the module. The cohort were made aware that their choice to participate, or not, would not affect our future relationship in any way.

3.5 Research timeline

The entrepreneurial project formed part of the 'Design Development 2' module for the second year BA Fashion with Promotion at the beginning of Semester 4, on the week commencing January 20th, 2020 and was completed by February 24th, 2020. The planned detail of timescale for the study is clarified in a Gantt Chart (Appendix 7).

3.6 Results and analysis

Enterprising individuals can be defined as having a particular set of "abilities, skills and behaviours" (Williams 2019; Shabab *et al* 2019). According to Zhao *et al* (2018) and Sahin *et al* (2018), the 'big five personality traits', which includes entrepreneurial self-efficacy can be used

as a predictor of entrepreneurial intention. The 'big five personality traits' comprise of conscientiousness, openness to experience, emotional stability, agreeableness and extraversion (including entrepreneurial self-efficacy) and a breakdown of these personality traits is used to inform the questions asked on the questionnaire.

Controversially, research claims that entrepreneurship theories are mostly derived from studies with samples of men, suggesting that they may not be a true reflection of women's personality traits for entrepreneurship (Lin *et al* 2018), however, I can only use the information currently available to inform this study, for which the participants are 83 per cent female. Despite this, if the cohort show an increase in their confidence in any of the areas, it could be seen as a positive contribution to their entrepreneurial self-efficacy and career readiness. Students were asked to rate out of a score of one hundred, how confident they felt about each of the areas. The results for the first and second questionnaire for each of the six participants (who have been given fruit names to protect their identity) and the variation between both are listed below in *figure 3.8*.

3.6.1 The overview of the questionnaires result

Overall, I was quite surprised to see the remarkable shift in the levels of the participant's self-efficacy relating to 'the big five personality traits' and entrepreneurial self-efficacy (see Table 3.1). The ratio of conscientiousness and investment into the project seemed to parallel with growth in self-efficacy for most of the cohort. Cherry was the most anxious about the project but also the most conscientious in ensuring that it worked, it is interesting to note the considerable growth in her levels of self-efficacy. Another influence to their self-efficacy seemed to come from the group receiving their semester 3 results two weeks prior to completing the second questionnaire. Students who performed well in their exam results grew in confidence in their conscientiousness self-efficacy.

Table 3.1: Table indicating the self-efficacy for each participant for both questionnaires, one and two, and the variation between both (see larger version in Appendix 10)

Comparing before and after results
ENTREPRENEURIAL SELF-EFFICACY

	Berry			Cherry			Clem			Orange			Pear			Plum			
	Questionnaire 1	Questionnaire 2	Variation	Questionnaire 1	Questionnaire 2	Variation	Questionnaire 1	Questionnaire 2	Variation	Questionnaire 1	Questionnaire 2	Variation	Questionnaire 1	Questionnaire 2	Variation	Questionnaire 1	Questionnaire 2	Variation	
How confident are you?																			
1.0 Conscientious self-efficacy																			
1.1 set high standard - college wk?	40	40	0	65	70	5	30	90	60	55	70	15	60	70	10	100	90	-10	13%
1.2 Achieve high standard in college wk	40	50	10	65	70	5	50	90	40	55	70	15	70	70	0	90	60	-30	7%
1.3 Motivation to achieve goals?	60	40	-20	60	65	5	50	70	20	65	65	0	70	70	0	80	60	-20	-3%
TOTAL	47%	43%	-3%	63%	68%	5%	43%	83%	40%	58%	68%	10%	67%	70%	3%	90%	70%	-20%	6%
2.0 Openness to Experience																			
2.1 New experience?	65	40	-25	45	70	25	60	90	30	70	65	-5	55	65	10	80	90	10	8%
2.2 Find out new things?	90	30	-60	55	85	30	70	80	10	85	65	0	60	70	10	100	100	0	-2%
2.3 To be innovative?	80	50	-30	50	70	20		90	80	80	70	10	65	75	10	90	90	0	2%
2.4 To be creative?	90	70	-20	60	70	10	50	80	30	70	70	0	70	60	-10	80	90	10	3%
2.5 To problem solve?	85	50	-35	60	70	10	70	70	0	55	60	5	80	80	0	90	90	0	-3%
2.6 To see potential for new ideas?	85	60	-25	60	85	25	70	70	0	70	65	-5	80	85	5	70	80	10	2%
TOTAL	83%	90%	-33%	55%	75%	20%	53%	80%	27%	65%	66%	1%	68%	73%	4%	85%	90%	5%	4%
3.0 Emotional self-efficacy																			
3.1 Calm in difficult situations?	50	30	-20	40	75	35	60	60	0	45	60	15	40	60	20	90	80	-10	7%
3.2 Work well under pressure?	30	45	15	40	75	35	50	60	10	50	60	10	80	70	-10	90	90	0	10%
3.3 keep trying despite failure	45	50	5	45	65	20	30	60	30	70	60	-10	70	65	-5	70	80	10	8%
3.4 to take risks?	50	80	30	45	70	25	80	90	10	80	60	0	70	80	10	90	90	0	13%
3.5 initiative to try new things?	60	85	25	50	80	30	60	90	30	80	65	5	60	70	10	80	100	20	20%
TOTAL	47%	58%	11%	44%	73%	28%	56%	72%	16%	57%	61%	4%	64%	69%	5%	84%	88%	4%	12%
4.0 Self-efficacy for extraversion																			
4.1 Friendly?	90	80	-10	60	75	15	80	90	10	75	75	0	90	90	0	50	60	10	4%
4.2 sociable?	90	75	-15	50	65	15	80	90	10	85	70	5	80	70	-10	50	60	10	3%
4.3 outgoing?	80	90	10	45	65	20	80	90	10	55	70	15	75	70	-5	40	50	10	10%
4.4 communicate ideas?	30	55	25	40	65	25	80	90	10	55	65	10	70	75	5	70	60	10	14%
4.5 encourage others	50	90	40	45	75	30	70	90	20	70	60	-10	70	80	10	60	90	30	20%
4.6 stand firm?	30	60	30	40	60	20	60	90	30	60	55	-5	70	70	0	70	70	0	13%
TOTAL	62%	75%	13%	47%	68%	21%	75%	90%	15%	63%	66%	3%	76%	76%	0%	57%	68%	12%	11%
5.0 Agreeability self-efficacy																			
5.1 work in a group?	100	65	-35	50	65	15	80	70	-10	50	60	10	65	60	-5	80	90	10	-3%
5.2 express opinions?	90	65	-25	45	67	22	80	70	-10	80	60	0	70	65	-5	80	80	0	-3%
5.3 ideas without annoyance?	90	70	-20	45	65	20	80	80	0	65	70	5	80	75	-5	90	80	-10	-2%
5.4 generate interest in ideas?	90	60	-30	40	67	27	70	80	10	85	65	0	75	70	-5	80	70	-10	-1%
TOTAL	93%	85%	-28%	45%	68%	21%	78%	75%	-3%	60%	64%	4%	73%	68%	-5%	83%	80%	-3%	-2%
6.0 Entrepreneurial self-efficacy																			
6.1 start own business?	50	50	0	37	65	28	70	80	10	70	70	0	40	60	20	100	100	0	10%
6.2 idea to start own business with?	50	70	20	40	67	27	70	80	10	75	65	-10	60	60	0	100	100	0	8%
6.3 manage your time?	45	40	-5	50	65	15	70	80	10	65	60	-5	50	50	0	100	100	0	3%
6.4 manage your finances?	50	50	0	50	60	10	70	90	20	65	60	-5	65	65	0	100	100	0	4%
6.5 reaction of starting a business?	100	80	-20	30	65	35	60	80	20	80	70	-10	55	60	5	60	80	20	8%
6.6 like to be an entrepreneur?	60	80	20	50	65	15	80	90	10	70	65	-5	40	60	20	100	100	0	10%
6.7 favourable relationships?	90	70	-20	40	60	20	80	90	10	70	65	-5	70	65	-5	100	100	0	0%
TOTAL	64%	63%	-1%	42%	64%	21%	71%	84%	13%	71%	65%	-6%	54%	60%	6%	94%	97%	3%	6%

3.6.2 Conscientiousness self-efficacy

How confident are you	Confidence (0-100)
1.0 Conscientious self-efficacy	
1.1 in setting high standards for your college work?	
1.2 in achieving a high standard in your college work?	
1.3 in your motivation to achieve your goals?	

Figure:3.8: Questionnaire (showing only the section for conscientious self-efficacy questions)

	Berry			Cherry			Clem			Orange			Pear			Plum			
	Questionnaire 1	Questionnaire 2	Variation																
How confident are you?																			
1.0 Conscientious self-efficacy																			
1.1 set high standard - college wk?	40	40	0	65	70	5	30	90	60	55	70	15	60	70	10	100	90	-10	13%
1.2 Achieve high standard in college wk	40	30	10	65	70	5	50	90	40	55	70	15	70	70	0	90	60	-30	7%
1.3 Motivation to achieve goals?	60	40	-20	60	65	5	50	70	20	65	65	0	70	70	0	60	60	-20	-3%
TOTAL	47%	43%	-3%	63%	68%	5%	43%	83%	40%	58%	68%	10%	67%	70%	3%	90%	70%	-20%	6%

Table 3.2: Questionnaire results for each participant (showing only the conscientiousness self-efficacy questions)

Conscientiousness refers to “achievement, dependability and persistence” (Zhao *et al* 2018, p.36) Individuals with personality traits including achievement, persistence of conscientiousness and ambition would be predisposed toward entrepreneurship (Farrukh *et al* 2017). The majority of students rated an increase in their conscientiousness self-efficacy (table 3.2). When questioned why that may have happened during the focus group, Cherry clarified that the change made was due to the end of semester results received between both questionnaires and how they have given increased confidence in ability. Cherry’s explanation of her growth in confidence in conscientiousness is therefore not explained by the study intervention. Clem said ‘*I feel now, personally, that if I wanted to do it, I could do it. If I put my mind to it, I could completely and utterly do it*’. Berry’s end of semester results was below average and that may also explain the reduction in her motivation to achieve her goals. Overall, there was a 35 per cent growth in the cohort’s conscientiousness self-efficacy which gives an average growth of 5.8 per cent. Conscientiousness and openness to experience are considered to be the most predictive for entrepreneurial activity (Sahin *et al* 2018; Zhao *et al* 2018). Conscientiousness is aligned with entrepreneurial individuals as they have a need for achievement and are more motivated to achieve their goals hence, they are more likely to be successful entrepreneurs (Sahin *et al* 2018).

3.6.3 Openness to experience

How confident are you	Confidence (0-100)
2.0 Self-Efficacy for Openness to Experience	
2.1 when faced with a new experience?	
2.2 to find out new things?	
2.3 with your ability to be innovative?	
2.4 with your ability to be creative?	
2.5 in your ability to problem solve?	
2.6 in your ability to see potential for new ideas?	

Figure 3.9: Questionnaire (showing only the openness to experience questions)

How confident are you?	Berry			Cherry			Clem			Orange			Pear			Plum			
	Questionnaire 1	Questionnaire 2	Variation																
2.0 Openness to Experience																			
2.1 New experience?	65	40	-25	45	70	25	60	90	30	70	65	-5	55	65	10	80	90	10	6%
2.2 Find out new things?	90	30	-60	55	85	30	70	80	10	65	65	0	60	70	10	100	100	0	-2%
2.3 To be innovative?	80	50	-30	50	70	20		90	90	80	70	10	65	75	10	90	90	0	2%
2.4 To be creative?	90	70	-20	60	70	10	50	80	30	70	70	0	70	60	-10	80	90	10	3%
2.5 To problem solve?	85	50	-35	60	70	10	70	70	0	55	60	5	80	80	0	90	90	0	-3%
2.6 To see potential for new ideas?	85	60	-25	60	65	25	70	70	0	70	65	-5	80	85	5	70	80	10	2%
TOTAL	83%	50%	-33%	55%	75%	20%	53%	80%	27%	65%	66%	1%	68%	73%	4%	85%	90%	5%	4%

Table 3.3: Questionnaire responses for each participant for ‘openness to experience’

‘Openness to experience’ refers to an individual’s interest in new experiences, concepts, beliefs and ideas. An individual scoring high for ‘openness to experience’ tends to be able to think creatively and imaginatively and be more innovative (Farrukh *et al* 2017; Nielsen *et al* 2018; Sahin 2018; Zhao *et al* 2018). Openness to experience is deemed to be the most significant differential between career professionals and entrepreneurs (Farrukh *et al* 2017; Sahin *et al* 2018). Innovation is always at the core of successful fashion companies. Change can be capitalised as an opportunity for innovation, introducing new ways of creating fashion or how it is marketed (Unay and Zehir 2012). Similarly, Nielsen *et al* (2018) suggests that an entrepreneur must embrace change as they need to think and act differently in order to create an impact in a competitive market and similarly these skills are identified by the World Economic Forum (2018) as highly desirable employee skills.

When comparing the responses from questionnaire one and questionnaire two (table 3.3), the overall scores for this section showed the least growth. Berry’s results were considerably reduced

and this may be down to her poor attendance and application for the project. Unfortunately, Berry and Orange could only complete their questionnaires immediately before the focus group, therefore I was not aware of their second results which prevented me from questioning deeper during the focus group. The majority of scores are higher in questionnaire two by an average of four per cent for the remainder of the students. Clem missed out a box in the first questionnaire so I have completely discounted her score for her confidence to be innovative.

On reflection, it's probably not surprising that there has not been a sizable shift in this area as they as fashion students, are constantly working on creative, problem-based projects that require new ideas, so this project would not have been particularly challenging for them in that respect. Cherry, Clem and Pear scored higher for being more 'open to new experiences' and it was asked during the focus group if they enjoyed this style of project. Cherry said she was "afraid of the overlocker machine and afraid of getting it wrong, but now I'm confident with the overlocker, so I've learned that I shouldn't be afraid to try new things and that I can learn fast" which may explain Cherry's higher scores.

All scored the same or higher for confidence with problem solving. During the focus group, Clem said "the first two weeks, we didn't know what we were at and in the last week, I got more done in one day that the total of the first two weeks". Pear followed up by saying "it took us a while putting fabrics together, then we realised a quicker way...but I think the slower ones were the nicest". Clem also said "I'd never used the rotary cutter before and it's definitely quicker, so you're always problem solving".

3.6.4 Emotional stability self-efficacy

How confident are you	Confidence (0-100)
3.0 Emotional Self-Efficacy	
3.1 to feel calm in difficult situations?	
3.2 to work well under pressure?	
3.3 to keep trying despite experiencing failure?	
3.4 to take risks?	
3.5 to take the initiative to try new things?	

Figure 3.10: Emotional stability self-efficacy questionnaire

	Berry			Cherry			Clem			Orange			Pear			Plum			
	Questionnaire 1	Questionnaire 2	Variation																
How confident are you?																			
3.0 Emotional self-efficacy	50	30	-20	40	75	35	60	60	0	45	60	15	40	60	20	90	60	-10	7%
3.1 Calm in difficult situations?	30	45	15	40	75	35	50	60	10	50	60	10	80	70	-10	90	90	0	10%
3.2 Work well under pressure?	45	50	5	45	65	20	30	60	30	70	60	-10	70	65	-5	70	80	10	8%
3.3 keep trying despite failure	50	80	30	45	70	25	80	90	10	60	60	0	70	80	10	90	90	0	13%
3.4 to take risks?	60	85	25	50	80	30	60	90	30	60	65	5	60	70	10	80	100	20	20%
3.5 initiative to try new things?	TOTAL																		
	47%	58%	11%	44%	73%	29%	56%	72%	16%	57%	61%	4%	64%	69%	5%	84%	88%	4%	12%

Table 3.4: Emotional stability self-efficacy questionnaire results

Emotional Stability is the ability to be able to thrive in different situations by managing stress and anxiety levels, perseverance and resilience (Zhao *et al* 2018; Sahin *et al* 2018) and according to Sahin *et al* (2018) are the traits that are essential to starting a new business venture. Scores were generally higher (average of twelve per cent) for all students in the second questionnaire for this section (table 3.4). Cherry explained her increased result for ‘staying calm’ and ‘working well under pressure’ by explaining that it was testing to stay calm especially as others were coming in late, and the garments not being fully completed close to the deadline, but all students were able to remain calm and worked well under pressure. The others nodded in agreement at this statement and Orange said “you had to be calm on the outside, otherwise we would never have got there”. Everyone scored higher for their confidence to take risks and the initiative to try new things which may have been as a result of taking the risk to sell their work.

3.6.5 Extraversion self-efficacy

How confident are you	Confidence (0-100)
4.0 Self-Efficacy for Extraversion	
4.1 in your ability to be friendly?	
4.2 in your ability to be sociable?	
4.3 in your ability to be outgoing?	
4.4 in your ability to communicate your ideas to people you are not so familiar with?	
4.5 to encourage others to try out something new?	
4.6 stand firm with someone who is asking you to do something you are don't feel sure about?	

Figure 3.11: Questionnaire for extraversion self-efficacy

How confident are you?	Berry			Cherry			Clem			Orange			Pear			Plum			
	Questionnaire 1	Questionnaire 2	Variation																
4.0 Self-efficacy for extraversion																			
4.1 Friendly?	90	80	-10	90	75	15	80	90	10	75	75	0	90	90	0	50	60	10	4%
4.2 sociable?	90	75	-15	50	65	15	80	90	10	65	70	5	80	70	-10	50	60	10	3%
4.3 outgoing?	80	90	10	45	65	20	80	90	10	55	70	15	75	70	-5	40	50	10	10%
4.4 communicate ideas?	30	55	25	40	65	25	80	90	10	55	65	10	70	75	5	70	80	10	14%
4.5 encourage others	50	90	40	45	75	30	70	90	20	70	60	-10	70	80	10	60	90	30	20%
4.6 stand firm?	30	60	30	40	60	20	60	90	30	60	55	-5	70	70	0	70	70	0	13%
TOTAL	62%	75%	13%	47%	68%	21%	75%	90%	15%	63%	66%	3%	76%	76%	0%	57%	68%	12%	11%

Table 3.5: Questionnaire results for extraversion self-efficacy

Individuals who possess high extraversion scores are likely to be more sociable, persuasive and assertive, skills that are extremely important for entrepreneurs to help motivate their teams or pitch new ideas convincingly (Sahin *et al* 2018). The World Economic Forum (2018) also stress the importance of skills including persuasion and negotiation for potential employees. With the exception of Pear who perceived no difference, the remainder of the students showed a growth in their extraversion self-efficacy with an average growth of eleven per cent (table 3.5). Berry explained that she was thinking about how she dealt with customers when she was managing the shop during the quiet time, she said “you weren’t sure whether you should approach them or not...if they were having a look, you wouldn’t want them to feel pressured, so I just said to them, if they wanted anything to let me know”. The focus group discussion got distracted by this comment into when sales were good and the difference in mood from the passing trade at different times when they were busy or quiet.

3.6.6 Agreeability self-efficacy

How confident are you	Confidence (0-100)
5.0 Agreeability self-Efficacy	
5.1 to work in a group?	
5.2 express your opinions to others in an agreeable way?	
5.3 communicate your opinions without causing others to be annoyed?	
5.4 in getting others to take an interest in your ideas?	

Figure 3.12: Questionnaire for agreeability self-efficacy

How confident are you?	Berry			Cherry			Clem			Orange			Pear			Plum			
	Questionnaire 1	Questionnaire 2	Variation																
5.0 Agreeability self-efficacy	100	65	-35	50	65	15	80	70	-10	50	60	10	65	60	-5	80	90	10	-3%
5.1 work in a group?	90	65	-25	45	67	22	80	70	-10	60	60	0	70	65	-5	80	80	0	-3%
5.2 express opinions?	90	70	-20	45	65	20	80	80	0	65	70	5	80	75	-5	90	80	-10	-2%
5.3 ideas without annoyance?	90	60	-30	40	67	27	70	80	10	65	65	0	75	70	-5	80	70	-10	-1%
5.4 generate interest in ideas?	90	60	-30	40	67	27	70	80	10	65	65	0	75	70	-5	80	70	-10	-1%
TOTAL	93%	65%	-28%	45%	66%	21%	78%	75%	-3%	60%	64%	4%	73%	68%	-5%	83%	80%	-3%	-2%

Table 3.6: Questionnaire results for agreeability self-efficacy

Agreeability is associated with selfless, compliant people who have an empathy with others and whilst this is necessary for building trusting relationships with customers, employees or stakeholders, there is considerable research to suggest that agreeability can counteract key entrepreneur personality traits such as self-centredness and shrewdness that are required in the fight for survival of a new business (Farrukh *et al* 2017; Zhao *et al* 2018). Interestingly, the student group on average rated their agreeability lower after the project than at the beginning by an average of minus two per cent (table 3.6). This was the only personality trait that scored a lower average. From the focus group, it was clear that there were frustrations when working within the group when not all of the group were feeling the same pressure to meet the targets set and this has impacted on their results. Cherry who would usually portray very low self-confidence, emerged as a natural motivating leader when working in the group. Cherry scored the most significant growth with ‘self-efficacy to work in a group’, ‘express and communicate opinions’ and ‘generate interest in ideas’. Could we claim that experiential projects of this nature allow students to exercise their natural leadership skills and build confidence in such personal skills without it being targeted as a specific learning objective?

Despite the general lower self-efficacy rating for agreeability, the students did not have any verbal disagreement or fallouts, so they did manage their frustrations very well. Being able to control emotions, get on with others and manage frustration are considered the most predictive factors for employment and happiness success which suggests that difficult social learning of this nature could improve a graduate’s career readiness (Carthy and Jameson 2016).

3.6.7 Entrepreneurial self-efficacy

How confident are you	Confidence (0-100)
6.0 Entrepreneurial self-Efficacy	
6.1 to start your own business?	
6.2 with your ability to come up with an idea to start your own business with?	
6.3 to manage your time if you were running your own business?	
6.4 to manage your finances if you were running your own business?	
6.5 that you would get a positive reaction if you told those closest to you that you want to start your own business?	
6.6 that you would like to be an entrepreneur?	
6.7 in your ability to maintain favourable relationships with potential investors?	

Figure 3.13: Questionnaire for entrepreneurial self-efficacy

How confident are you?	Berry			Cherry			Clem			Orange			Pear			Plum			
	Questionnaire 1	Questionnaire 2	Variation																
6.0 Entrepreneurial self-efficacy																			
6.1 start own business?	50	50	0	37	65	28	70	80	10	70	70	0	40	60	20	100	100	0	10%
6.2 idea to start own business with?	50	70	20	40	67	27	70	80	10	75	65	-10	60	60	0	100	100	0	8%
6.3 manage your time?	45	40	-5	50	65	15	70	80	10	65	60	-5	50	50	0	100	100	0	3%
6.4 manage your finances?	50	50	0	50	60	10	70	90	20	65	60	-5	65	65	0	100	100	0	4%
6.5 reaction of starting a business?	100	80	-20	30	65	35	60	80	20	80	70	-10	55	60	5	80	80	0	8%
6.6 like to be an entrepreneur?	60	80	20	50	65	15	80	90	10	70	65	-5	40	60	20	100	100	0	10%
6.7 favourable relationships?	90	70	-20	40	60	20	80	90	10	70	65	-5	70	65	-5	100	100	0	0%
TOTAL	64%	63%	-1%	42%	64%	21%	71%	84%	13%	71%	65%	-6%	54%	60%	6%	94%	97%	3%	6%

Table 3.7: Questionnaire results for entrepreneurial self-efficacy

When we question the entrepreneurial self-efficacy of an individual, we are trying to gauge the belief that the individual has about their potential to start a business and be a successful entrepreneur (Sahin *et al* 2018). Individuals with high entrepreneurial self-efficacy have higher entrepreneurial intention (Wilson *et al* 2009). All of the group reported the same or higher confidence to start their own business with an average of ten per cent growth for all and a growth of ten per cent for 'like to be' an entrepreneur (Table 3.7). In the focus group, I asked if the project opened their mind to starting a business, the instant reply from Clem was "100 per cent, but starting your own business is so much work...I'd like to have my own shop but not a business as a designer". Pear commented that "you have to be in business for so long before you make money ...and it's so much work". Cherry stated that she "wouldn't be that confident yet...I think when you've done that [the project], you could see yourself doing it more". According to Sui *et al* (2017) and Shahab *et al* (2019), when an individual's entrepreneurial self-efficacy grows, so too does their ability to persist with and focus on a task, and if an individual has more confidence in completing a task, then the entrepreneurial behaviour is more likely to be successful. In

addition, when an individual rates themselves highly with entrepreneurial self-efficacy and creativity, they are more alert to new opportunities (Shahab *et al* 2019). Wilson *et al* (2009) claim that entrepreneurial education has a more positive impact on entrepreneurial education for women more than men, however this is explained by the fact that women have lower self-efficacy and interest to start with. That would appear to be the case in this study too with Cherry, Clem and Pear making considerable improvements in their entrepreneurial self-efficacy with a slightly lower score for Berry and Orange. Plum is the only male in the group and he had one hundred per cent confidence in all the entrepreneurial self-efficacy questions with the exception of his family support which grew by twenty per cent for the second questionnaire.

The influence of family support is asserted as influential in an individual's entrepreneurial intention by Farrukh *et al* (2017). It is interesting to note that Berry and Orange record a decrease in their confidence with support from those closest to them, although on average the percentage growth is an improvement of eight per cent for the group as a whole.

3.6.8. Analysis linked to the four main sources of self-efficacy (Bandura 1977)

At the beginning of the focus group, I gave the participants back their first questionnaire so that they could see the comparison between how they rated their self-efficacy for the first and their second questionnaire. They were genuinely surprised by the marked difference in some of their estimations. I asked them if they had any fears, thoughts or anticipations when we first discussed doing this style of project back in December. Cherry, said that she couldn't remember any fears but that she was looking forward to it, to improve her sewing skills. Clem said that she thought the project was good and she enjoyed the project and they all agreed.

3.6.8.1 Performance accomplishment

The group as a whole had a positive experience with the project and that positive experience would work toward their '*performance accomplishment*' to improve self-efficacy as defined by Bandura (1977). The student cohort worked as a team and succeeded with the entrepreneurial intervention, which was successful despite the risk of failure in terms of their reputation or lack

of sales. The success provided a positive performance accomplishment because in spite of it being a sufficiently difficult challenge, they were delighted with the response to the pop-up shop and their designs.

3.6.8.2 Vicarious experience

Students witnessed each other solving common problems with garment and fabric construction. These observations witnessing their peers succeed is the *vicarious experience* that can work to improve self-efficacy. Learning through the *vicarious experience* of others enabled each student to witness others succeed through persistent effort. When an individual accepts that they also can succeed with determined effort, then their self-efficacy improves (Bandura 1977).

3.6.8.3 Verbal persuasion

The students were unsure if their designs would be appreciated by the shoppers at the pop-up shop, after all the garments were unconventional and made from recycled fabrics. However, the college shoppers were very generous in their complimentary comments and purchases which seemed to take the study participants by surprise. The confidence of the students definitely grew as a result of *verbal persuasion*. Most of the people that came to view the garments at the pop-up shop were not individuals who the study cohort were familiar with, this factor accelerated the student's self-belief further.

3.6.8.4 Psychological state

The study cohort stated during the focus group that they found working as a group with the joint responsibility for getting sufficient garments finished and to a retail standard stressful. Based on their reflection, the stress did not override their overall enjoyment of the project and they stated that they would be happy to do a project like that again, which would support the theory of a positive *psychological state*. Overall, the experiential nature of the project would seem to have worked favourably to improve the students self-efficacy relating to running a business.

3.6.9 Focus Group response

One student, Plum was absent from the focus group. At the introduction to the focus group, the five students were asked to reflect on how they felt in terms of their thoughts and fears about beginning a project of this nature. The students were subsequently then asked to write down whatever came to mind. The group shared responses to the effect that they enjoyed the project and were excited to work with it because it was a different type of project. The students and I had envisaged a more 'factory' style classroom but due to the slow nature of arranging the fabric, that was not fully possible and that was another element of the discussion. The group mentioned what they had learned about fabric, fabric construction and an improvement in their construction skills. It was clear that they did not view the project as having an entrepreneurial education focus because entrepreneurship did not factor into their responses until it was raised.

3.6.9.1 Focus Group response to female entrepreneurship

I wanted to understand if the group had any particular views on female entrepreneurship because I was curious if they held any opinions that might influence their entrepreneurial aspirations. I asked the group why they thought only 16 per cent of the Local Enterprise Office applicants for business start-ups were female (Korbel 2018). This spiralled into a discussion about the groups' understanding of male entrepreneurs. Orange said that men are more risk-takers to which Clem and Berry agreed and then Berry volunteered that "men just do stuff...whereas we tend to worry more". Lin *et al* (2018) assert that women are more risk-averse and are more driven by solving their own or others problems rather than pursuing profit. Berry also suggested that it could be to do with the fact that "women are trying to juggle more things like family". This corresponds with research in that family support is critical to female confidence in being able to manage family and work responsibilities (Lin *et al* 2108). When the group were asked if they thought they could see themselves as an entrepreneur or who did they think an entrepreneur was, Orange said "I never thought of myself as ever being an entrepreneur, I think of an entrepreneur as an older man...but I never really thought of it, I suppose" The remainder of the group nodded to support what Orange said and agreed that they had thought of entrepreneurs as being like a 'Steve Job' type of person. This made me consider the use of the word 'entrepreneur' and if there were more female-friendly descriptions that we could use.

I asked specifically if the pop-up shop helped them to gain confidence in their ability to run a business. All nodded and Clem said “yes, for sure, but it’s still a hard thing to do”. Williams (2019) emphasises that there are real barriers to starting your own business following the expense of completing a degree, there is a tendency for students to seek out a less risky graduate job which can be viewed as more appealing.

3.7. General observations

It is important to note that this project was not about ‘entrepreneurship’ for the students. The group had finished a module that covered sustainability and another module where they learned how to design, pattern cut and make a top and trousers in the previous semester and seen this project as an extension of that learning for a Design and Development module. Their incentive for the shop was to make money to contribute to the cost of their trip next year to Premiere Vision in Paris. They were aware that the project was part of an entrepreneurial study but their own challenges to work as a team, design, learn, make and sell sustainable clothing was their focus. They were learning about entrepreneurship without being fully aware of it and it was the focus group that made them reflect on that particular aspect of learning and recognise the entrepreneurship element. Williams (2019, p.5) referred to entrepreneurship education taking place in higher education in modules that do not ‘bear the label’ because it is important not to disengage students (Phillips 2020) who would see entrepreneurship as an outside distraction of the course they signed up for.

I was anxious of the risks I was taking with the students, if through the project the students did not make clothing that was appealing, resulting in low or no sales or if the pop-up shop did not happen for whatever reason, then the study could possibly have provided different entrepreneurial self-efficacy results.

4. Conclusion

Section four: Conclusion

4.1 Conclusion

The aims of this research study was to determine if levels of entrepreneurial self-efficacy and career readiness improve for students enrolled on a Level seven fashion degree course following engagement with an experiential entrepreneurship teaching intervention and how the intervention would form part of an effective entrepreneurship education provision for the female dominated programme. Our intention for the course graduates, is that they would be considered as amongst the most entrepreneurial and intrapreneurial from all the fashion graduates in Ireland. As a facilitator of learning for the course, I planned to explore how I could be a better fashion educator and programme planner and my research has led me to recognise the importance of entrepreneurial education within the fashion course curriculum. The real-life nature of the decisions made in starting and running a fashion enterprise certainly made the cohort recognise the potential they have, to start a fashion enterprise after graduation. The research study also revealed improved confidence for the majority of students in the 'big five personality traits' suggesting, according to research, that there was an advancement in their career readiness and their entrepreneurial mindset.

Based on the response that the study cohort presented it is fair to report the following:

- 1) An overall average increase of six per cent was recorded when each of 'the big five personalities' and entrepreneurial self-efficacy were analysed after the study. The quantitative and qualitative results agree that the entrepreneurial project did improve the cohort's entrepreneurial self-efficacy and career readiness.
- 2) Students rated an average growth in their conscientiousness self-efficacy which according to research could improve a student's entrepreneurial inclination (Farrukh *et al* 2017), self-regulation and academic achievement (Bandura 1993). Therefore, focusing on entrepreneurial skills could not only improve a student propensity toward enterprise, it could also present a focus, motivation and improvement in student achievement. For some of the students, the growth was also linked to exam results that they had received between both questionnaires.
- 3) With regards to the remaining personality traits, there was an average improvement in student confidence which ranged from four to twelve per cent with the exception

of 'agreeability' which suffered on average by two per cent. Agreeability is the least reliable barometer of all the personality traits to indicate entrepreneurial intention (Farrukh *et al* 2017; Zhao *et al* 2018).

- 4) The participants view entrepreneurship as a male construct, they believe that men are greater risk-takers and do not assume the same responsibilities of having to manage home and family issues, which makes entrepreneurship more attractive for men.

In response to how the intervention would form part of an effective entrepreneurship education provision for the female dominated programme, based on the literature analysis of this study, I believe experiential pedagogy should be included within the entrepreneurship provision alongside entrepreneurial business and theory modules, lectures by visiting entrepreneurs relevant to the field of study and entrepreneurship referenced within the course delivery as illustrated in figure 4.1.

Entrepreneurship education is for every student and it needs to be interlinked with the student's main subject curriculum in a learner-centred, active and responsive way as only five per cent of graduates are opting for a business start-up (Williams 2019). Our core aim as educators, is to prepare the student for life and work, entrepreneurship education or improving a student's entrepreneurial self-efficacy not only increases the uptake of entrepreneurial activity, it builds better employees.

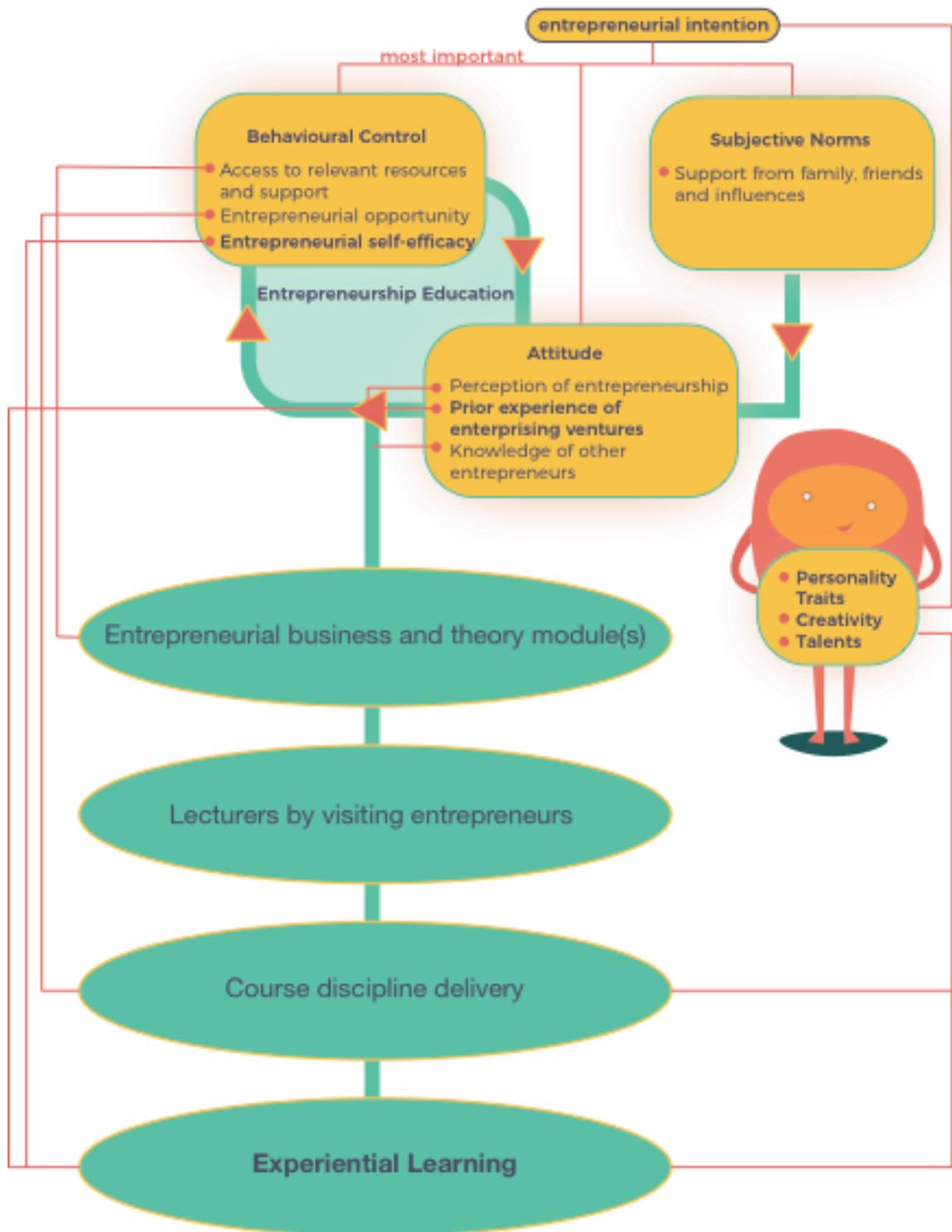


Figure 4.1: Recommendation of how experiential learning could integrate into an effective third level entrepreneurship education provision (Adapted from Poon 2001; Unay et al 2012; Sahin et al 2018; Advance HE 2019; Zhao et al 2019)

4.2 The research limitations and potential usage.

There are undeniable limits to the causal inferences that could be made from the analysis of data from such a small study of six students. The study focuses on fashion students, however, I hope that the results could provide insight to inform educators within other subject areas who wish to promote entrepreneurial self-efficacy. The study works as an exploratory trial with regards to implementation and planning for an entrepreneurial project, one that could be adapted for any practical-based discipline including animation, graphic and digital design, photography, mechanical engineering, sports studies, architectural technology, electronics, computer science, health education, nursing, veterinary nursing and culinary arts. Whilst some of the disciplines may not produce a physical product, they may chose a product that could take the form of an app or provide a service.

4.3 Recommendations

According to the wealth of research available on the topic of entrepreneurial education, it would appear to be considered as a salient topic within third level education. Within the Institute, there have been various initiatives and events organised to raise the entrepreneurial ethos of the college, which is encouraging. As alluded to earlier, this was a very small-scale study, but one that opens many areas up for deeper analysis. Whilst there is an abundance of literature available on the topic of entrepreneurial education, there is very little information on best teaching methodologies to deliver it. A recommendation would be for further research with a larger cohort and also an investigation into different styles of delivery, with a view to building a comprehensive range of methodologies to support a structured entrepreneurial education curriculum for all disciplines and gender. Additional learning and training for educators could be provided by policy makers within the Irish education system to support the delivery of structured entrepreneurial education.

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Appendices

Appendices

Appendix 1: Ethical application approval



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Institiúid
Teicneolaíochta
Leitir Ceanainn

Letterkenny
Institute
of Technology

SECTION D

For office use only

INSTITUTE RESEARCH ETHICS COMMITTEE

DATE:

DECISION

1. Approved without amendment
2. Approved subject to minor modifications
(No resubmission required, supervisor responsible for ensuring that modifications are implemented)
3. Modifications required. Complete modifications below and resubmit.
4. Additional information required.
5. Approval withheld. All conditions set by Institute Research Ethics Committee must be met.
6. Reject.

REASONS FOR DECISION

- State how will questionnaires be distributed.
- I will personally give the student a hard copy of the questionnaires at the beginning of the intervention and also at the end.

3.2 to work well under pressure?	
3.3 to keep trying despite experiencing failure?	
3.4 to take risks?	
3.5 to take the initiative to try new things?	
4.0 Self-Efficacy for Extraversion	
4.1 in your ability to be friendly?	
4.2 in your ability to be sociable?	
4.3 in your ability to be outgoing?	
4.4 in your ability to communicate your ideas to people you are not so familiar with?	
4.5 to encourage others to try out something new?	
4.6 stand firm with someone who is asking you to do something you are don't feel sure about?	
Please also complete the questions on the next page, Thanks.	
5.0 Agreeability self-Efficacy	
5.1 to work in a group?	
5.2 express your opinions to others in an agreeable way?	
5.3 communicate your opinions without causing others to be annoyed?	
5.4 in getting others to take an interest in your ideas?	
6.0 Entrepreneurial self-Efficacy	
6.1 to start your own business?	
6.2 with your ability to come up with an idea to start your own business with?	
6.3 to manage your time if you were running your own business?	
6.4 to manage your finances if you were running your own business?	
6.5 that you would get a positive reaction if you told those closest to you that you want to start your own business?	
6.6 that you would like to be an entrepreneur?	
6.7 in your ability to maintain favourable relationships with potential investors?	

The above questionnaire has been designed by me based on a framework from the 'Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention' (Sahin, Karadag and Tuncer 2018)

Sahin, F., Karadag, H. and Tuncer, B. (2018) 'Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention', *International Journal of Entrepreneurial Behaviour and Research*, 25(6) 1186-2554, available: <http://dx.doi.org/10.1108/IJEBR-07-2018-0466>

Appendix 3: Participant information sheet



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Institiúid Teicneolaíochta Leitir Ceanainn
Letterkenny Institute of Technology

Participant Information Sheet

Study Title:

Can working on an entrepreneurial project within a fashion course improve entrepreneurial self-efficacy and career readiness?

Researcher: Sharon Maxwell, Assistant Lecturer, Department of Design & Creative Media

'You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this'

What is the purpose of the study?

The overall aim of my research is to gain a better understanding of how student engagement in an entrepreneurial project could impact on the student's entrepreneurial self-efficacy, with a view to better preparing them for work in the fashion industry. Entrepreneurial self-efficacy is your belief in your ability to be successful in an entrepreneurial role (Bandura 1977). Research suggests that improved self-efficacy can improve engagement, creativity, motivation and curiosity, the same qualities sought after by potential employers or required of potential entrepreneurs. My research aims to contribute to this body of knowledge by comparing self-efficacy at the beginning and end of the project. I also wish to gain additional knowledge from holding a focus group to discuss what impact working on the project has had on you. It is hoped that this study will provide important information with regards to the design, planning for and implementation of fashion education.

How does taking part in the study affect me?

If you decide to participate you will be asked to give your consent. The consent is necessary to allow the collection of data from survey questionnaires and interviews. All consenting participants will complete a short questionnaire at the beginning of the process and the end of the research. It should take approximately 5 minutes to complete each of them. All consenting participants will be required to take part in a 30-minute focus group to discuss changes that have been indicated on questionnaire 2 in comparison with questionnaire 1. The focus group will be video recorded and also voice recorded.

For the questionnaires, you are required to rate your confidence with different areas associated with the 'big five' personality traits of entrepreneurs. Prior to being given the first questionnaire, you will be given an information sheet and an informed consent form.

You will select a fruit name which will be used to track your answers across both questionnaires this will provide a level of anonymity. You will place the completed questionnaire in the envelope provided and the information will be gathered, analysed and kept secure at all times.

Why have you been asked to take part?

This project has been designed to work with the module you are currently studying so you are one within the only group that can take part at this time.

Do I have to take part?

Participation in the research is entirely voluntary. You will be encouraged to participate because I believe you may gain knowledge about yourself and the outcomes of the research may help future students. However, any student who decides not to participate will not be disadvantaged in any way. Your grades and assessments will not be affected whether you decide to participate or not. You may also withdraw from the research up until the data is collated on Monday 24th February, 2020.

Will my taking part in this study be kept confidential?

All survey questionnaires will be completed and collected without any means of identifying participants. Focus group participants will be recorded on audio tape and with a voice recorder. The audio material will be stored in a secure location and all names will be replaced with pseudo names to ensure privacy and confidentiality. The audio recordings and questionnaires will be destroyed upon transcription of the information. All data gathered will be stored securely so that data cannot be accessed, altered, disclosed or destroyed by unauthorised persons. The data will be maintained on researcher's computer, which has a password protected screen saver. The computer software is updated regularly and it contains Norton Antivirus software, which is set for daily automatic updating. In addition to the antivirus software, a firewall also runs on the computer. All documents are password protected.

Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases the College may be obliged to contact relevant statutory bodies/agencies.

What will happen to the results of the research study?

The results of the research study will be used to support the submission of a thesis for taught Masters. The results may also be used in publications of the research in research journals and conferences. Participants will not be identified in any published report.

Who is organising and funding the research? (If relevant)

The research is supported by the Department of Design and Creative Media, Letterkenny Institute of Technology.

Who has reviewed the study?

The project has been reviewed by Letterkenny Institute of Technology Research Ethics Committee.

Contact for Further Information:

Primary Contact: Sharon Maxwell, Assistant Lecturer, Department of Design and Creative Media, School of Business — [email: XXXXXX](mailto:XXXXXX)

Secondary Contact: Dr Deirdre McClay, Lecturer — [email: XXXXXX](mailto:XXXXXX)

Appendix 4: Participant consent form



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Institiúid Teicneolaíochta Leitir Ceanainn
Letterkenny Institute of Technology

Consent Form

Study Title:

Can working on an entrepreneurial project within a fashion course improve entrepreneurial self-efficacy and career readiness?

Researcher: Sharon Maxwell, Assistant Lecturer, Department of Design & Creative Media

- I confirm that I have read and understand the ‘participant information sheet’ for the above study and have had the opportunity to ask questions.
- I understand that my participation is voluntary and that I am free to withdraw at any time up until February 24th without giving any reason, by sending an email to XXXXXX If I withdraw from the study, there will be no negative consequences
- I give my consent to take part in a focus group, which will be recorded by video and voice Recorder. I am aware that should I at any time I feel uncomfortable with being recorded, I can request that the recording equipment be turned off.
- I give my consent that any research publication reference to my participation in completing any questionnaire, participation in a focus group will be by means of a pseudonym.
- I understand that my participation or non-participation in the research will have no effect on grades or assessment.
- I agree to take part in the above study and agree that quotations may be used for the research.
- I am aware that I am permitted to view all research and transcripts that have taken place concerning my involvement. I can request a copy of the report from the researcher.

Participant's Name: _____

Student Number: _____

Signature: _____

Date: _____

I, the researcher, have stated the purpose and procedure involved in this piece of research. I have answered any questions that the participant had in relation to the study. I believe the participant has understood my explanation and purpose of this study and has given me informed consent.

Researcher's signature: _____ Date: _____

Contact for Further Information:

Primary Contact: Sharon Maxwell, Assistant Lecturer, Department of Design and Creative Media, School of Business — [email:XXXX](#)

Secondary Contact: Dr Deirdre McClay, Lecturer — [email: XXXXX](#)

Appendix 5: Consent Form for the Head of Department – Design and Creative

Head of Department name,

As part of my MALT studies, I wish to request permission to experiment with the following intervention with our second-year fashion students for their Design Development 2 module in Semester 4.

TITLE OF STUDY: Can working on an entrepreneurial project within a fashion course improve entrepreneurial self-efficacy and career readiness?

The overall aim of my research is to gain a better understanding of how student engagement in an entrepreneurial project could impact on the student's entrepreneurial self-efficacy and potentially better prepare our fashion graduates for work in the fashion industry.

Philosophy suggests that improved self-efficacy can improve engagement, creativity, motivation and curiosity, the same qualities sought after by potential employers or required of potential entrepreneurs. My research aims to contribute to this body of knowledge by comparing self-efficacy at the beginning and end of the project. It is hoped that this study will provide important insight regarding the design, development, planning for and implementation of fashion education.

Design of the project

This action research project will study how students engage with an entrepreneurial project that has especially been devised and if it has any impact in their entrepreneurial self-efficacy. At the beginning of the project, I intend to measure the students entrepreneurial self-efficacy by asking them to rate their level of confidence to various questions within a questionnaire that has been developed from the 'Big Five' entrepreneurial personality traits as postulated by Sahin, Karadag and Tuncer (2019).

Students will then work as a team to gather pre-used textiles, cut the fabric up, cut new patterns, construct a range of womenswear tops and sell them in a pop-up shop at the college foyer during mid-February. Throughout the project, the students will keep evidence of their process, their reflections and the work they produced in a visual journal. The visual journal will evidence their work in preparing the garments for the pop-up shop and this will be submitted for assessment. Assessment will be solely based on their visual journal and not linked to their involvement in the intervention project, students will be made fully aware and understand that.

After the pop-up shop is complete, the students will fill out the same questionnaire to ascertain if there has been a shift in any of the 'Big Five' areas. I will personally give the student a hard copy of the questionnaires at the beginning of the intervention and also at the end. I will arrange a 30 minute meeting with all the consenting students who are participating, in the days that immediately follow my collection

of their second questionnaire, to hold a focus group. The purpose of the focus group is to gain a deeper understanding of changes or none evidenced between their first and second questionnaire. I will then ask questions related to each of the topic areas from the questionnaire, with emphasis given to any area that reveals a shift in their confidence level.

Assessment of the project will be planned for after the focus group because I want to ensure that students perception of what they have learned is not coloured by an assessment mark they receive for their visual journal. Whilst the work that the student puts into their visual journal is assessed, the visual journal is not linked to the research. Student participation in the study will not influence their assessment for their module.

Participants of the study

The participants will be those who choose to be included from the full class of ten second year students from the BA Fashion with Promotion course at LYIT (ten students; 9 female and 1 male), all of whom I will be teaching for this module. All students are aged 18+. Participation in the research is entirely voluntary and the department's involvement will only be allowed with your agreement.

Ethics and GDPR

Following ethics approval, I will ask the students if they would be interested in participating in the project and they will be given a sheet explaining the invention. Students will be made aware that it is not compulsory and they may withdraw from the project up until the time that the data is collated for analysis (24th February, 2020). Before the questionnaire is given, students will be asked to complete the student consent form.

The study will comply with LYIT GDPR policy recommendations with regards to retention, storage and disposal of information.

Dates for the project

The project will start week commencing January 20th, 2020, with the pop-up shop planned for week commencing 10th February (perhaps making a play on 'love your environment for Valentine's week). The data for the study should be collected by Friday 28th February, 2020.

Please confirm by return of email if you are happy to give permission for me to continue with the study.

Thanking you in advance.

Kind regards,

Sharon Maxwell

Assistant Lecturer.

Appendix 6: Focus group questions



lyit

Institiúid Teicneolaíochta Leitir Ceanainn
Letterkenny Institute of Technology

Focus Group Questions

Study Title:

Can working on an entrepreneurial project within a fashion course improve entrepreneurial self-efficacy and career readiness?

Researcher: Sharon Maxwell, Assistant Lecturer, Department of Design & Creative Media

QUESTION 1: I want you to remember back to when you were introduced to the project brief. What fears, thoughts and anticipations did you have about completing the work for the project. [allow time to remember].

Think about how you worked through the project. [allow time for reflection]

Now on reflection, how have your fears, thoughts and anticipations changed? What have you learned about yourself? [allow time for reflection]

Write it down on the post-it provided – you are not required to reveal what you have written on the post-it unless you would like to.

Would anyone like to say what they have learned about themselves during the project?

I will then give the students both of the completed questionnaires to see if they have noted any changes in their confidence levels.

QUESTION 2 (a, b,c, d, e and f)

I will outline the general changes noted (without referring to any one personal feedback) for each of the following areas:

- a. conscientious self-efficacy
- b. openness to experience
- c. emotional self-efficacy
- d. extraversion self-efficacy
- e. agreeable self-efficacy

f. entrepreneurial self-efficacy

I will then ask the focus group why they thought changes happened and encourage them to discuss.

QUESTION 3

Men are twice as likely as women to start a business. Our Local Enterprise [where business start-ups would go through] only has 18% females as their clients, can you think of why that is...any thoughts ...are men better?

QUESTION 4

Do you think the pop-up shop helped you gain confidence in your ability to run a business?

QUESTION 5

Do you think you could be an entrepreneur or who do you think an entrepreneur is?

QUESTION 6

Did you see others in the group excel in particular way?

QUESTION 7

Do you think the skills gained would be sought after in a design business? Are you more industry ready?

I concluded by thanking the students for their participation and informed them that I will be updating them on what I've learned from the study in the coming weeks.

Research Critical Path

	Nov	02-Dec	09-Dec	16-Dec	23-5 Jan	06-Jan	13-Jan	20-Jan	27-Jan	03-Feb	10-Feb	17-Feb	24-Feb	02-Mar	09-Mar	16-Mar	23-Mar	30-Mar	6-19 Apr	20-Apr	27-Apr	04-May	11-May	18-May	25-May	01-Jun	08-Jun	15-Jun	22-Jun	29-Jun	06-Jul
Research Proposal																															
Permission from HOD (email)																															
Questionnaire design																															
Consent Form																															
Supervisor meeting																															
Apply for ethics approval																															
Email to request recycle clothing																															
Introduction																															
Critical Analysis - Literature																															
Ethics approval																															
Explain study to students																															
Supervisor meeting - ethics																															
Questionnaire from students																															
Write project brief																															
Methodology section																															
Supervisor meeting																															
Begin intervention																															
Monitor progress																															
Pop-up shop																															
Supervisor meeting																															
Project Submission																															
Focus group																															
Review research writing																															
Research findings/graphics																															
Analysis																															
Conclusion & recommendations																															
Supervisor meeting																															
Critically review research																															
Tidy/rewrite/abstract																															
Appendices/contents/refs																															
Review layout																															
Supervisor meeting																															
Supervisor meeting																															
Print and bind x 2																															
Project Submission																															

Appendix 7 : Proposed research timeline Gantt chart

Appendix 8: Module descriptor

Module Title:

Fashion Design and Development 2

Module Code:

Credits: 15

Credit Level: 6

Prerequisite Modules: Yes

Hours per Week	
Lectures	-
Tutorials	1
Lab/Studio/Practicals	7
Online	
Independent Learning	17
Total	25

Description:

This module allows the learner to put the skills learned to date into practice. The learner will design a marketable fashion product which will be constructed using the pattern cutting and sewing skills previously covered. The final fashion product must evidence innovation, style and a consideration for a target audience.

Module Learning Outcomes:

On successful completion of this module the learner will be able to:

1. Interpret a theme and develop innovative design solutions in a fashion sketchbook
2. Use research to inform the design development and target audience (exploring learner's individual design identity)
3. Source and suggest materials that are suitable for the product
4. Assemble a fashion garment/product appropriate for the targeted audience
5. Design and illustrate a co-ordinating fashion range
6. Work with advanced sewing techniques for garment details

Indicative Content:

1. Drawing & Design Development

- Theme exploration
- Design development

2. Research

- Target audience
- Trend forecasting
- Mood board
- Colour palette and fabric sourcing
- Comparative shop

3. Pattern Drafting

- Draft pattern from block pattern
- Cut and stitch toile
- Cut and assemble final garment
- Advanced sewing examples to add to sewing folder

4. Final range

- Develop a co-ordinating range
- Illustrate final range

Module Assessment:

Coursework	100%
End of Semester Final Exam	0%

Learning Outcome	Addressed by	
	Coursework	End of Semester Final Exam
1	x	
2	x	
3	x	
4	x	
5	x	
6	x	

Indicative Coursework Description

Fashion sketchbook developing theme and design process. Design capsule range. Construct key final garments from modified block patterns. Sewing techniques & research folder.

Resources:

Note: Learning resources will also be available on Blackboard.

Essential Reading				
Author	Year	Title	Publisher	ISBN
Burke, Sandra	2011	Fashion Designer: Concept to Collection	Burke Publishing	ISBN-10: 0958239126
Kiisel, Karolyn		Draping: The Complete Course	Laurence King	ISBN-13:978-1780672861
Supplementary Reading:				
Baumgartel, B	2009	The complete book of sewing : essential tips and techniques for you and your home	Apple Press	
Bryant, Michele Wesen	2011	Fashion Drawing: Illustration Techniques for Fashion Designers	Laurence King	1856697193
Aldrich, Winifred	2015	Metric Pattern Cutting for Women's Wear	John Wiley & Sons	1444335057
Holman, Gillian	2012	Pattern Cutting Made Easy: Step by Step Introduction	Batsford Ltd; Reprint edition (15 Feb. 2013)	ISBN-13: 978-1849940733
Hosegood, B	2006	The complete book of sewing	Dorling Kindersley	

Other Resources:

www.fashionoffice.org
www.promostyl.co,
www.style.com
www.wgsn-edu.com
www.catwalking.com

Appendix 9: Blank reflective journal sheet sample

WEEK THREE - FEB 3-7

Reflections from each class: What have you achieved today? What worked well for you, what frustrated you, what did you master or learn, what would you like to do different, what thoughts do you have about the class?.

Monday:

Images of work completed:

Tuesday:

Wednesday:

Appendix 10: Comparison questionnaire data

Comparing before and after results

ENTREPRENEURIAL SELF-EFFICACY

How confident are you?	Berry		Cherry		Clem		Orange		Pear		Plum								
	Questionnaire 1	Variation																	
1.0 Conscientious self-efficacy																			
1.1 set high standard - college wk?	40	40	0	65	70	5	30	90	60	55	70	15	60	70	10	100	90	-10	13%
1.2 Achieve high standard in college wk	40	50	10	65	70	5	50	90	40	55	70	15	70	70	0	90	60	-30	7%
1.3 Motivation to achieve goals?	60	40	-20	60	65	5	50	70	20	65	65	0	70	70	0	80	60	-20	-3%
TOTAL	47%	43%	-3%	63%	68%	5%	43%	83%	40%	58%	68%	10%	67%	70%	3%	90%	70%	-20%	6%
2.0 Openness to Experience																			
2.1 New experience?	65	40	-25	45	70	25	60	90	30	70	65	-5	55	65	10	90	90	10	8%
2.2 Find out new things?	90	30	-60	55	85	30	70	80	10	65	65	0	60	70	10	100	100	0	-2%
2.3 To be innovative?	80	50	-30	50	70	20	20	90	90	60	70	10	65	75	10	90	90	0	2%
2.4 To be creative?	90	70	-20	60	70	10	50	80	30	70	70	0	70	60	3%	80	90	10	3%
2.5 To problem solve?	85	50	-35	60	70	10	70	70	0	55	60	5	80	80	0	90	90	0	-3%
2.6 To see potential for new ideas?	85	60	-25	60	85	25	70	70	0	70	65	-5	80	85	5	70	80	10	2%
TOTAL	83%	50%	-33%	55%	75%	20%	53%	80%	27%	65%	66%	1%	68%	73%	4%	85%	90%	5%	4%
3.0 Emotional self-efficacy																			
3.1 Calm in difficult situations?	50	30	-20	40	75	35	60	60	0	45	60	15	40	60	20	90	80	-10	7%
3.2 Work well under pressure?	30	45	15	40	75	35	50	60	10	50	60	10	80	70	10	50	90	0	10%
3.3 Keep trying despite failure	45	50	5	45	65	20	30	60	30	70	60	-10	70	65	-5	70	80	10	8%
3.4 To take risks?	50	80	30	45	70	25	80	90	10	60	60	0	70	80	10	90	90	0	13%
3.5 Initiative to try new things?	60	85	25	50	80	30	60	90	30	60	65	5	60	70	10	80	100	20	20%
TOTAL	47%	58%	11%	44%	73%	29%	56%	72%	16%	57%	61%	4%	64%	69%	5%	84%	88%	4%	12%
4.0 Self-efficacy for extraversion																			
4.1 Friendly?	90	80	-10	60	75	15	80	90	10	75	75	0	90	90	0	50	60	10	4%
4.2 sociable?	90	75	-15	50	65	15	80	90	10	65	70	5	80	70	3%	50	60	10	3%
4.3 outgoing?	80	90	10	45	65	20	80	90	10	55	70	15	75	70	-5	40	50	10	10%
4.4 communicate ideas?	30	55	25	40	65	25	80	90	10	55	65	10	70	75	5	70	80	10	14%
4.5 encourage others	50	90	40	45	75	30	70	90	20	70	60	-10	70	80	10	60	90	30	20%
4.6 stand firm?	30	60	30	40	60	20	60	90	30	60	55	-5	70	70	0	70	70	0	13%
TOTAL	62%	75%	13%	47%	68%	21%	75%	90%	15%	63%	66%	3%	76%	76%	0%	57%	68%	12%	11%
5.0 Agreeability self-efficacy																			
5.1 work in a group?	100	65	-35	50	65	15	80	70	-10	50	60	10	65	60	-5	80	90	10	-3%
5.2 express opinions?	90	65	-25	45	67	22	80	70	-10	60	60	0	70	65	-5	80	80	0	-3%
5.3 ideas without annoyance?	90	70	-20	45	65	20	80	80	0	65	70	5	80	75	-5	90	80	-10	-2%
5.4 generate interest in ideas?	90	60	-30	40	67	27	70	80	10	65	65	0	75	70	-5	80	70	-10	-1%
TOTAL	93%	65%	-28%	45%	66%	21%	78%	75%	-3%	60%	64%	4%	73%	68%	-5%	83%	80%	-3%	-2%
6.0 Entrepreneurial self-efficacy																			
6.1 start own business?	50	50	0	37	65	28	70	80	10	70	70	0	40	60	20	100	100	0	10%
6.2 idea to start own business with?	50	70	20	40	67	27	70	80	10	75	65	-10	60	60	0	100	100	0	8%
6.3 manage your time?	45	40	-5	50	65	15	70	80	10	65	60	-5	50	50	0	100	100	0	3%
6.4 manage your finances?	50	50	0	50	60	10	70	90	20	65	60	-5	65	65	0	100	100	0	4%
6.5 reaction of starting a business?	100	80	-20	30	65	35	60	80	20	80	70	-10	55	60	5	60	80	20	8%
6.6 like to be an entrepreneur?	60	80	20	50	65	15	80	90	10	70	65	-5	40	60	20	100	100	0	10%
6.7 favourable relationships?	90	70	-20	40	60	20	80	90	10	70	65	-5	70	65	-5	100	100	0	0%
TOTAL	64%	63%	-1%	42%	64%	21%	71%	84%	13%	71%	65%	-6%	54%	60%	6%	94%	97%	3%	6%

Appendix 11: Researcher's reflection during the study

A reflective summary of the week to week observations

Week commencing	Tasks	Observations and reflections:
<p>Week One: Class one (2 hours)</p>	<p>Explanation of study</p> <p>Give out information about study</p> <p>Consent form</p> <p>Questionnaire</p> <p>Sort donated clothing into what can be used, items that could be sold without intervention and items (such as knitwear) that would be donated to a charity shop as they would not work for the intervention.</p> <p>Sorted usable clothing into colour stories that would work together for the patchwork fabric</p>	<p>A highly unconventional class as there was no specific teaching. We were just working together to sort fabrics and prepare for making.</p> <p>Four of the students who should have been part of the class did not return after Christmas (due to health, family commitments and relocation) and this has never happened in any fashion group before which really shocked the tightly knit group creating a very sombre mood and dulled the excitement of starting the project.</p>
<p>Class two (3 hours)</p>	<p>Demonstration of how to work safely with the rotary cutter. This was the quickest way to cut out straight lengths of fabric and the students had not used them previously.</p> <p>Demonstration of how to construct patchwork fabrics.</p>	<p>Really good atmosphere in the room. Everyone was absorbed in creating fabric which appealed to their creativity.</p> <p>Music and conversations were happening but everyone was busy creating.</p> <p>Great motivation and appraisals between students on what was working.</p> <p>Interesting design ideas emerged with suggestions of keeping in buttonholes,</p>

	<p>Students started to make their patchwork fabrics.</p> <p>Introduce sketchbook element to the project which works with design development for their next garment construction.</p>	<p>pockets, ripped jeans effects and placing them on the garment in unexpected ways.</p> <p>This provided great motivation and the students certainly enjoyed the creative freedom.</p> <p>Students learned about the implication of cutting triangles and matching them at the corners. Fabric had to be ripped out and re-assembled.</p>
<p>Week Two</p> <p>Class three</p>	<p>Review work to date as a group – discuss what is working and what difficulties they are facing.</p> <p>Review work on sketchbook with one-to-one tutorials</p>	<p>A considerable amount of work has to be ripped out due to uneven stitching.</p> <p>The difficulties with doing unconventional patchwork are becoming apparent</p> <p>It is taking longer than expected to create fabric blocks</p> <p>Rule book for conventional garment construction is being re-wrote which is opening interesting discussions. This style of organic conversations that truly question, analyse, evaluate and reconfigure are teaching gold (Bloom’s Taxonomy)</p> <p>Long tea breaks by some is delaying completion of work.</p>
<p>Class four</p>	<p>Open discussion about what’s working and what isn’t.</p> <p>Raised concerns over late starts, long tea breaks</p> <p>One to one tutorials to review sketchbook work.</p>	<p>Discussion lead to agreement that they needed more fabric.</p> <p>Students asked for a sign in sheet where time worked would be logged.</p> <p>Email to all staff and students to collect more fabric on Thursday.</p>

		<p>committed. I believe that this observation from the student cohort is educational also in that your friends may not be your best entrepreneurial partner. To see students assume different roles naturally is a really interesting insight, one that I believe will enhance how I best facilitate their learning over the next two years.</p>
<p>Week 5</p> <p>Class nine</p> <p>Class ten</p>	<p>Review of garments made.</p> <p>Agreement on what needs to happen this week to ensure that the shop can happen.</p> <p>Build rail for shop display</p> <p>Agree roles.</p> <p>Last class before the pop-up shop.</p> <p>Agree to meet on the next day at lunchtime to put together all the garments.</p>	<p>Some anxiety with students because they have fallen short of what they anticipated they could produce (I have eased their fears and they seem to be happy working). There are no garments completely finished but quite a few are nearly finished.</p> <p>Roles for pop-up shop considered.</p> <p>Great atmosphere with everyone working as a tight team</p> <p>One student is taking longer than necessary at the overlocker and there is frustration that it is holding up their production run.</p> <p>The natural leader role, the problem solver role, the person lightening the mood with conversation and laughter, and the students who seems oblivious to what's going on are all easily identified for me as an observer.</p>

		<p>Students were resourceful sourcing a garment steamer (for re-sale garments), recycled hangers and a swift tag gun to give a professional finish to the garments. Facebook and Instagram promotion for pop-up shop. Shop supervision and set-up was agreed.</p> <p>When we met at lunchtime, there was more work that needed to happen to improve garment quality. Two students volunteered to work late with me to fix quality issues identified in the garments.</p>
<p>Thursday 20th February</p>	<p>Pop-up shop.</p>	<p>Students were nervous and anxious setting up the shop. These fears soon turned to relieved elation with the frenzy of people queuing to buy the tops before shop opening at 9.30. The students declared the shop as a resounding success and their confidence was really boosted. Seventeen garments were made and only two remained at 11.30am. After the initial rush, Cherry, deep in thought said, "I can't believe how quickly they've sold....I know what I will be doing this Summer". What she meant was that she could do something similar over her Summer break to make money.</p> <p>Students were congratulated by various members of staff throughout the morning (many of whom they did not know) and the students were extremely proud and at</p>

		the same time surprised at what they had achieved.
Week 6	<p>Monday: Give out questionnaire (identical to the first given out in week one)</p> <p>Collect sketchbook and reflection sheets for assessment. Collect reflections.</p> <p>Introduce and start next project.</p> <p>Tuesday: Focus group.</p>	

Appendix 12: Entrepreneurship education provision

Entrepreneurship education provision within the Level 7 fashion degree course.

The study forms part of the delivery for a fifteen credit module “Design Development Two” in semester four (see module descriptor in Appendix 8), it forms part of a bigger entrepreneurship education strategy for the Level 7 Fashion degree students. In semester three, the students complete a ‘live’ brief to present a professionally packaged design solution in response to a real brief from local fashion industry specialists. In semester four, they begin to consider their product design, how it addresses their researched market and they also design their brand identity. In semester five and seven they choose to enter either international or national design competitions. Also in semester five, students go on work placement and study a more in depth module on marketing. In semester six and eight, they learn about business-related theory with regards to costing, sourcing production, enterprise support systems and they also link up with our Local Enterprise to launch their final year fashion show. To be familiar with the Local Enterprise is important because they also offer the New Frontiers programme which supports new business start-ups with finance, incubation facilities and expertise advise. Whilst none of these modules are specifically labelled as entrepreneurship education, they all work to facilitate entrepreneurship education providing an opportunity to grow the knowledge, skills, attributes and entrepreneurial mindset for the student.

Within the Fashion degree course, students ‘learn about’ other designers and their entrepreneurial success. Second year of the course focuses on ‘learning through’ with regards to working on a ‘live’ brief and also experimenting with this study intervention of the pop-up shop. In third and fourth year, students ‘learn for’ setting up their own business. Throughout all of these stages, the student is made aware of the value of enterprise, engaging the entrepreneurial mindset, developing the entrepreneurial skills and attributes and providing information on starting a business or adding value to another’s business through the module for innovation and creativity (Advance HE 2019)

Appendix 13: Other information which may be of interest but not essential to the thrust of the study

Entrepreneurship within the creative industries

Despite the positive contribution creative industry entrepreneurs bring to the economy, pathways into being self-supported with regards to income are notoriously difficult. Individuals often need to manage short term contracts, second jobs, casual employment to support themselves financially whilst working on a creative business start-up (Haukka 2011). The perception of this difficult start to creative businesses could effect a graduate's attitude towards entrepreneurial activity and as a result affect their entrepreneurial self-efficacy (as illustrated in figure 2.1, page 21).

Entrepreneurial opportunities

Another key area that influences an individual's entrepreneurial self-efficacy and entrepreneurial intention is the availability of entrepreneurial opportunity (figure 2.1, page 21). Pre-empting demand and therefore entrepreneurial opportunity for fashion is to some extent unpredictable in that an entrepreneur is trying to anticipate the emotional response of the market to a creative product. The customer may not value the creation at that exact time of availability, or perhaps the garment is too radical? Fashion designers are challenged with creating garments that are sufficiently different from what currently exists to give them competitive advantage in a saturated market, but not too different that the customer cannot envisage them as fashionably appropriate for them (The State of Fashion 2020; Nielsen *et al* 2018; Loschek 2009)

Entrepreneurial opportunities are the opportunities to create and offer new goods, materials, services or processes for a price greater than their cost (Scott 2000). Opportunity must exist or be created if entrepreneurial activity is to happen. Some people are more alert to opportunities, these people identify opportunity based on the information they already possess, informed by their prior life experience. (Patten 2016; Scott 2000). However with regards to ultra-fast pace of fashion, there are always entrepreneurial opportunities but pre-empting what the right garment design is with the right marketing at the right time in the right location and at the right price in a constantly evolving market makes the recognition of entrepreneurial opportunity an arbitrary task (Hassen and Tremblay 2018)

Appendix 14: Transcript from the focus group

For SE for Extraversion...being friendly, sociable, outgoing, communicating ideas, encouraging others, standing firm...there was some changes, some lower for that one...any thoughts on that one?

BERRY: suppose for that one, I would mostly think of how we dealt with people at the shop...you weren't sure whether you should approach them or not...if they were having a look, you wouldn't want them to feel pressured, so I just said to them, if they wanted anything to let me know...

CHERRY: We were lucky [indicated to PEAR], we were on first in the shop when everything was sold right away...it was great, I couldn't believe how quick they were selling...

Like I was afraid that we would be embarrassed and nothing would sell...but when we saw them all pressed and presented, they really did look good...it was great to see people wanted them...it would make you want to do it again...

RESEARCHER: Agreeability SE...I suppose we have covered some of the topics there...working in a group, expressing opinions, communicating ideas without annoyance...generating new ideas... anything to add to that.....

CLEM: Working in a group was fine... think we can work ok as a gang!

Yeahs from a number of them....

Entrepreneurial SE...do you think it opened your mind to starting a business?

CLEM: 100%...starting your own business is so much work though... like I would like to have my own shop but not a business as a designer though... but I'd need about 100,000 to stock the shop, ya'don't realise how much it takes to stock a shop and how could you start with that amount of money...?

PEAR: Like you'd have to be in business a long time before you'd make money...and it's a lot of work.

RESEARCHER: would you like your own business?

CHERRY: I just wouldn't be that confident yet, but I would think more of it, I think when you've done that, you could see yourself doing it more...but it's a lot of work and I wouldn't be sure just yet...

RESEARCHER: Men are twice as likely as women to start a business....our Local Enterprise [where business start-ups would go through] only has 16% females as their clients... can you think of why that is...any thoughts ...are men better?

ORANGE: I think men are more risk takers....

CLEM and **BERRY** agree...yeah men just do stuff whereas we worry...

Most businesses I know are run by men... the shop I work in is run by a man...when I'd say to him that I have an idea.. he just says, do what you think is the best thing and lets me just get on with it!! He's no idea...

BERRY: Suppose women are trying to juggle more things like ..family and all...

RESEARCHER: Do you think the pop-up shop helped you gain confidence in your ability to run a business?

CLEM: All nodded....auck aye... for sure but it's still hard.

RESEARCHER: Do you think you could be an entrepreneur or who do you think an entrepreneur is?

Orange: I never thought of myself as ever being an entrepreneur, I think of an entrepreneur as an older man. I never really thought of it, I suppose.

Cherry: Yeah an entrepreneur you'd think of a Steve Job's kind of person [laughs]

RESEARCHER: Did you see others in the group excel in particular way?

ALL agreed: No specific comment...

RESEARCHER: I could see your strengths highlighted... the quiet co-ordinator that could gently guide work to be done.. those of you that were there to ensure everything got done...those that were resourceful, those that really mucked in to get the best work... Could you see that?

ALL: Yeah, we worked well..

RESEARCHER: Do you think the skills gained would be sought after in a design business? Are you more industry ready?

Hesitation from group:

CLEM: Yeah, I suppose so...

Orange: maybe