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Supporting Educators Towards More Inclusive Design of Entrepreneurship Courses

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Supporting Educators Towards More Inclusive Design of Entrepreneurship Courses

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Abstract

This paper explores inclusive entrepreneurship course design across European universities. Drawing a sample of six cases across five universities the paper adopts a multiple case study research design to explore how educators are supporting the Missing Entrepreneurs according to the OECD definition (women, people with disability, refugees and migrants, young people and seniors). The findings show interesting and innovative pedagogical approaches to emerge by analogy and replication. The paper provides empirical and practical contribution for educators in terms of developing entrepreneurship courses according to the principles of universal design for learning drawing on needs of the Missing Entrepreneurs. The Paper further contributes to a more focused approach for educators who want to target entrepreneurship programmes and support specific underrepresented groups, such as female entrepreneurs, people with a disability, the youth and seniors as case studies are explained.

Keywords

entrepreneurship, business start-up, educators, course design, universal design for learning, Missing Entrepreneurs.

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Introduction

Higher education institutions (HEIs) mainly develop entrepreneurial curricula across the earlier stages in which entrepreneurship is stimulated. This involves the inspiration, education and incubation stages. Programmes and courses in entrepreneurship usually exist across faculties and schools at undergraduate and postgraduate level. Entrepreneurship courses and initiatives may also be created and delivered by knowledge transfer and incubation centres of HEIs.

Although examples are emerging, it is still unusual for HEIs to develop entrepreneurship curricula that explicitly considers underrepresented cohorts. Most courses in HEIs across Europe are open to all students, but educators give little consideration to what is needed to facilitate minority groups of students that may need extra support to access and participate.

Categorising the many approaches to entrepreneurship education into three pedagogies of the supply side model; the demand side model; and the competence model (Nabi et al., 2017), the barriers and obstacles that students from minority groups may experience are wide ranging. The supports needed also exist on a continuum from more mainstream courses that are welcoming to everyone, to major adjustments and customisations that will allow specific minority groups access and fully participate in specialised entrepreneurship courses.

The OECD recognises six important groups of Missing Entrepreneurs: women, youth, seniors, the unemployed, immigrants and people with disabilities (OECD, 2021). These groups face greater hurdles on the path to entrepreneurship, yet there is substantial untapped opportunities that exist from these populations if training and supports are enabled. Educators must respond by ensuring that they are designing entrepreneurship courses that allows Missing Entrepreneurs to access and participate in education and training that is appropriate and meaningful to their needs.

This paper adopts a multiple case study approach (Yin, 2009) towards inclusive entrepreneurship course design across five European universities of the European University of Technology (EUT+), European University Alliance. Seven exemplar cases are identified that reach the Missing Entrepreneurs. The findings help interesting and innovative pedagogical approaches to emerge that can support HEIs in their need for more inclusive entrepreneurship education design.

Literature Review

Inclusive entrepreneurship education means that all students from any social-economic and cultural demographic, geographical location, gender, disability, ethnicity and discipline have equal opportunity to experience entrepreneurship education and access entrepreneurial learning environments (Smith et al., 2017). Achieving inclusive and accessible entrepreneurship education is not without challenges. Educators are often coerced towards low-cost pedagogy involving traditional approaches in large lecture theatres and 'one-size-fits-all' content (Morselli and Gorenc, 2022). For students of minority backgrounds this can create a negative experience (Cope and Watts, 2000).

Inclusive Entrepreneurship Education

Inclusive entrepreneurship education ensures all students can learn, participate, and are welcome as valuable members of their institution (Nilholm, 2006). Inclusive teaching is underpinned by principles of social justice and rights (Wijeratne et al, 2022). This means taking account of and valuing students' differences within mainstream curriculum, pedagogy and assessment (Hockings et al., 2012; Mincheva, 2022).

Research has shown that for women gendered norms impact class dynamics and hinder lecturers' efforts to build inclusive classroom cultures (Wijeratne et al., 2022). Entrepreneurship is affected by this in a number of ways. Within entrepreneurship education teaching cases and methods are largely about the "heroic male" normative assumptions and narratives (Ahl, 2007). Similarly, the practice of entrepreneurship is stereotypically described with characteristics such as risk taking or aggressiveness that would often be ascribed to men (Siivonen et al., 2022; Sharen and McGowan, 2018; Jones, 2014). In teaching activities, such language and norms may afford perceptions or practices of exclusion and micro aggressions, that could have intersectional dimensions and may discourage attendance or participation by targeted groups (Harrison and Tanner, 2018). Inclusive teaching begins with forward thinking design, so that course materials including readings and assessments reflect the variation in identities and perspectives that might be in the classroom (Gannon, 2018).

Within the HEI ecosystem, a progression model approach to entrepreneurship education is gaining attraction (Lackéus, 2015; Klucznik-Tőro, 2021). The progression model draws on a wider definition of entrepreneurship aligned to the EntreComp approach. Scholars such as Hynes (1966) and Fayolle et al. (2019) promote a broad range of problems to be defined, analysed and solved through entrepreneurship education. Gaining an entrepreneurial mindset is not a single event, but rather a continuous process of training, even from a young age (Gavigan et al., 2022).

Moreover, Rae et al. (2010) link entrepreneurship education to an even wider reach in its ability to influence groups of people and at a societal level.

Authors such as O'Brien et al., (2021) highlight how people from minority groups suffer social marginalisation that entrepreneurship education can alleviate. It is further suggested that developing specialised entrepreneurship courses and opting for more inclusive course design can reduce declining rates of labour productivity and growing inequalities, unlocking an unrealised entrepreneurial potential in under-represented communities (Cooney and Licciardi, 2019).

Enhancing entrepreneurship education that is welcoming to all can integrate universal design for learning principles (Rose and Meyer, 2002) to address barriers commonly experienced by diverse student groups (see Figure 1).

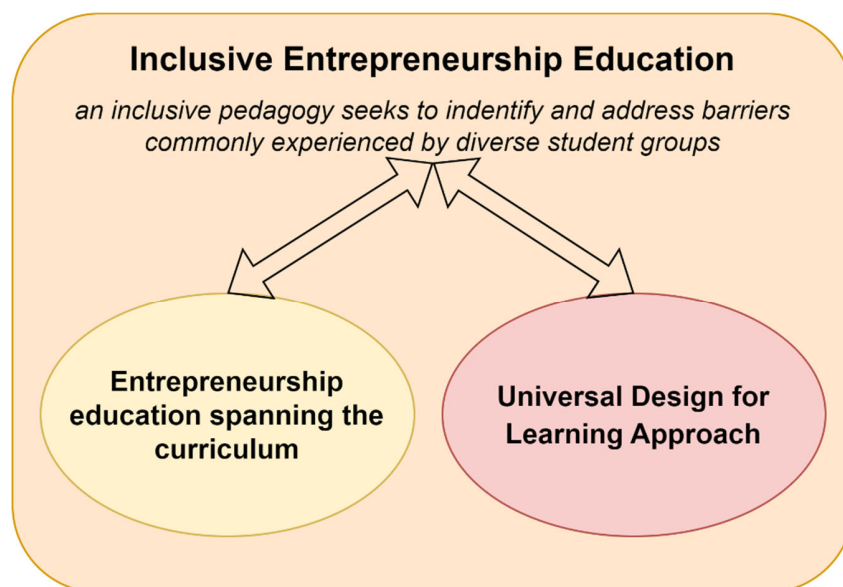


Figure 1. The inclusive entrepreneurship education components

Entrepreneurship education spanning the curriculum

Embedding inclusive entrepreneurship education in the curriculum is led by the idea that employability, enterprise and entrepreneurship can be built into the delivery of traditional subjects such as economics or engineering. Indeed, entrepreneurship within STEM disciplines is a key priority of the European Commission, especially for women to build strong foundations for innovation and job growth in the region (EC, 2023). Entrepreneurship education plays a key role in nurturing the key competencies in everyone and is part of the EC eight key competences for lifelong learning, such as personal fulfilment, citizenship and social inclusion (European Commission, 2019).

University entrepreneurship education and training, especially in non-economics and non-business environment are increasingly moving towards experiential learning by implementing a social constructive approach (Lackeus, 2020). Entrepreneurship educators at universities face the challenge of setting learning goals and evaluating inclusive entrepreneurship education design that aligns to the Bologna Declaration and the European qualification framework (EQF) tripartite (knowledge-skills- attitudes) model (Tauch 2004). To better answer the requirements of the Bologna Declaration and complementing the European Universities Initiatives, many universities are involved in academic curricula restructuring aiming to become 'entrepreneurial universities' with students across all disciplines developing entrepreneurial skills (Scarlat,2007).

A Universal Design for Learning Approach

Universal Design for Learning (UDL) is more than just good teaching as suggested by Hayward et al. (2022). UDL is an instructional framework designed to address learners' variability by removing barriers in the curriculum (Burgstahler, 2009; Williams et al., 2021). The goal recognises that students are not a homogenous group. There are many dimensions upon which they may differ such as ability, age, ethnicity, gender and/or socioeconomic status (Murphy, 2021). Within this context variability implies that students learn in different ways and to ensure a good experience for all students a variety of pathways gives appropriate choice and flexibility (CAST, 2018; AHEAD, 2017). Although studies show UDL as effective for student learning with significant cognitive disabilities, UDL offers a framework to design and deliver programmes and modules that ensures materials and learning environments affords the best learning experience for all students irrespective of their ability or disability (Burgstahler, 2009; O'Neill and Maguire, 2019).

Studies have examined UDL implementation across a range of curriculum content areas such as reading (Kennedy et al., 2014) and mathematics (Kortering et al., 2008) all revealing positive impacts on students' engagement and academic outcomes (Reinhardt et al., 2021). Further positive results in demonstrating gains in both academic and social outcomes for students with a range of diagnoses and disability severity levels (Cipriano et al., 2022). Such findings have led to the National Educational Technology Plan (2016) to promote UDL as an important means for creating learning environments for diverse learners, but especially for learners with disabilities. Furthermore, concerning research on teachers adopting the principles of UDL, studies indicate an increase in teacher's efficacy, instructional and self-efficacy (Hayward et al., 2022). Teachers also report greater success in reaching diverse learners (Bradford et al., 2021) and increasing student engagement (Marino, 2021).

Further research has indicated positive outcomes associated with UDL for diverse learners in grades as suggested by Ok et al. (2017). Here UDL was found to be beneficial in improving access to the curriculum, reducing behaviour problems, and increasing metacognitive knowledge.

Methodology

This paper adopts a multiple case study approach (Yin, 2009). Six case studies from 5 European universities of the European University of Technology (EUT+) were used to showcase approaches to inclusive entrepreneurship. The case examples were built through data collection from a number of sources including educator written explanations, online content, news and media content, seminar presentation, informal discussions and mini surveys / feedback sheets. Cases were selected to ensure a mix of geographic locations from across Europe and as good exemplars for specific cohorts of Missing Entrepreneurs. The cases were originally documented in the 'Educator handbook for designing inclusive entrepreneurship courses in higher education'. This document was created as support for educators and was translated into the languages of the universities in 2022. The English version is available at:

https://arrow.tudublin.ie/researchporbk/4?utm_source=arrow.tudublin.ie%2Fresearchporbk%2F4&utm_medium=PDF&utm_campaign=PDFCoverPages.

The correlation between the case studies and the findings are presented in a concise manner in table 1. A more detailed description on each case study is included in the aforementioned handbook.

Table 1. Correlation between the case studies and the findings

Case study	Carried out at	Participants	Case reflections and Findings
Case one: WE Support to encourage <i>women entrepreneurship</i> across all university disciplines	Technological University Dublin (TU Dublin)	101 students and Alumni women	<ul style="list-style-type: none"> • There are industry sectors that are traditionally more appealing to women than men. • Flexibility in delivery options is needed since women often have greater family and home responsibilities. • A wide representation by women is needed within the course material. • Women need additional post-programme support if they want to start a business.

<p>Case two: Address entrepreneurship skills for <i>young people</i> (older children) and those that are excluded from joining university</p>	<p>Technical University of Cluj-Napoca (TUCN)</p>	<p>a total of 120 students attendance</p>	<ul style="list-style-type: none"> • Mentoring as an introduction to networks and agencies could be a very good support to help women stay on their entrepreneurship trajectory. • Young people often lack practical experience. • Young people are in need of validation to increase the level of confidence and self-esteem. • They are limited by the comfort and security they feel by the labour market and no longer take the initiative to take some risks to start their own business. • Lack of motivation needs to be mentioned in the context of courses targeted at young people. • Encouraging entrepreneurship in young people at an earlier age gives them a real head start for engaging in entrepreneurship initiatives.
<p>Case three: Analyzing the struggles of <i>refugees</i> within the realm of social entrepreneurship</p>	<p>Cyprus University of Technology (CUT)</p>	<p>35 students from the Department of Multimedia and Graphic Arts, in cooperation with Migrant Information Center with 50 migrants</p>	<ul style="list-style-type: none"> • Migrants and refugees may not have the same access to finance and other supports of other groups in society. • Language barriers and reliance on social media may have particular pertinence for migrants and refugees. • Linking into migrant networks should be developed within the course content. • Barriers to finance or legal status may prevent migrants from traditional enterprise routes for new venture creation. • Consideration of post programme support in the design of entrepreneurship courses is important.
<p>Case four: A student story with <i>disability</i> that participated in pre-incubator Idea LAB course</p>	<p>Riga Technical University (RTU)</p>	<p>1 student with disability</p>	<ul style="list-style-type: none"> • High percentage of disability is invisible. • A student may not realise until after they start a course how they need to be supported; thus openness and responsiveness needed;

and developed his own idea - E-Race Wheel			<ul style="list-style-type: none"> • Persons with disabilities should be represented within the course material. • Care is also needed to respect variability of students with a disability. • Consideration of the most suitable pedagogy or mix of pedagogical approaches is important.
Case five: A student who participated on the self-employment for <i>people with disability</i> pilot course	Technological University Dublin, (TU Dublin)	1 participant with disability on course	
Case six: Address entrepreneurship skills and mindsets for seniors over 55 years of age at Seniors University	Universidad Politécnica de Cartagena (UPCT)	3 courses of 50 people with a total of 150 people over 55 years of age receiving the programmed studies (50% women, 50% men)	<ul style="list-style-type: none"> • Entrepreneurship holds the potential for providing a way for seniors to remain active beyond the typical retirement age. • Entrepreneurs benefit from improved physical and mental health, maintaining social connections, and creating economic value. • Seniors have a lot of experience but need additional skills such as opportunity recognition to be successful in entrepreneurship and self-employment. • Seniors are much more motivated to stop a business due of retirement or if it is not profitable. • Barriers to entrepreneurship for seniors often include health issues, the opportunity cost of time and the shorter timeline to grow a sustainable business

Findings

The cases and findings were originally documented in the 'Educator handbook for designing inclusive entrepreneurship courses in higher education'. This document was created as support for educators and was translated into the languages of the universities in 2022. The English version is available at:

https://arrow.tudublin.ie/researchporbk/4?utm_source=arrow.tudublin.ie%2Fresearchporbk%2F4&utm_medium=PDF&utm_campaign=PDFCoverPages. Findings are presented under the categories of the OECD's Missing Entrepreneurs.

Designing specialised entrepreneurship courses for women

Designing and delivering courses on female or women entrepreneurship requires thought about different industry sectors that future entrepreneurs may find more appealing. Women entrepreneurs exist in and should be encouraged across all sectors in society, but there are sectors that are traditionally more appealing to women than men. It is a very interesting challenge for educators in HEIs to work out how to integrate ambitions of promoting entrepreneurship in STEM fields with traditionally more appealing sectors for women.

A wide representation by women is needed within the course material. This might include case studies, guest seminars, mentoring. Developing courses for better participation by women should also recognise intersectionality, where for example a student might be a woman but also have a disability, or also have refugee status, or also be in their senior years.

Flexibility in delivery options is also needed, especially where courses are not designed for full time students. Women may have greater family and home responsibilities that makes them less flexible with time. Providing recorded lecture materials and multiple options for engagement may be required.

Mentoring as an introduction to networks and agencies could be a very good support to help women stay on their entrepreneurship trajectory. Educators should consider how this can be achieved with the limited supplementary resources and time often available to them. Could they rely on past students as mentors? Is there such supports in other departments of the institution, for example the technology transfer office? Are there experienced entrepreneurs that are willing to spend time supporting other budding entrepreneurs? How does the government and its agencies support mentoring of female entrepreneurs that you could draw in?

Women need additional post-programme support if they want to start a business. They may lack female mentors, be more restricted on time or feel excluded from support agencies and networks. Lecturers should work with their technology transfer offices to establish pathways that feel welcoming and accessible to women. This may be advanced programmes or initiatives to start a business. This information and linkages should be included in the course content.

Designing specialised entrepreneurship courses for children and unemployed young people

Young people need a strong practice approach that combines with some theory. Those who feel the need to assert themselves in the field of entrepreneurship, often lack practical experience.

Courses for young people should support them to develop both personally and professionally. A favourable environment to develop personally, in terms of communication and teamwork, as well as professionally, in terms of technical / theoretical knowledge is very important.

Validating young students' performance throughout a course will help to increase the level of confidence and self-esteem.

Once young people reach the labour market, they are limited by the comfort and security they feel and no longer take the initiative to take some risks to start their own business, which leads to stagnation. Lack of motivation needs to be mentioned in the context of courses targeted at young people. This starts before university. Encouraging entrepreneurship in young people at an earlier age gives them a real head start for engaging in entrepreneurship initiatives during their university years.

When designing courses for children, particular risk assessments, consents and supports will need to be in place. This will need to be fully worked through before starting if targeting pre-university students.

Designing specialised entrepreneurship courses for refugees and migrants

Migrants and refugees may not have the same access to finance and other supports of other groups in society. The educator would need to have a clear understanding of differences before developing course content. Language barriers and reliance on social media may have particular pertinence for migrants and refugees. Course content should be developed with a good understanding of this.

Migrants and refugees may not have strong linkages within entrepreneurship ecosystems but they may also have strong networks within their own groups. Developing private sector linkages and linking into migrant networks should be developed within the course content.

Social innovation and social enterprise may have an important role in courses developed for migrants and refugees. Barriers to finance or legal status may prevent migrants from traditional enterprise routes for new venture creation.

Consideration of post programme support in the design of entrepreneurship courses is important.

Working with your technology transfer office or incubation hub to facilitate next steps for migrants

and refugees who may not be able to access national supports can help ideas and opportunities reach fruition.

Designing specialised entrepreneurship courses for people with disabilities

When designing and delivering entrepreneurship courses for persons with disabilities, it cannot be overstated how important the planning and design stage is. Reasonable adjustments and accommodations may vary greatly. In addition, a high percentage of disability is invisible. Planning, working with the disability support office and engaging with students on their own needs even before registration is important. A short questionnaire or interview with students may be conducted before the start of a programme where students can disclose any medical needs or other relevant information that they want to share. Educators should also provide opportunities during course delivery for students to declare any adjustments that they need. A student may not realise until after they start a course how they need to be supported.

Any educator who is delivering an entrepreneurship course for persons with disabilities should have a good knowledge of accessible technologies and other support tools needed for their programme. They will also need to know how these work within the customised software of their own institution as students may not be familiar with these in advance.

Persons with disabilities should be represented within the course material such as in case studies, guest seminars or in assessment work. Care is also needed to respect variability of students with a disability. Depending on the size of a cohort, there may be potential to individualise materials, or include a mix of broader and focused material concerning entrepreneurship for persons with disabilities so that everyone feels welcome.

While not compromising on quality, consideration of the most suitable pedagogy or mix of pedagogical approaches might be important. For example, what real life projects and assessments can be developed and what options can be developed for each student to participate in? What is the requirement for physical or online participation from different approaches?

Course material should include access to post programme supports designed in to help students stay on the entrepreneurship trajectory. This should include opportunities for mentoring, networking opportunities, and access to incubator facilities. Such information should be clear about physical access or limitations that might impact particular individuals.

Designing specialised entrepreneurship courses for seniors

Developing entrepreneurship education for seniors offers wonderful opportunities for intergenerational learning experiences in HEIs that can be leveraged in the design of programmes and extra-curricular activities. This is an untapped entrepreneurial potential recognised by the OECD.

Designing and delivering education for seniors can have a strong social enterprise aspect promoting solidarity among students and their communities. Entrepreneurship holds the potential for providing a way for seniors to remain active beyond the typical retirement age for those who wish to do so, leading to benefits of improved physical and mental health, maintaining social connections, and creating economic value. It can play an important role in active aging policy.

Older people that are interested in starting a business or becoming self-employed may have spent their entire careers working as employees. They may have a lot of experience but need additional skills such as opportunity recognition to be successful in entrepreneurship and self-employment. The evidence indicates that seniors are much more motivated to stop a business because of retirement or because it was not profitable. This could point to need for educational support to sustain successful business, but also concerning transferring and selling a business to fund retirement.

Evidence from the OECD suggests that senior entrepreneurs are very similar to the normal population in terms of skills and competences. However, barriers to entrepreneurship for seniors often include health issues, the opportunity cost of time and the shorter timeline to grow a sustainable business compared to younger entrepreneurs. This points to similar approaches to educational provision, but alternate consideration may be given to targeting, selection, retention and communication channels with seniors.

Discussion and Conclusion

The key challenge in this paper is a gap in literature facing educators on how to design and deliver inclusive and accessible entrepreneurship education to diverse learners. The case studies collected across European universities provide rich contextual data and experiences to connect Missing Entrepreneurs to educational contexts internationally. The paper provides a contribution for the cohort of educators in the design of mainstream courses according to the principles of universal design for learning. When specific needs begin to be understood, educators have the opportunity to consider such issues upfront at the design stage of programme and course development. In addition, the shared experience of design and delivery of courses to specific cohorts of missing entrepreneurs helps educators to create courses specific to the challenges and

idiosyncrasies. Our contribution in this paper is mainly a practical one to support course designers in the entrepreneurship education field.

There are limitations with this study. Aspects of UDL are applied to some of the cases but more research is needed on mainstream entrepreneurship courses that are designed from the outset according to UDL principles studying them from creation to delivery and assessment. In addition, the importance of inclusive entrepreneurship course design within other subjects and spanning curricula to embed entrepreneurial mindsets in all students is not explored here, even though its importance is recognised (Lakeus, 2020). Future studies could also research that challenge. An exploration of the theoretical contributions could also be developed in future studies.

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