



by Barbara Gabriel

As an entrepreneurship educator, I believe we really need to ask ourselves two questions. First, do I have the skills and competencies to teach? And second, do I have the skills and competencies to teach entrepreneurship?

My Story

My own experience comes from delivering courses in engineering. I had thought that with my professional background, it would have been an easy task to transfer my technical knowledge to higher education students, but it is not! I found a big gap between my expectations as the teacher, and theirs as learners! What this experience taught me is that to effectively transmit knowledge, motivate, and prepare learners for the constant challenges they will face in the labour market, you need to understand the way they learn (EU, 2014). It does not matter how good or well informed your content and curricula may be, if you are unable to connect with your learners and engage them emotionally (Felder, 2004 and Wankat and Oreovicz, 2005).

These questions have always fed my constant dissatisfaction as a teacher, and, consequently, led me to seek out the most suitable practices, methodologies, and frameworks to pursue my goal of engaging with learners. I have never taught an entrepreneurship discipline, but I believe that all of us must improve our capacities as intrapreneurial teachers.

My challenge: how can I become an entrepreneur in higher education?

Why Use 'Emotional Learning' in Your Teaching?

Contextualisation - From Then to Now

In the past, the curricula for each course and the learning outcomes for the programme were defined. This meant that, for the educator, the challenge lay in choosing an appropriate educational approach. It is our responsibility as educators to identify and apply the best practices, but what are they?

In my country, in the field of engineering, there is no specific training to help us develop our competencies as teachers. In some ways, this is good, because each of us is free to deliver our course in the way we prefer; but what about consistency and quality? How do we know what works, and what does not?

Background in Entrepreneurship

As an ex-owner of a technology company, a volunteer in my community, and a higher education teacher (with thirteen years experience), my uncertainty over what represents an appropriate methodology for teaching entrepreneurship led me to seek out a mentor. My mentor is Professor Dana Redford, a recognised authority on entrepreneurship education (Redford, 2013).

In discussions with my mentor, I realised that the key to

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developing an effective learning experience was to give learners more ownership of the learning process and respect their views, ideas, and opinions. The challenge was to do this in a fifteen-week semester: would it be possible to establish a connection with the group, by means of what I call 'emotional learning' (Elias, 1997 and Zins, 2004).

The Learning Experience

Pedagogic Approach – Emotional Learning

If students are the most valuable elements that we have in higher education institutions, we need to start with them. We need to treat them with respect, and give them the freedom to learn in a way that suits them.

Over the last two years, I have been developing a module in entrepreneurship and engineering called 'Do you want a TIP (Try to Improve your Potential)?'. This is part of the 'Summer Academy' programme at the University of Aveiro, Portugal. My audience was pre-higher education students, with a specific interest in mechanical engineering. The methodology included the following four steps:

1. The 'Business Model Canvas' was presented as the main tool and framework for the whole course.
2. Each student was then invited to use the Canvas as a framework for describing their own personal attributes, and to share these with the class.
3. Students were then encouraged to form teams, based on the personal attributes they had identified. These teams were asked to choose a specific area of mechanical engineering, and build an idea/product/service, taking into consideration all the necessary categories: technical knowledge, commercial, marketing, etc.
4. The teams prepared a public presentation on their ideas, making use of their combined skills and expertise.

Lessons Learned

- The course 'Do you want a TIP?' provided me with an interesting insight into how we can improve as teachers, in order to enhance our students' potential.
- Students selected step two as the most challenging part of the session. They found it difficult to identify their strengths and present these to the group. Sharing their personal skills and characteristics was very tough, but a rewarding exercise.
- Students reported that sharing their 'Personal Canvas' with the class helped them to identify the skills that would complement their own, and that they should seek out in others when forming their groups.



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Learning Aims and Outcomes

- Be able to understand how believing in and exploring one's own potential is relevant to a successful academic and professional career.
- Be aware of the importance of skills diversity, in terms of efficient team-building.

Expected Impact

- Students become more aware of the relevance of their potential.
- Students gain the perception that they play a key role in the success of their own academic path towards an engineering degree.

The Relevance of Coneect for Me as an Educator

The Coneect training played a crucial role in my mission as a teacher. The training:

- Provided me with strategies and approaches for teaching.
- Tested me, during several workshops.
- Reinforced that educators are responsible for efficient and effective teaching, and...
- ... that Entrepreneurship (in) Education is fundamental for the improvement of student potential.
- Enhanced my awareness of the relevance of humility and respect as important tools for knowledge and for being a real entrepreneur.



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I am currently a member of the Mechanical Engineering Department at the University of Aveiro and Assistant Lecturer at the Instituto Politecnico de Leira, Portugal. In addition, I am also a trainer for the HEInnovate initiative and I am passionate about developing effective collaborations between universities and industry, and social innovation. My current research and

teaching is centred on nanotechnology, innovation management and entrepreneurship (in) education. I hold a MSc degree from the Department of Electronics, Telecommunications and Informatics, University of Aveiro. I am currently studying for a PhD in support tools for the application of nanotechnology on the development of eco-efficient manufacturing processes.

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