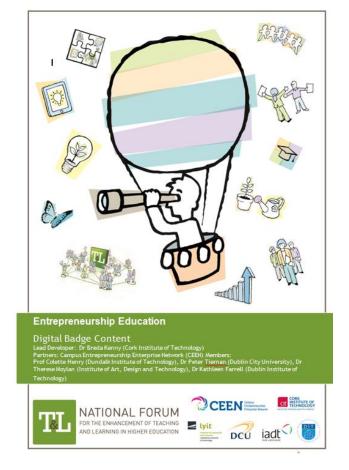# Implementing a Digital Badge in Entrepreneurship Education at Dundalk Institute of Technology

Background to the Badge and DkIT's entrepreneurial approach

The Irish National Forum for the Enhancement of Teaching and Learning in Higher Education has developed a Digital Badge in **Entrepreneurship Education** (Figure 1). The Badge's main purpose is the professional development of higher education teachers towards teaching entrepreneurship.

Figure 1: Cover of the Digital Badge document

Entrepreneurship Education

Digital Badge Content
Lead Developer: Dr Breda Kenny (Cork Institute of Technology)
Partners: Campus Entrepreneurship Enterprise Network (CEEN) Members:
Prof Colette Henry (Dundalk Institute of Technology), Dr Peter Tiernan (Dublin City University), Dr Therese Moylan (Institute of Art, Design and Technology), Dr Kathleen Farrell (Dublin Institute of Technology)

This badge is based on the 2016 **EntreComp** competence framework that understands entrepreneurship as a key competence that individuals and groups can apply across all spheres of life. EntreComp defines entrepreneurship as to "act upon opportunities and ideas and transforming them into value for others".[1]

The badge addresses the why, what and how of entrepreneurship education. The **learning units** for the badge provide insight into what entrepreneurship is about and what skills and competencies an entrepreneurship education curriculum should foster. It explores how a higher education teacher can develop these skills through certain pedagogical methods. The badge also deals with challenges in the design, delivery and assessment of entrepreneurship education.

Source: National Forum for the Enhancement of Teaching and Learning in Higher Education

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[1]   Quoted from Bacigalupo et al. (2016): EntreComp: The Entrepreneurship Competence Framework, p. 10.

The National Forum developed the Badge in partnership with five Irish higher education institutions (HEIs): Cork Institute of Technology as lead developer, together with members of the Irish Campus Entrepreneurship Enterprise Network (CEEN)[2] from Dundalk Institute of Technology (DkIT), Dun Laoghaire Institute of Art Design and Technology (IADT), Dublin Institute of Technology (DIT) and Dublin City University (DCU).[3]

DkIT is a higher education institution located in Dundalk on the Irish East Coast, half way between Dublin and Belfast. Founded in 1970, DkIT has approximately 5,000 students and more than 600 academic employees. It comprises four academic Schools: Business and Humanities, Engineering, Health and Science, as well as Informatics and Creative Arts. This case study focuses on how **Dundalk Institute of Technology** (DkIT) implements the Digital Badge.

1. The HEI fosters a digital culture as a means for innovation and entrepreneurship

In January 2017, DkIT was invited to partner on the Digital Badge project – mainly because of the Institute's expertise in entrepreneurship education and its success in spreading entrepreneurship across disciplines. DkIT is acknowledged as one of the first HEIs to introduce entrepreneurship into its curricula. Beginning in the early 1980s, 'entrepreneurship' was delivered by DkIT's academic staff mainly under the heading of modules such as *Innovation* Studies and *Enterprise Development*. Originally, these modules were confined to Business Studies students taking courses in Management and Marketing, but as they grew in popularity, so too did their appeal to non-business students. Gradually, entrepreneurship was introduced to Accounting and Cultural Studies students, and subsequently to students of other academic Schools within the Institute.

Over the years, DkIT has published a number of texts to support the teaching of entrepreneurship, including two case study books 'Irish Cases in Entrepreneurship' in association with INTRE (Ireland's Network of Teachers & Researchers in Entrepreneurship) (2007, edited by Colette Henry & Pauric McGowan), and The Ernst & Young Entrepreneur of the Year Case Series (2007, edited by Colette Henry). Colette Henry has also published a research monograph on Entrepreneurship Education & Training (2003), which was recently translated for the Chinese market.

DkIT is dedicated to promoting entrepreneurship and innovation throughout its campus. **Entrepreneurship education** has been part of DkIT's core strategy for several years. The majority of entrepreneurship programmes are developed within the Institute's Business School at under- and post-graduate level. By way of example, the Department of Business Studies runs a highly successful Master of Business Studies (MBS) specialising in Entrepreneurship and Marketing. This programme received two awards at the 2017 Irish Education Awards.

DkIT has an on-campus incubation centre, the **Regional Development Centre** (RDC), which supports entrepreneurial activity amongst the Institute's students and staff, and helps local start-ups and SMEs to develop their businesses. Since its inception in 1989, the RDC has supported over 315 applied research projects with industry; helped over 1,350 entrepreneurs through training and development programmes, and incubated more than 200 new enterprises.[4] The RDC provides practical support for students and employees seeking to commercialise an idea or start a new business. DkIT also teaches entrepreneurship modules in almost all of its disciplines and courses. In recent years, DkIT has made

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[2]   For CEEN see http://www.ceen.ie/ceen-about-us.

[3]   See https://www.teachingandlearning.ie/resource-hub/professional-development/open-access-professional-development-courses/entrepreneurship-education/#1507083043909-5adac7cc-55b6.

[4]   See https://www.dkit.ie/innovation-and-business/regional-development-centre.html.

specific efforts to expand entrepreneurship into science, technology, engineering and mathematics areas, resulting in an award-winning BSc (Honours) Degree in Engineering Entrepreneurship - a joint initiative between the School of Engineering, School of Business & Humanities and the RDC.

2. The digital infrastructure is planned, managed and continuously improved to align with the vision, mission and strategy of the innovative HEI

The principles of the Digital Badge are reflected in DkIT's **strategic plan** 2017 – 2019. This plan has as its core focus the development of "employable skills" and "connected learning". Embedded in this focus is a commitment to implementing change and enhancing the learner experience. Ongoing development of the Institute's IT infrastructure and the promotion of digital learning tools are at the heart of this focus. The promotion of the Digital Badge is also implied within one of the Institute's core values: (to promote) excellence in learning and teaching; and within its strategic goal number 3: (to develop) new modes of flexible delivery.

DkIT launched the Badge in October 2017 with a facilitator workshop at Cork Institute of Technology. The workshop was aimed at those interested in adopting the Badge for delivery within their own Institution. The **EMerGE Research Group** in the Department of Business Studies manages the badge and promotes it widely within the Institute. The badge has also been promoted via the Institute for Small Business & Entrepreneurship (ISBE's) website[5] and through DkIT's Centre for Excellence in Learning and Teaching. Today, the Badge is hosted on the National Forum's website, and DkIT's lecturers can access the material from that site.

As the Entrepreneurship Education Digital Badge becomes further developed, with potentially different levels and foci introduced, it is likely that Badge content will need to be streamlined to allow for complete online delivery and assessment. At that point, DkIT may consider making it available as a stand-alone course on their own virtual learning platform (VLE) – moodle. Such development would make it more readily accessible to staff, and may well encourage faster take up. Currently, the National Forum is the central host for all Digital Badge material, so DkIT directs staff to its website where they can download all material. The Badge and its content are openly available to all of the Universities and Institutes of Technology. Hence, there is an **ethos of sharing and exchanging** of knowledge and expertise.

3. The HEI is committed to digital teaching, learning and assessment practices

DkIT aims the Digital Badge at those teachers who are new to the discipline of entrepreneurship and have not taught it before, or those who are teaching entrepreneurship to non-business students for the first time. It is designed as an introductory "**Entrepreneurship Train the Trainer**" programme. As DkIT is fortunate to have an experienced entrepreneurship education team across its four faculties, there has been no need to train new staff just yet. However, the EMeRGe Research Group plans to formally offer the Badge across all four faculties throughout 2019, and will be holding an introductory workshop to kick-start the process. "On an individual institute basis, the number of staff being trained in any of the Badges will probably be small", says Entrepreneurship Professor Colette Henry from DkIT. "It is in the national aggregate number over a period of several years where we are more likely to see the the benefits."

The Entrepreneurship Digital Badge develops teachers' knowledge, skills and competencies in terms of defining entrepreneurship and recognising its importance both to individuals and the economy. It seeks

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[5]   See https://isbe.org.uk/entrepreneurship-education-digital-badge-development/.

to develop an entrepreneurial mind-set and apply relevant pedagogical techniques, including digital pedagogies.

The Digital Badge encourages teachers to reflect on various pedagogical and assessment methods that are appropriate to entrepreneurship and the discipline area in which they are teaching. Various **digital pedagogical and assessment methods** are also outlined within the Badge content, such as the use of electronic quizzes, games and video clips; interactive chat rooms; skype guest lectures; electronic submissions and e-portfolio assessments.

All of the Digital Badges have been designed to prompt personal reflection on one's own teaching practice, and to draw on one's own experience in teaching entrepreneurship. DkIT considers National Forum workshops as an excellent way to encourage exchange of experiences and disseminating learning.

As the Badge was only finalised in October 2017, it is too early to say how it has impacted on teaching practice. However, in the pilot workshops organised by the National Forum, the feedback and anticipated impact reported by participants was highly positive. Teaching staff are often expected to introduce their particular specialism into new discipline areas without support. The Digital Badge provides valuable practical support with regard to introducing entrepreneurship into new areas. A visible benefit so far is that more teaching staff are trained to deliver entrepreneurship modules, and that more experienced entrepreneurship teachers are trained to deliver entrepreneurship in new discipline areas.

Although it is still early days, the Entrepreneurship Badge development team at DkIT – Colette Henry, Angela Hamouda and Colman Ledwith – recognises that there is potential for a number of new Badges to be developed within the area of Entrepreneurship, each with a different focus. For example, one Badge could focus exclusively on digital assessment tools; another could focus on the introduction of entrepreneurship to niche or professional discipline areas, while another could be aimed exclusively at international students. After all, when it comes to Entrepreneurship Education, '*one size does not fit all*.'

Source

Contact

Professor Colette Henry is the 2017 Sten K Johnson European Entrepreneurship Education Laureate, and has published widely on the topic of Entrepreneurship Education and Women's Entrepreneurship. She is Head of Department of Business Studies at Dundalk Institute of Technology, Ireland, and Director of the Institute's EMeRGe Research Group. Contact: Colette.henry@dkit.ie.

Key link

National Forum for the Enhancement of Teaching and Learning in Higher Education: Entrepreneurship Education, https://www.teachingandlearning.ie/resource-hub/professional-development/open-access-professional-development-courses/entrepreneurship-education/#1507083043909-5adac7cc-55b6.