

A Toolkit for Enhancing Doctoral Enterprise Education – Mapping and Aligning Curricular and Extra-Curricular Resources

University of Edinburgh

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Project report

Mapping and Aligning Curricular and Extra-Curricular Doctoral Enterprise Education

Executive Summary

This project aims to map out and align curricular and extracurricular enterprise/entrepreneurship education for doctoral students. We conceptualise the doctoral enterprise education system consisting of two distinctive forms - *credit-bearing courses as part of the curriculum* and *extra-curricular activities and events* (e.g. bespoke training, business competitions, mentoring, business advice, incubators, accelerators). This report presents an overview of the existing curricular courses and extra-curricular resources available to doctoral/PhD students at the University of Edinburgh as a case study and identifies aspirations and challenges for PhD startup processes based on survey data and individual interviews.

Key Lessons

There is a growing demand for a flexible enterprise education system at the PhD level and a supportive entrepreneurial ecosystem at the University of Edinburgh.

- In order to make an inclusive, effective and sustainable enterprise education system, we need to combine the strengths of both curricular and extra-curricular learning by aligning key stakeholders.
- A clear roadmap of enterprise education, resources and support is needed, informing and updating enterprise learning opportunities available for PhD students. The diverse needs of PhD students have to be taken into consideration e.g. those with families, and caring responsibilities.
- Enterprise education needs to satisfy the specific needs of PhD programmes and students. PhD students from different disciplinary backgrounds can also learn enterprise skills together – the university can help build inclusive and diverse PhD enterprise learning communities, across curricular and extra-curricular spaces. A

short and flexible format is preferred by doctoral students. A general introductory enterprise training, as well as specialist advice and mentoring, is essential.

- The university needs to support and ensure sustainable entrepreneurial research culture. For instance, having entrepreneurs in residence and PhD enterprise mentors within Schools, and raising awareness of PhD supervisors about entrepreneurship processes would help support such a culture.
- Enterprise education and support can be better linked to career development and alumni network support. The entrepreneurial journey would encompass after graduation. Networks with alumni will help inspire current students, also.

Recommendations

- **Enterprise educators** need to seek models of enterprise education for PhD students with a combined emphasis on both curricular and extracurricular resources. Specifically, a short and optional course on entrepreneurship with a focus on practical components and case studies may best suit the interest of most students.
- **Doctoral students**, who are under various types of pressure launching and running a startup alongside research, need to manage time and competing expectations. To gain practical knowledge to start up and run a business, actively engaging in enterprise-related extracurricular activities will help. These activities, as well as enterprise courses, are considered very helpful according to past participants and students.
- **University communities and wider stakeholders** can help build an inclusive PhD entrepreneurial ecosystem where different stakeholders, including PhD students, supervisors, Schools, and startup communities can work together. This will allow more PhD startups, which add creative value to both the economy and society.

Toolkit overview:

The Project Report is accompanied by

- a) Mapping Curricular and Extra-Curricular Doctoral Enterprise Education: Why Case Studies Matter - PhD Students' Entrepreneurial Journeys Video**
- b) ETC Toolkit Case Example – Examples of Enterprise Courses for PhD Students**

The project was carried out as a joint work between:

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and

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