

The Wilson Review and University Enterprise Strategy

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The Wilson Review

We also want our universities to look again at how they work with business across their teaching and research activities, to promote better teaching, employer sponsorship, innovation and enterprise. We have asked Professor Sir Tim Wilson, former Vice Chancellor of the University of Hertfordshire, to undertake a review into how we make the UK the best place in the world for university–industry collaboration.

White Paper: Putting Students at the heart of higher education. paragraph 13, June 2011

Wilson reported in February 2012

A Review of Business–University Collaboration

The Wilson Review

General analysis of whole of industry - university relationships

- Research collaboration
- IP issues, protection, exploitation and translational research
- **Graduate employability and skills**
- Role of universities in promoting local economic growth

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Substantive chapter titles

- **Skills and Knowledge for Employment**
- Business-University Collaboration in Research and Innovation
- Graduate recruitment: Interface between Students, Universities and Employers
- Universities in their local communities: Enabling Economic Growth

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The CBI Education and Skills Survey 2011⁴⁶ found that 82 percent of employers surveyed rated employability skills as the highest graduate recruitment factor. Self-management, teamwork, problem solving, communication skills, application of IT, application of numeracy all featured consistently in employer needs. Nevertheless, whilst employability skills rated the highest priority, specific degree subject was the second highest factor, reported by 68 percent of employers in the survey.

Skills development and the subject studied are not independent; students develop a 'mindset' relating to the subject and employability profiles of graduates are related to the degree studied.⁴⁷

Wilson review recommendations

- CIHE and NACUE to be strengthened and recognised
- Internships for all (UG and PG)
- All PDRAs to have work experience outside academia every 3 years
- Sandwich degrees encouraged
- Foundation degrees reaffirmed as qualifications in their own right
- TSB to work more closely with universities – open innovation
- KTP programme to be expanded
- Sector Skills Council kite-marking welcomed

Wilson review recommendations

Reflective recommendation 5, paragraph 4.3.2

Universities should reflect on the opportunities that are provided for students to develop employability skills through the formal learning methodologies used within the university and ensure that students are able to articulate the skills that they have developed through their learning experiences. It is for universities to ensure that their staff have the appropriate skills to support students in this process.

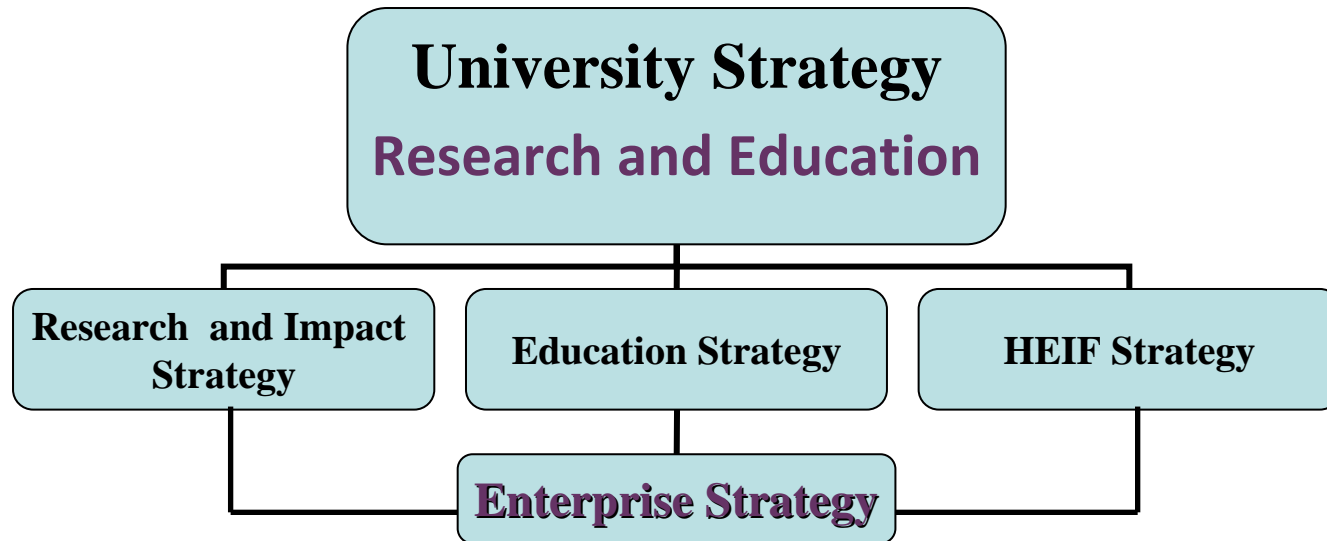
Reflective recommendation 6, paragraph 4.3.3

Universities should reflect on the strategies they use to ensure that students have the opportunity to develop enterprise skills both through the formal curriculum and through optional study or practice, and reflect on the integration of enterprise education in the professional development programmes for academic staff.

The Wilson Review – interconnected themes

- **Relevance of programmes to the world of employment**
- **Skills development and awareness**
- **Importance of work experience**

Durham University Enterprise Strategy



6 Pillars* of Knowledge Exchange

Business Engagement

Strategic Relationships with Selected Companies

Research Commercialisation (Technology Transfer)

Enhancing Societal Impact of Research and Teaching

Enterprise and Promotion of Entrepreneurial Behaviour

Community Social Engagement and Outreach

*Durham University HEIF Strategy 2011-2015

Enterprise and Entrepreneurship Education

Three strands

1. Enterprise activity focused on employability and preparation for self-employment, including the employment of others.
2. Rigorous academic courses in entrepreneurship
- 3. Development of entrepreneurial behaviour embedded within mainstream academic programmes**

Enterprise activity focused on employability

Enterprise Coordinator in the Careers Centre

- Workshops focused on awareness raising and developing entrepreneurial skills for graduate employment
- Working with and through student societies (e.g. Entrepreneurs Durham and SIFE)
- Specialist provision based on relationships with internal and external providers

Placement Officer

- placement of interns in local and national companies

plus Durham Award

Preparation for self-employment

- Careers Centre provides support for graduate start-up businesses via a structured referral process
- Small scale Proof of Concept “*Kick-Start*” fund
- Entrepreneurship activities in colleges or departments (e.g. Dragon’s Den Competitions –colleges vv Durham University Business School)
- Blueprint: North East Universities’ Business Planning Competition
 - Workshops, mentoring, network building
 - University and regional levels



Rigorous academic courses in entrepreneurship

Part-time Executive MA in Enterprise Management (DUBS) “New Venture Creation” module

MSc in Management (Entrepreneurship)

Module in “Entrepreneurship”

Module in “The Entrepreneurial Process”

Module in “New Business Creation”

Open Level 1 module in Entrepreneurship (DUBS)

run in parallel at Queens (100) and Durham (50) campuses

Open Level 2 module in Entrepreneurship (from Oct 2014)

Doctoral Training Centres.

- Module to postgraduate research students.

Postgraduate Certificate in Academic Practice - component on teaching and practice of enterprise

Entrepreneurial behaviour embedded in mainstream academic programmes

Annual internal seedcorn competition

- £10,000 distributed on a competitive basis.
- 1 year projects to embed enterprise in curriculum
- Average award £3,000
- Requirement to present outcomes at a lunch time seminar after project end

Physics Team Project (Level 3)

(Running for 22 years.)

Teams of 6 students work on genuine technical problems set by external client (e.g. Cottam Brush Ltd, Durham County Cricket Club, Pipeline Integrity International) [No charge to sponsor.]

4 afternoons per week for 9 weeks

Formal weekly meetings chaired and minuted in rotation. Minute book used in summative assessment. Staff member attends.

Team meets sponsor and interacts with sponsor during project

Team responsible for management and task assignment

Team writes single collective report which is assessed as a single item

Team makes formal presentation to sponsor at end of project

Team vote bonus marks to member(s) who contribute outstandingly

Client contribution to marking

Biological Sciences Enterprise Module (Level 3)

(Running for a decade)

Teams of 6 students required to develop business plan for a bioscience spin-off company

Technology just plausible (but usually not real-world)

Assess market potential

Assess market niche and barrier to entry

Assemble commercial team

Develop business plan and write collectively

Present to (fictional) investor

Earth Sciences in Society (Level 4)

Teams of 6 students work on problem set by external client (e.g. oil companies, Durham Cathedral, Durham County Council)

Initial individual skills audit

Team works on brief for a 9 week term

Team produces a jointly written 5,000 word report

Team makes presentation of results to client

Individuals required to write and evidence based, personal reflection on value added, issue resolution

Clients contribute to assessment

Provides window onto best students for client companies

BP have sponsored module for next 3 years (including provision of hard hats!)

Earth Sciences in Society: Learning Outcomes

- Gained experience in working with external organizations
- Conducted a client-led project
- Received training in project management, teamwork, communication and outreach
- Recognized the importance of self-evaluation, personal and continued professional development

Meeting with client	9 hours
Tutorials with mentor	10 hours
Key skills workshops	15 hours
Presentation day	6 hours
Project work	160 hours

Government and International Affairs – politics in the real world (Level 3)

Writing to persuade agency to take a particular course of action (i.e. not writing as for academic debate)

Group project to write collectively a bid to an agency such as DfID or an NGO

General theme of “corruption”

Videos illustrating general policy of organisation

Members of organisation come to explain what they are looking for in bids

- (1) boosts students’ motivation by increasing the “this feels real” factor,**
- (2) proves students with advice from people within the sector**
- (3) helps students see the bigger picture of how research on political issues matters for many organisations.**

Generic themes

- Involvement of external partners
- Student maturity
- Team work structure
- Collective assessment

How do these map into Computing Science?

