Professional Higher Education

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Presentation Overview

- 1. National Context
 - Mission of Higher Education in Ireland Recent HE system developments
- 2. Overview of Dublin Institute of Technology (DIT)
- 3. Graduate attributes and labour market requirements
- 4. Key features of professional higher education in DIT
- 5. Best practice and issues for consideration



1. National context: mission of higher education

'A new relationship between the state and the 39 publicly funded higher education institutes will be implemented.

This will allow the system to respond in a more coherent way to national priorities set down by the government and provide graduates with the skills and qualifications that are essential for Ireland's social and economic well-being'. (Minister for Education 2013)



National Strategy for Higher Education: mission & objectives

Mission

- Excellent teaching and learning
- Quality in research and knowledge transfer
- Effective engagement between higher education and society
 (Department of Education and Skills 2011)

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Additional Key Objectives

- Increased participation, equality of access and lifelong learning
- Quality of student experience
- Enhanced internationalisation



National context: recent developments in HE system – Technological University

- New addition to binary system
- Mission a systematic focus on the preparation of graduates for complex professional roles in a changing technological world
- Some of the criteria: (HEA 2012)
 - Programmes from level 5 to 8 EQF (equivalent)
 - Applied problem-oriented research and discovery
 - Intensive links with business, enterprise and professions
 - 30% lifelong learning students
 - Staff role: teaching, research, engagement & administration
 - Curricula: Generic attributes for employability and citizenship
 - Leadership: strong academic & professional experience



National context: recent developments in HE system – regional clusters

- 5 Regional clusters with a mix of Universities, Technological universities and Institutes of Technology within a cluster
- Key Objectives of Regional clustering
 - Shared co-ordinated academic programme planning and delivery
 - Co-ordinated approach to transfer and progression
 - Co-ordinated approach to enterprise, community and regional development
 - Shared services and facilities
 - Co-ordinated approach to the presentation and promotion of the region internationally (HEA 2013)



National context: changes

• Role of HE:

Driving economic and social development; repositories of cultural and intellectual wealth; pursuit of knowledge is its own reward; holistic development of the individual (HEA 2013)

- Evidence of familiar lifelong learning themes: 'economic imperatives created by global competition, technological change and the challenge of the knowledge economy, individual responsibility and self-improvement, employability, flexibility of institutions and individuals, social inclusion and citizenship' (Osborne 2003)
- Impact of the economic crisis and role of higher education



2. Overview of Dublin Institute of Technology

- Mission: academic quality of a traditional university with career-focussed learning, discovery and the application of knowledge.
- Higher degree awarding authority

- Offers a range of programme from EQF-equivalent levels 5-8 (Higher Cert, Degree, Masters, Doctoral degree)
- A colleges: Arts and Tourism; Business; Engineering and Built Environment; Sciences and Health
- 30% of students through non-standard entry: mature students, further education, access, disability <u>www.accesscollege.ie</u>
- Competitive entry with entry across the spectrum of academic attainment
- Together with two other IoTs in Dublin will seek Technological University status: 23,778 students; 2,433 staff; Income 250m; Research income: 20m.



3. Graduate Attributes and Labour Market Requirements

- Balance between discipline-specific and generic graduate recruitment: only 40% graduate employers sought graduates with specific degrees
- Employers require key, transferable skills. Main shortfall identified by employers is communication skills: 57% (Employer survey 2011 www.gradireland.com)
- Educating students for international employment
- Employers group and multinational companies make a significant contribution to public discourse on education and influence education policy



Graduate Attributes

- Graduate attributes working group (DIT)
- Concept of 5 Es
- Enquiry: critical thinking; problem-solving; questioning; curiosity; analytical
- Experience: disciplinary knowledge; experiential learning; self-managers; ethical; leaders; team players
- Enterprise: creative innovators; motivated selfstarters; industry experience; decision-makers; resilient
- Efficacy: excellent communication skills; digitally literate
- Engaged: social responsibility; civic-minded; questioning; reflective practitioners; leaders



4. Key features of professional higher education to produce graduates with such attributes

- Relationship between programme and industry/professional bodies
- Curriculum
- Approaches to learning, teaching and assessment
- Research-informed teaching and learning
- Staff training and development and staff promotion



4.1 Programme relationships with employers and professional bodies: Example College of Sciences and Health

- Professions involved in programme development and review
- Programme accreditation by professional bodies
- External examiners
- Acquiring industry and professional certification of modules
- Work placement and clinical placements
- Real-world projects in collaboration with employers
- Showcase of projects for industry & graduate recruitment
- Industry provision of specialist facilities or equipment
- Guest lecturers and project supervision
- Industry or employer-sponsorship of student prize
- Deliver CPD modules for professionals
- Employer liaison committee
- Staff representation on professional bodies



4.2 Curriculum

- Explicit programme aims, structure, module learning outcomes and learning, teaching and assessment strategies publicly available <u>www.dit.ie/catalogue/</u>
- Discipline-knowledge modules and generic-skills modules: communications; professional practice; digital literacies; critical analysis = core modules
- Cross-curricular embedding of student induction and generic skills
- Move towards broad focus first year programmes
- Work placement on approx. 50% of programmes
- Adapting the curriculum to create awareness of and draw on student diversity <u>http://elearning-</u> <u>events.dit.ie/Diversity/</u>
- LEAD module (Lead, Engage, Achieve, Develop) from student extra-curricular and co-curricular achievement
- Programme-embedded careers education





Dacre Pool & Sewell (2007)



Programme-embedded careers education: career development learning

- Self-awareness of skills, aptitudes, personality and interests
- Decision-making techniques and creating a personal career plan
- Research into occupational profiles and opportunities
- Effective written and verbal communications and promotion, e.g. CVs, application forms, interviews and presentations
- Network effectively
- Ability to critically evaluate personal progress and adapt a strategic approach to handling changing circumstances
- Enhance their employability and reach their career potential

www.dit.ie/careers/



4.3 Approaches to teaching, learning and assessment: student-centred

- Importance of encorporating student transition and induction, quality student experience and retention into programme approach (Thomas 2012)
- Problem-based learning <u>http://www.dit.ie/physics/research/physicseducationresea</u> <u>rchgroup/</u>
- Case studies, in-class discussion and role play
- Team-based projects and presentations
- Reflective practices and journals
- Virtual learning environments and lecture capture
- Classroom response systems (clickers)
- Assessment of participation/attendance
- Community-based learning



Students Learning With Communities





- Community-based learning and research
- Staff/students collaborate with underserved community partners for mutual learning
- Develop real-life, course-based projects within a module
- 2011/12: 1,300 students, 100+ community partners on 46 DIT programmes
- Example: Sports for Girls Leisure Management programme
- Communication skills, understanding of discipline in society and self-reflection







Community-based Learning: Nutrition & Dietetics with Dublin City Council



- Professional Practice module, year 2
- Competency skills for placements
- With group of older adults from disadvantaged area
- Describe dietary intake, do nutritional assessment, develop educational resources/presentation, ethics
- Previously delivered through role-play, case studies
- Collaboration with Dublin City Council





4.4 Research-informed teaching and learning: some examples

- 2 Research institutes, 19 research centres and 4 overarching research pillars
- Research-active staff teaching undergraduate students, including first years
- Reduction of teaching hours for research-active staff
- Annual Research and Innovation summer school
- Undergraduate Research Opportunity Programme
- Undergraduate teaching award



4.5 Staff training and development and staff promotion

- Learning, teaching and technology centre
- New staff must have a teaching qualification: Postgraduate diploma in learning and teaching
- Annual teaching and learning theme with workshops and seminars
- Teaching fellowships
- Academic promotion criteria include: research and scholarly activity; teaching quality and development; programme development; advising and supervising students; engagement with professional bodies, industry, community.



5. Key Learning

- Separation of three strands of HE mission
- Engagement as optional add-on
- Assumption of student awareness of skills
- Transferable skills as separate activity
- Separation of learning and student experience
- Curriculum and approaches based on 10% HE participation with 60% HE participation

- Integration of 3 strands
- Embedded Engagement
- Explicit and accessible learning outcomes
- Cross-curricular integration of transferable skills and careers education
- Integration of student and academic experience
- Curriculum and approaches adapted to student diversity

Practices to avoid

Best Practice



Broader Issues for consideration

- Role of higher education in providing re-skilling for unemployed/skills shortages
- Role of foundation programmes in widening participation for mature learners and SED students
- Reform of learning outcomes, curriculum content and learning and teaching approaches in HE not replicated in further education and 2nd level, with significant transfer and transition difficulties for students: HE as education system leader?

