Creating a Sustainable Environment for Knowledge Transfer in Undergraduate and Postgraduate Education and Research

Siobhán Harkin – SIF Project Manager, WIT

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A SIF Funded Project on Knowledge Transfer in the Curriculum
Presentation Overview

1. Project concept and scope
2. Defining and mapping Knowledge Transfer
3. Knowledge Transfer in the Curriculum
4. Case Studies
5. Next steps for the Project
Knowledge Transfer in the Curriculum – The Concept

- **Two-way** interaction between the institute and the world beyond;
- Potential to build knowledge transfer competencies **into the learning experience** itself;
- Students acquire the capacity to realize the value of their learning in the world of work and in broader society
KTC Project Focus

- **Focus**: What students can do with the teaching, learning and research components of their programmes;
- **Hence knowledge transfer IN THE curriculum**;
- **Focus on the theory and practice of knowledge transfer in the curriculum (at both undergraduate and post-graduate levels)**.
- **Develop and facilitate structure(s) to manage the interfaces between workplaces and academia**;
KTC Project Summary

- **4 key strands:**
- **Governance & Management Structures**
  - Build relationships across academic and workplace partners
- **Scoping assessment & design phase**
  - Baseline of practice/expertise already established in the institutes. Understanding of needs
- **Implementing structure and curriculum (undergraduate activities)**
  - Staff training in the delivery of theory and practice based components
  - Scoping phase will define this strand
- **Doctoral Programme Development**
  - Offer doctorates that are work and practice based thus facilitating greater access for life long learners
  - Develop a framework that can be shared/used elsewhere
Project Details

Duration: 30 months; Start date 01/09/08
Partners: WIT as main implementer
- CIT
- UCC
- Chamber of Commerce - Waterford
- IBEC
- Waterford Chamber of Commerce
- University of Kuopio
Scoping Phase

- What is Knowledge Transfer in this context – use of appropriate language
- Pilot/broad-stroke initiatives?
- Specific modules/integration?
- Which tools (many already in use in institutions – can there be a sharing within/without institutions)?
- Work placements – effectiveness and integration?
- Ensuring added value – not duplication
- Quality
CALVIN AND HOBBES

THE MORE YOU KNOW, THE HARDER IT IS TO TAKE DECISIVE ACTION.

ONCE YOU BECOME INFORMED, YOU START SEEING COMPLEXITIES AND SHADES OF GRAY.

YOU REALIZE THAT NOTHING IS AS CLEAR AND SIMPLE AS IT FIRST APPEARS. ULTIMATELY, KNOWLEDGE IS PARALYZING.

BEING A MAN OF ACTION I CAN'T AFFORD TO TAKE THAT RISK.

YOU'RE IGNORANT BUT AT LEAST YOU ACT ON IT.
What is “Knowledge Transfer” in this context?

- Literature does not proffer a definitive definition
- Transfer of “employability skills” (UK, Mantz & Yorke)
- Students as Life-long Learners
- Two-way interaction (Bebbington)
- Possessing the capacity to use knowledge in external settings (University of Melbourne)
University of Melbourne – “Growing Esteem”

“Melbourne’s knowledge transfer develops intellectual capital through a two-way mutually beneficial interaction between the university and non-academic sectors with direct links to teaching and learning and research, and informed by social and global issues.

The University of Melbourne’s knowledge transfer is anchored in its intellectual capital, history and tradition, and a reputation for world-class expertise”
Mapping Knowledge Transfer
Existing Structures/Activities - WIT

Knowledge Transfer Activities

- Academic Council
- Centre for Entrepreneurship
- Graduate Profile – Strategic Plan
- Modularisation
- T&L Working Group
- Tech Transfer
- Technologies
- Careers Service
- Work placements
- Industrial Liaison
- Curriculum Development
KT in the Curriculum

Embedded in teaching and learning experiences in many ways/at many levels within the curriculum:

- Whole/core Curriculum
- Entire course/programme
- Within-subject
- Module
- Supplementary
How? – Course/Subject Level

- Inclusion of core knowledge transfer capacities and its context;
- Problem- and project-based approaches in teaching and learning;
- Case studies/field trips/experiential learning;
- Work placements or internships;
- Student exchange/study abroad;
- Community-based projects;
- Applied research projects;
How? Module/Course Level?

- Systematic development of knowledge transfer skills
- eg WIT Business School Flexible Semester:
  - Study Abroad
  - College & Community
  - Work Placement
  - New Venture Initiative
KT - Supplementary level

- Not-for-credit
- Generic skills – in the broadest sense
- Linking to Careers Service
- Preparation for 4th level career pathway
- College/community involvement
Specific modules/institution-wide approach?

- Broad consensus in literature for an “embedded” approach

Institution-Wide:
- Alverno College – Ability-based education
- University of Melbourne – Knowledge transfer in the Curriculum
- University of Luton – Institutional approach to employability
Specific modules/institution-wide approach?

“It is the adoption of innovative teaching methodologies which blend skills provision into the academic content which is perhaps the most exciting and likely to have the greatest long-term impact on teaching and learning”

Fallows and Stevens, 2000, University of Luton
A Framework Approach– Sheffield Hallam University

- Progressive development of autonomy.
- Skills development (intellectual; subject; professional; Key Skills).
- Personal Development Planning (PDP).
- Inclusion of activities reflecting external environments.
- Reflection on the use of knowledge and skills between contexts.
- The development of career management skills.
- Engagement with learning from work (LfW).

- Additional features that may be appropriate, depending on the nature of the course
- Preparation for professions.
- Engagement with enterprise.
Knowledge Transfer Skills and a Modular Curriculum - Challenges

- Accommodating “slow learning” (Claxton, 1998) eg
  - Complex problems
  - Critical thinking
  - Interpersonal/team building
- Need to ensure coherence, as experienced by the student
WIT Case Studies

- The Transferable Skills Project
- Ascon Rohcon in Partnership with WIT
- Business School – Flexible Semester
- Generic Skills Training for Postgraduate Researchers
- Post Graduate Diploma in Enterprise Development
Synergies With Other SIF Activities

- NAIRTL
- REAP
- IOTI – Flexible Learning
- IOTI – Research
Going Forward - Next Steps for the Project

Complete scoping through:

- International Literature review
- Consultation across Partners through meetings/ workshops in Schools/Departments
- Questionnaires to Course/module leaders to assess practices and needs
- Understanding of current work related/placement practices and where project can add value

Outputs:

- Detailed operational plan
- Detailed training plan
CONTACTS

- Ms. Siobhán Harkin – SIF Project Manager, email: sharkin@wit.ie
- Dr. Mary Holden – Module Development Leader, email: mtholden@wit.ie
- Dr. Felicity Kelliher – Doctoral Development Leader, School of Business, email: fkelliher@wit.ie
- Mr. Liam Doyle – Doctoral Development Leader, School of Science, email: ldoyle@wit.ie
- Ms. Paula Power – SIF Coordinator, email: pppower@wit.ie