A Work-Integrated Learning Library

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5 November 2019
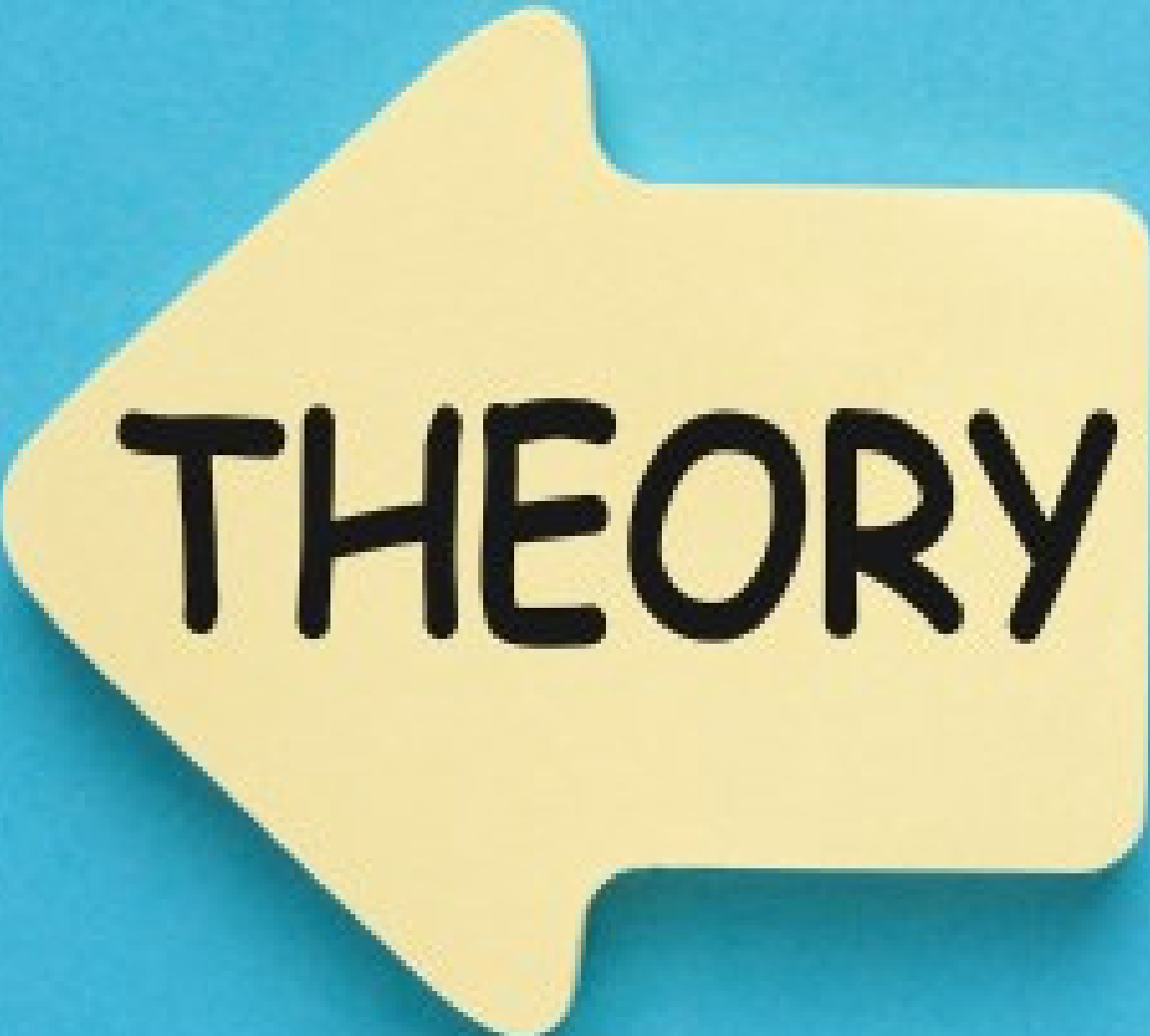
Professional Education
Research Institute

Cape Peninsula
University of Technology

Overview

1. The Work-integrated Learning Philosophy;

2. The problem…

3. Lessons from world-class work-integrated learning libraries;

University/Work (Theory/Practice) Divide

1) Devaluating of practice by academics, and:

2) Assumptions that vocational, technical and professional education 'don't belong in a university';

3) An undervaluing of 'book learning' (aka theory) by practitioners;

4) Assumptions that universities are not teaching 'the right stuff'…

The only thing that you absolutely have to know, is the location of the library.
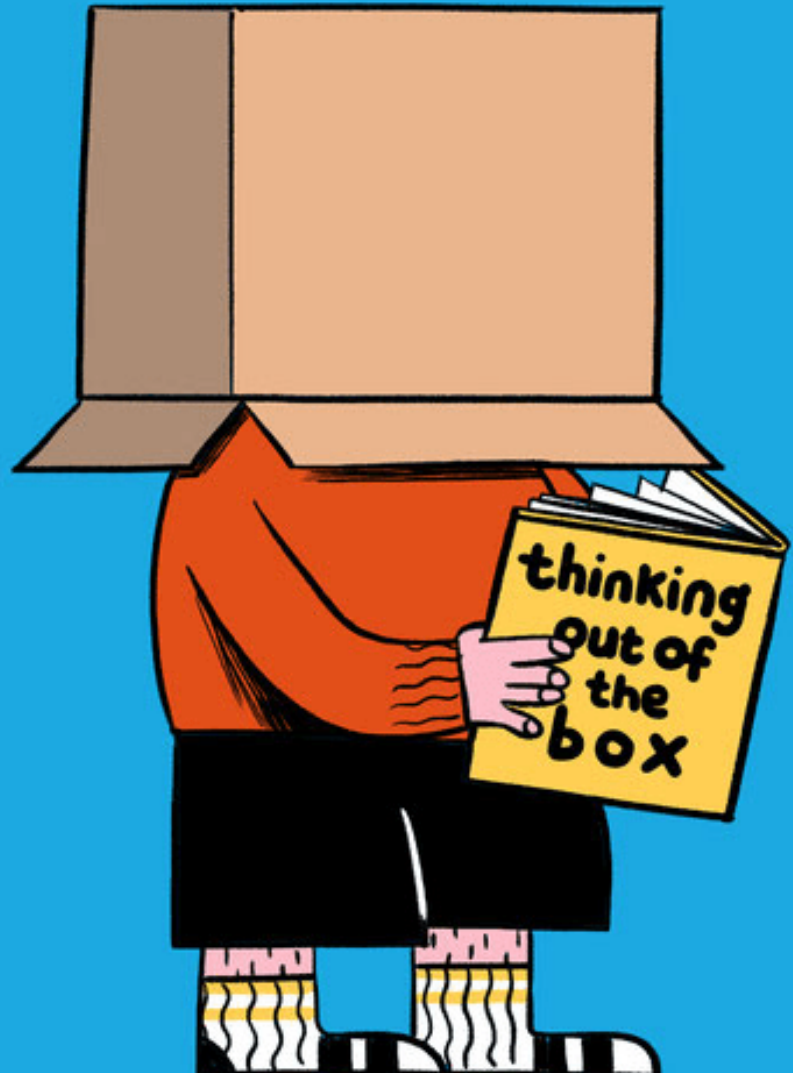—Albert Einstein

The WIL Philosophy

Getting Theory and Practice (Academic and Industry) to talk to one another – to unlock the potential of theory – and to bring practice into academic settings. This is what can happen if you do this:
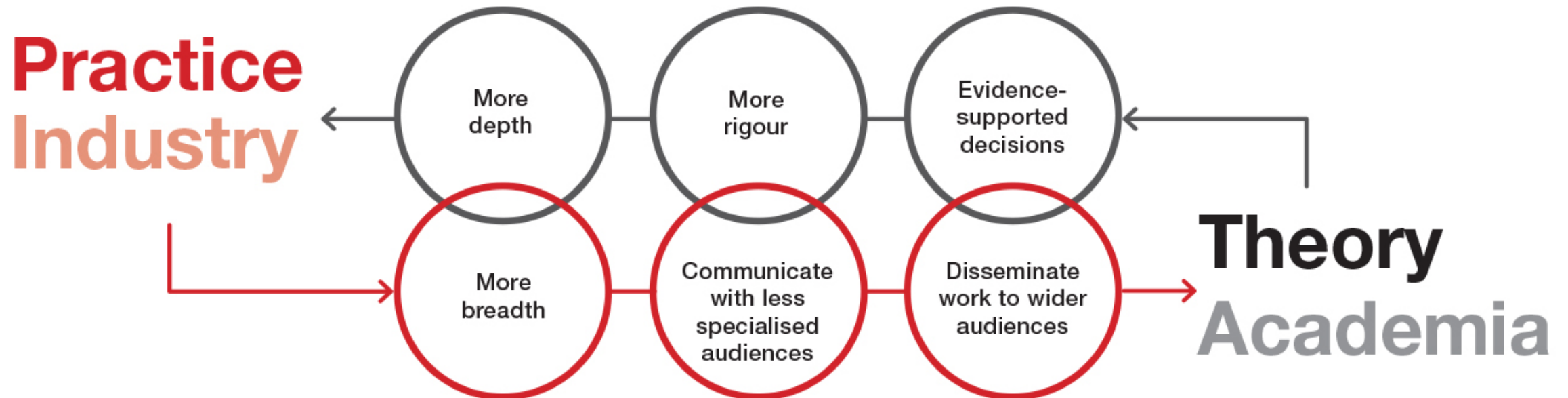
The problem is not that what universities teach is irrelevant, the problem is it's stuck in a box and students can't apply it…

University 'box'

Workplace 'box'

So how do we transfer from the university box to the workplace box?

**This is the real issue – it's much more about transfer than about relevance...**

University 'box'

?

Workplace 'box'

Transfer

Types of transfer

#	Level	Type of knowledge in transfer
1	Nonspecific transfer	Theory → More theory This is typical university learning...
2	Application transfer	Theoretical knowledge → Practice This is what universities try to do with work placements...
3	Context transfer	Knowledge in context 1 → context 2 This is what universities generally fail to do...
4	Near transfer (direct application)	Basic theory → simple practice The closer the theory and practice are, the easier to apply
5	Far transfer (indirect application)	Complex Theory → complex practice This is much more difficult to achieve...
6	Reflective transfer	Practice → Theory This is known as reflective practice or critical reflection

Pedagogies that improve learning transfer

	Pedagogies	Example
1	Scaffolding	Examples and analogies from practice
2	Schema Building and concept mapping	Consolidating concepts and linking to practice
3	Problem solving, case studies/scenarios, etc.	Near transfer forms of application
4	Reflection/reflection practice	Reflective journals, critical thinking skills
5	Adjusting the variables (time, modality, context, social)	Layered approach to far transfer…
6	Iterative learning (towards improvement)	Practice and re-doing…
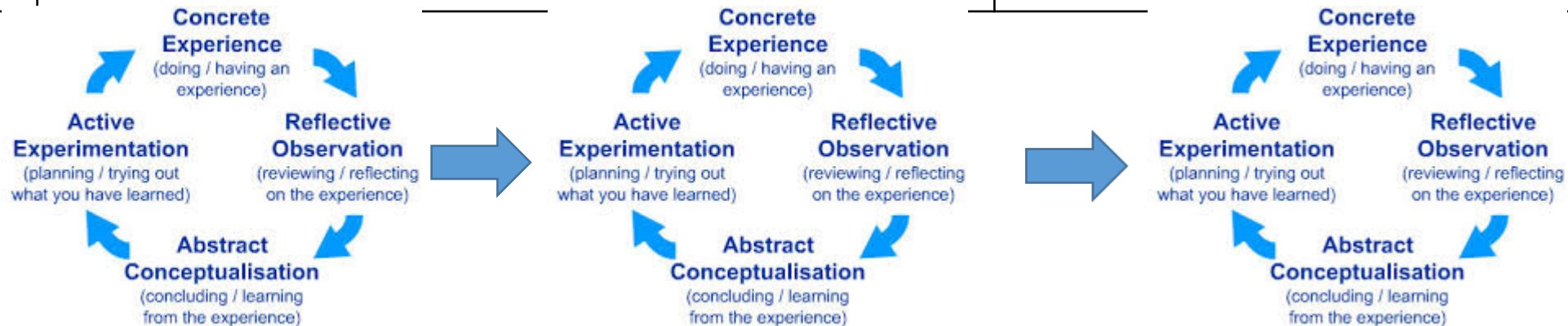
Can libraries enhance students' employability?

QS WORLD UNIVERSITY RANKINGS | GRADUATE EMPLOYABILITY RANKINGS | 2019

Quacquarelli Symonds (QS). Previously known as
Times Higher Education–QS World University Rankings

Question: how does your library support students employability?

I asked the above question of five universities of technology (or equivalents) in the top list of the rankings (April – July 2019) – I have (or have had) research projects around work-integrated learning with all 5 universities of technology.

1. University of Twente , Enschede, Netherlands;
2. Chalmers University of Technology, Gothenberg, Sweden;
3. Massachusetts Institute of Technology, Boston, US;
4. Universität Osnabrück, Germany;
5. Sheffield Hallam University, Sheffield, UK.

University of Twente.

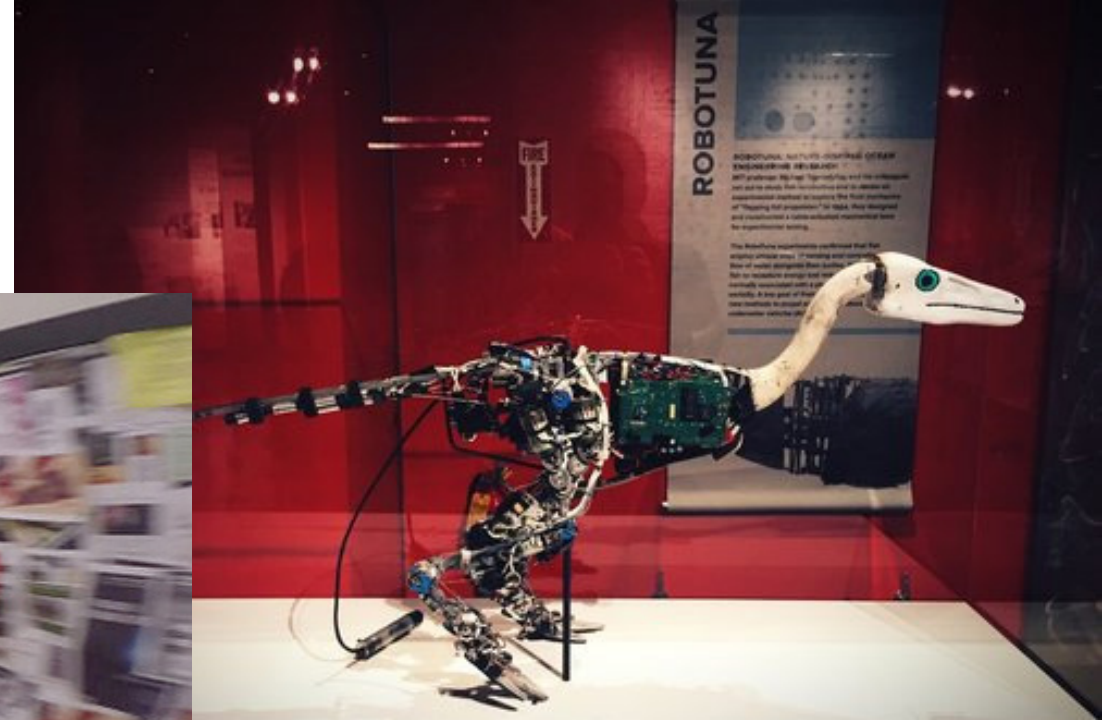University of Award-Winning Entrepreneurs.

CHALMERS
UNIVERSITY OF TECHNOLOGY

- The 'sustainable university';

- 'Sustainable practice in the discipline and field' is the only graduate attribute;

- Sustainability is taught in every qualification;

- The library buildings show-case sustainability in its design as well as collections (their aim is to have the largest collection on sustainability).

Massachusetts Institute of Technology

1) Specialist Libraries (e.g., for each engineering discipline);

2) Library of teaching resources (MIT T&L Laboratory);

3) Library of machine parts;

4) MIT museum;

5) The 'infinite corridor'.

Resources for 'dual' education

- Students spend half their degree in industry;

- The library has many resources on local industries;

- The library has places to meet with industry partners – e.g., recruiting students;

HOCHSCHULE OSNABRÜCK
UNIVERSITY OF APPLIED SCIENCES

Directorate of Education and Employer Partnerships

Unit 3

Sheffield Hallam University

Fire assembly point

PRINT

BOOTH 4.02

the skills centre

Sheffield Hallam University

Statistics Support

When? Term time statistics support drop in sessions.

Adsetts: Thursday 1:30 - 3:30pm
Collegiate: Tuesday 12-2pm

Bookable appointments are also available for most of the year

Where?
- Adsetts library: The Skills Centre (above the café)
- Collegiate Learning centre: Room C019a 'The Skills Centre'
- Resources: https://maths.shu.ac.uk/mathshelp/

SPSS

Excel

Sheffield Hallam University

WORKING TOGETHER

You wanted to know when staff are available to offer help.

You can now check staff availability directly from the SHUMaths website.

LET'S KEEP TALKING

EⅢO / Exploring outcomes in Computing, Engineering & Mathematics

00101101

Work-integrated Learning Libraries: Lessons learned…

The quality of the library and the quality of the institution are connected…

1) The University's identity is clear and unambiguous;

2) There is total consistency in the expression of this identity, including the library's focus;

3) Text resources beyond books (e.g., code libraries, machines, student projects – often industry funded);

4) Teamwork (Library, Management, Academics and Industry).

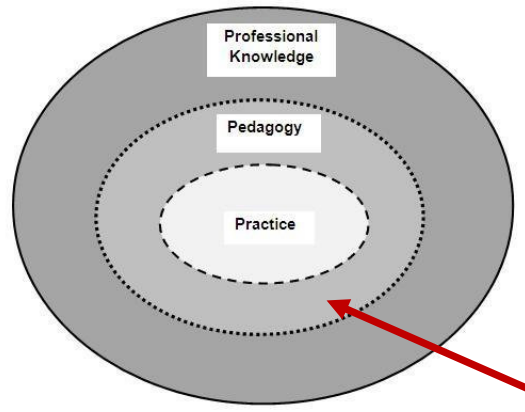![QS World University Rankings | Graduate Employability Rankings | 2019](image)
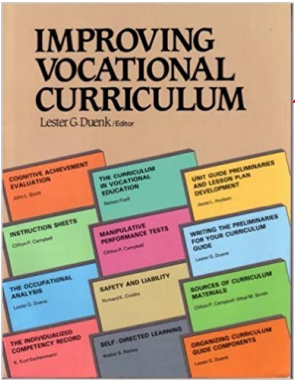
Key indicators
Quality of partnerships predict the quality of internships, graduate employability, relevance of curricula, and pedagogy, as well as the relevance of research outputs.

Quacquarelli Symonds (QS). Previously known as Times Higher Education–QS World University Rankings

Ecology of Partnerships

Unlocking book learning for practice…

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