Community Housing Cymru Leadership Conference

Building Resilience through Leadership

Yr Athro/Professor Iwan Davies
Dirprwy Is-Ganghellor a Chadair Hodge yn y Gyfraith
The economic geography of the world is not flat
The Higher Education Landscape:

- 2015: 255M
- 2035: 500M
- 2020: 50% of student population: China, India, Indonesia, USA
- 2010-2030: 30% of World’s global growth in Chinese cities
- 2030: 7M graduates in China per annum
- 1990: 250M 15-24 years
- 2030: 150M 15-24 years
- 2020: India in the reverse pyramid: 500M
  50% in higher skills for service-led economy
Universities and Change:

• Massification
• Globalisation
• ICT
• Commodification
• Unsustainable business model
Transformation:

1. For the first time since Bologna, Universities need to be fast learners
2. Migrating “offspring” is not the answer
3. New mutations recombining DNA and hardwiring into networks
Recasting and Redefining

How to be:

• Accessible and high quality
• Autonomous and accountable
• Public and private
• Innovative and conservative
• Engaged and dispassionate
• Local and international
• Specialised and interdisciplinary
The Challenges

• Global integration and interdependencies

• Remain competitive through innovation and technological advancement

• Low skills

• Small R&D base in Wales, mostly dominated by HE
Consensus of Outlook

• Knowledge hungry industries will drive growth and demand skills

• Swansea is one of the most vulnerable cities...
City Growth Potential

Low Growth
- Liverpool
- Doncaster
- Barnsley
- Grimsby
- Swansea

High Growth
- Aberdeen
- Oxford
- Cambridge
- London
- Reading

Source: No City Left Behind: the Geography of Recovery (The Work Foundation 2010) Cities Outlook (Centre for Cities 2011)
Swansea: The Great Industrial Centre
No City Left Behind?  
The Geography of the Recovery

- Recession widened the gap between successful cities and those with weak economies
- Growth over the next 10 years will be driven by knowledge-based industries demanding higher level skills
Regional and National Mission: Swansea University

The University has a key role to play

“Universities and specialized research centres are the driving force behind innovation in nearly every region”

The Context

• Swansea University entered 21st century running out of steam and occupying an estate that was mainly designed and built in the mid 20th century.

• Remarkable transformation in research performance and research power
The 20th Century Research-Intensive UK University

University Domain

World-class Research → Life- and Career- Enhancing Teaching

Collaborative research; Spin-outs; IP; Consultancy etc

Skills etc

Knowledge Economy
Swansea University’s 21st Century Ambitions

University Domain

World-class Research

Life- and Career- Enhancing Teaching

Collaborative research; Spin-outs; IP; Consultancy etc

Skills etc

Knowledge Economy
Swansea University’s 21st Century Ambitions

University Domain

World-class Research

Life- and Career-Enhancing Teaching

Strategically managed relationships with industry

Employability

Knowledge Economy
Academic Development: Dual Approach

Incremental Growth

Investing against Business Plans and diverting resources towards the most successful academic areas

. . . Closed the 6 weakest departments

Strategic Initiatives (Quantum Leaps)

Attracting external funding for large new academic developments with the critical mass and level of funding to have a significant impact on the University’s profile

. . . New School of Medicine

. . . Multidisciplinary Nanotechnology

. . . Science and Innovation Campus

(EU Structural funds critical)
Comprehensive Knowledge Economy Strategy
Driving the ‘Knowledge Economy’

Evidence is that firms seeking close proximity to World class rated University departments will be...

6 x more likely to produce innovative products
5 x more likely to produce innovative process
Myth of the ‘Ivory Tower’ University

Myth:
• Pure research and education are the central university roles

Reality:
• University research related to industry helps generate training and skills necessary for productive lines
• Industry’s needs and questions can drive university research and be a source of relevant Publications
There is growing evidence that the current Science Park model fails to maximise the potentially mutual benefits of University/Industry collaboration.
Non-Linear Model of Innovation

**Basic Research**
- Quest for Basic Understanding
  - New Knowledge
  - Fundamental Ideas

**Applied Research**
- Potential Use
  - Application of Knowledge to a Specific Subject
  - “Prototypicalization”

**Development**
- Development of Products
  - Goods and Services

**Commercialization**

**Feedback:**
- Basic Research needed for discovery
- Search for new ideas and solutions to solve longer-term issues

**Feedback:**
- Applied Research needed to design new product characteristics

**Feedback:**
- Market Signals/Technical Challenge
  - Desired Product Alterations or New Characteristics
  - Cost/design trade-off

**New Unanticipated Applications**
‘Swansea University’s model of engaging with industry is one to be replicated in Europe’

Dimitri Corparkis, DG Research and Innovation, European Commission, Brussels, June 2013
Singleton Park Campus

Likely to be the largest Knowledge Economy project in the UK.

Bay Campus

One of the top-5 Knowledge Economy projects in Europe.

Promises to be a global exemplar for using Higher Education/Industry links to drive economic regeneration.
International collaboration

• The big issues are global. International collaboration between the best research groups in the UK and the best worldwide is essential to produce the best research. The impact of research papers measured by citations for international collaboration with the US, France and Germany is around 50% higher than for the domestic average.

(International comparative performance of the UK research base, 2008)
International collaboration map for the UK in the period 2006-2010: World excluding Europe

International Comparative Performance of the UK Research Base – 2011, p 58; Fig 5.2A
Responding to the Future

• The abundance of the virtual created a hunger for the ‘real’

• Unique assets: Facilities; Academic Excellence; The Transcendent

• Outstanding education

• Safe community environment

• Outstanding facilities

• International alumni
Preparing our students

“Creativity is more important than knowledge. For knowledge is limited, whereas creativity and innovation embrace the entire world, stimulating progress”

Albert Einstein
"Singleton Abbey" – A Memory of June 4th 1887:

‘Not built for ostentation, but delight
Not lifting up to heaven a Babel-tower,
Not spreading over acres, like a town,
It stands a monument of happy art,
In harmony with nature’s sweetest self,
The home and heirloom of a favoured race.’

Samuel Clearstone Gamwell – Editor of the Cambrian Newspaper in the 1880’s
What does this mean?

1. Do not become mentally hardened
2. Be generous and don’t overplan
3. Do not suffer from existential schizophrenia – entering into bureaucracy and forgetting what and who you are serving
4. Do not have a funereal face
Community Housing Cymru Leadership Conference

Building Resilience through Leadership

Yr Athro/Professor Iwan Davies
Dirprwy Is-Ganghellor a Chadair Hodge yn y Gyfraith