The role of HEIs in society's transformation to sustainability – the case for embedding sustainability concepts in business programs

**Paper presented to ACTS 2010 Conference,
"Connecting Curriculum and Campus"
RMIT University, 1st October 2010**

Liz Sidiropoulos,
Lecturer, Faculty of Arts, Business, Infomatics and Education
CQUniversity, Melbourne

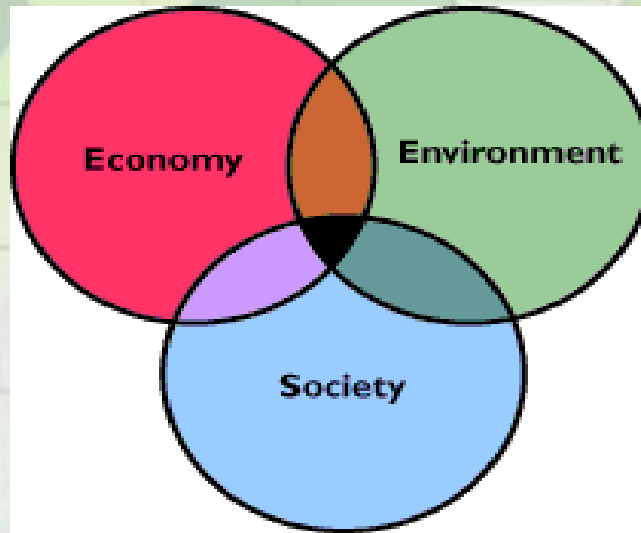# Outline of today's presentation

1. Sustainability as a journey
   - PPP / EEE balance
   - Role of Education for Sustainability (EfS)
2. The role of Individual and Social Values
   - Maslow, Hofstede and Schwartz
   - Change in Social Values over time
3. Social Change/Transformation to Sustainability
4. Contribution of HEIs
5. Contribution of HE Business Schools
   - EfS and Connecting Curriculum to Campus
6. Australian Situation – Push & Pull Factors
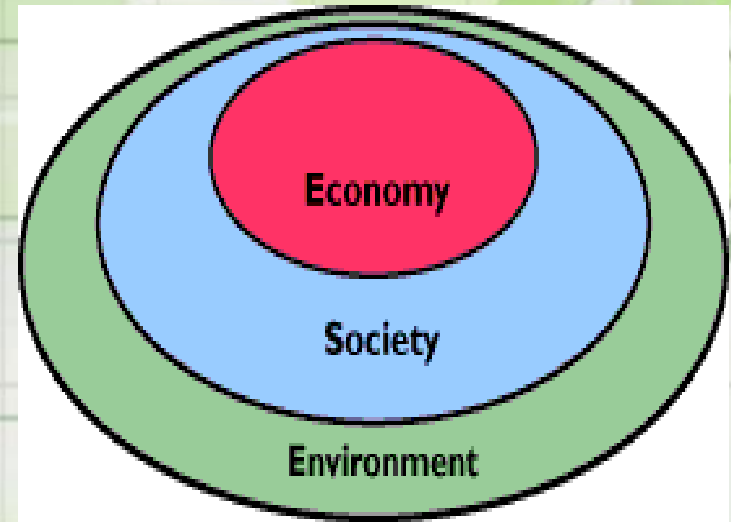7. Conclusions & Recommendations

1. Sustainability[1] – a journey to balance

PPP = people, planet, profit   EEE = economy, ecology, equity

A mechanistic/functionalist approach[2]   A holistic/interpretive approach[2]

1. The Brundtland definition of sustainability (1987 cited in Porter and Cordoba 2009) is used here, namely meeting the economic, social, and environmental needs of the present and the future generations

2. Porter T and Cordoba J Three Views of Systems Theories and their Implications for Sustainability Education, *Journal of Management Education* 2009 33: 323, accessed 21 Sep 2010 http://jme.sagepub.com/content/33/3/323.full.pdf+html

1. Sustainability – a journey of learning

Sustainability as a "wicked", threshold concept

SUSTAINABILITY IS A COMPLEX, INTERDISCIPLINARY TOPIC OF STUDY[1]

- A threshold concept is defined[2] as possessing the following qualities:
  - Transformative – changes how we see things,
  - Integrative – brings together different aspects,
  - Bounded - delineate a conceptual space, and
  - Irreversible - difficult to unlearn.
- Sustainability is regarded as 'powerful concept' in a social constructivist context

1. Facing the Future (2008) "UNDERSTANDING SUSTAINABILITY: Two-Week Unit for Social Studies Grades 9-12", Seattle
2. Meyer and Land (2003) cited in Davies 2003 "*Threshold Concepts: how can we recognise them?*", Paper presented at the EARLI Conference August 26 – 30th 2003, Padova.

Copyright of Liz Sidiropoulos

1. Sustainability – a journey of learning (cont.)
Learning of a threshold concept such as sustainability

Climbing The Environmental Literacy Ladder[1]

Capacity for personal and **collective action** and civic participation

↑

Problem solving and critical thinking **skills**

↑

Attitudes of appreciation and concern for the environment

↑

Knowledge and understanding of human and natural systems and processes

↑

General **awareness** of the relationship between the environment and human life

(the above is a simple model of graduated learning)

1. Campaign for Environmental Literacy (2007), http://www.fundee.org/facts/envlit/whatisenvlit.htm accessed 20 April 2010
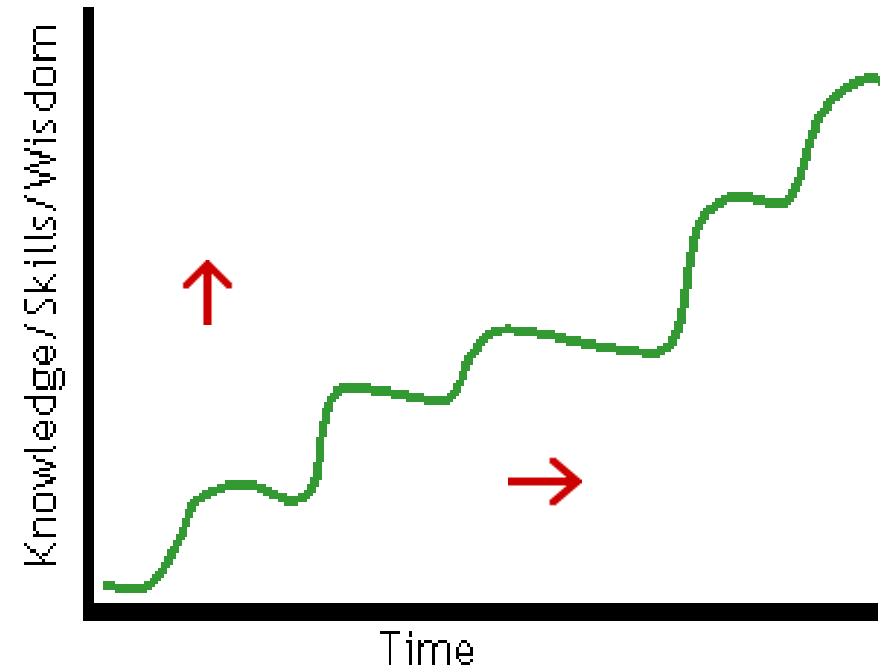
Source: Atherton J S (2010) *Support site for University of Bedfordshire PCE programme: Threshold concepts; angle 2* [On-line] UK: "**Threshold concepts**" Available: http://www.bedspce.org.uk/threshold_4.htm Accessed: 23 September 2010

1. Sustainability – a journey of learning (cont.)

It is a learning journey at every level in society:

- Individual
- Family / Household
- Organisation
- Community
- Region
- Nation
- Globe

EfS acts as a powerful catalyst on the learning journey

In the absence of regulation, we may ask "Are we there yet?" & "What is the perspective of our students?"

Maslow's Hierarchy of Needs revisited – individual sustainability behaviour

Figure 1. Maslow's Hierarchy of Needs

Sustainability awareness is increasing in developed economies due to higher incomes, EfS initiatives in primary and secondary education and coverage in the media & cultural industries **– is this universal?**

Developed economies

Self Actualisation

Esteem Needs
Self-esteem
Recognition
Status

Social Needs
Sense of belonging
Love

Safety Needs
Security
Protection

Physiological Needs
Hunger
Thirst

Source: Maslow's Hierarchy of Needs
Abraham Maslow, Motivation and Personality, 2nd ed., Harper & Row, 1970

Social/Cultural Values & Changes Over Time

General Surveys

- Hofstede Model of Cultural Dimensions (1984)

- Schwartz' Values Theory (2007)

- World Values Surveys (Inglehart & Welzel, 2010)

- Pew Global Attitudes (Burke 2008)

- World Bank surveys (Burke 2008)

➢ While cultural values differ between countries, they do change over time. Sustainability emerges as an important value and therefore EfS can have an impact.

Post Industrialisation & emerging social values in Sustainability

Figure 2a **The Inglehart-Welzel Cultural Map of the World** **(2005)**

"Traditional/Secular-rational values dimension reflects the contrast between societies in which religion is very important and those in which it is not.. Societies near the traditional pole .. have high levels of national pride, and a nationalistic outlook"[1].

"The polarization between Survival and Self-expression values is linked with the transition from industrial society to post-industrial societies"[1].

1.Source: Ronald Inglehart and Christian Welzel, Modernization, Cultural Change and Democracy. New York, Cambridge University Press, 2005: p. 64, accessed on 24 Sep 2010
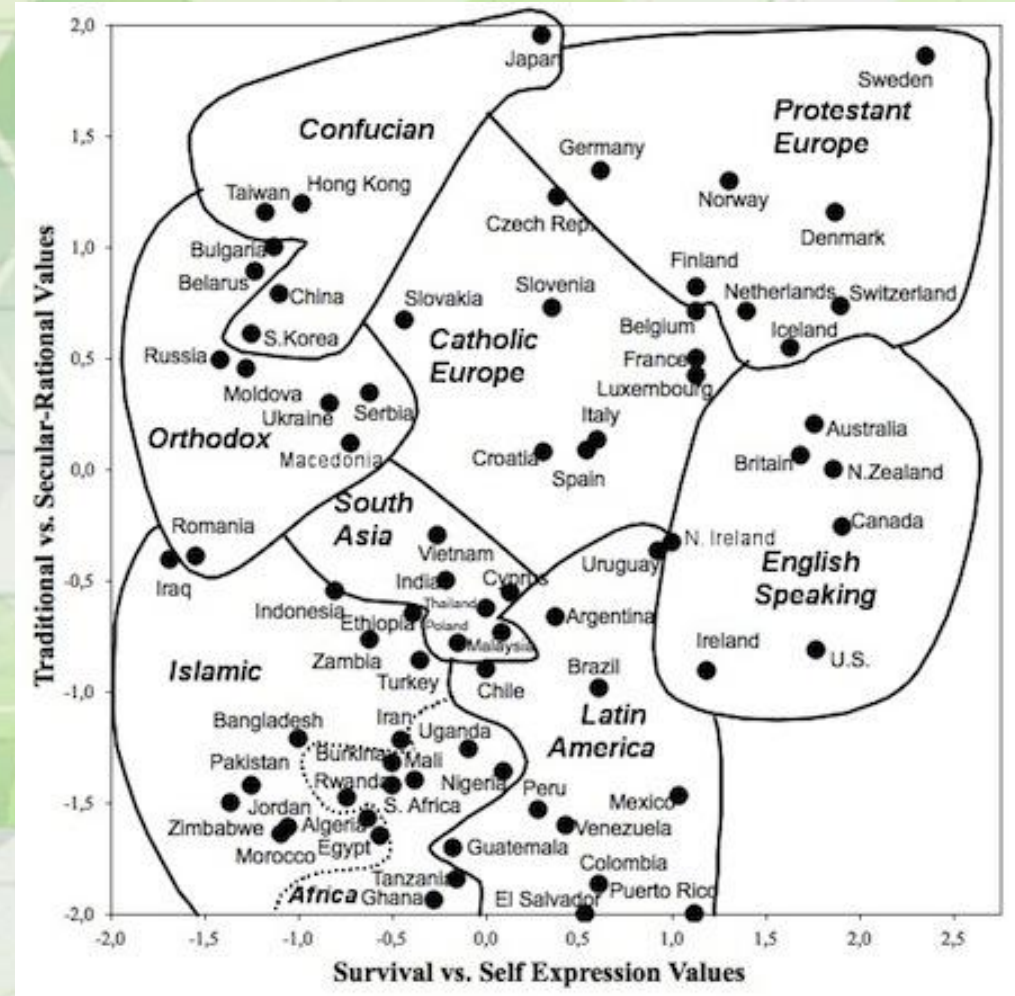http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_54

Copyright of Liz Sidiropoulos

2. The role of Values and Culture on the Journey to Sustainability

Figure 2b. Inglehart-Welzel Cultural Map of the World (2010)

"Self-expression values give high priority to environmental protection, tolerance of diversity and rising demands for participation in decision making in economic and political life"[1].

1. Ingleheart R, 2009 "Inglehart-Welzel Cultural Map of the World" World Values Survey, **http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_54** accessed on 24 Sep 2010

Changing Cultural Values – Generation Y

Worker Surveys

- Johnson Controls (2010)

Business Student Surveys

- Beyond Pin Stripes (Net Impact 2007,2009&2010)

- Aspen Institute (Aspen Institute (2008a, 2008b)

  Convergence in increased concern for social and environmental responsibility, although national differences remain.

➢ Crucial role for EfS, particularly in HE business courses which is a major multiplier in social transformation

➢ Need for careful positioning of EfS initiatives to attract interest and "scaffold" student learning for sustainability literacy

3. Social Change/Transformation to Sustainability

Figure 3. Transition as a complex set of societal cogwheels - Rotmans and Kemp 2003[1]

The transition to sustainability occurs across a broad range of fronts and so it needs to evolve in each one both independently and multifariously.

The major domains in society of business, education, government and civil society, media, arts/culture, all require greater sustainability literacy and so there is role for EfS in each domain
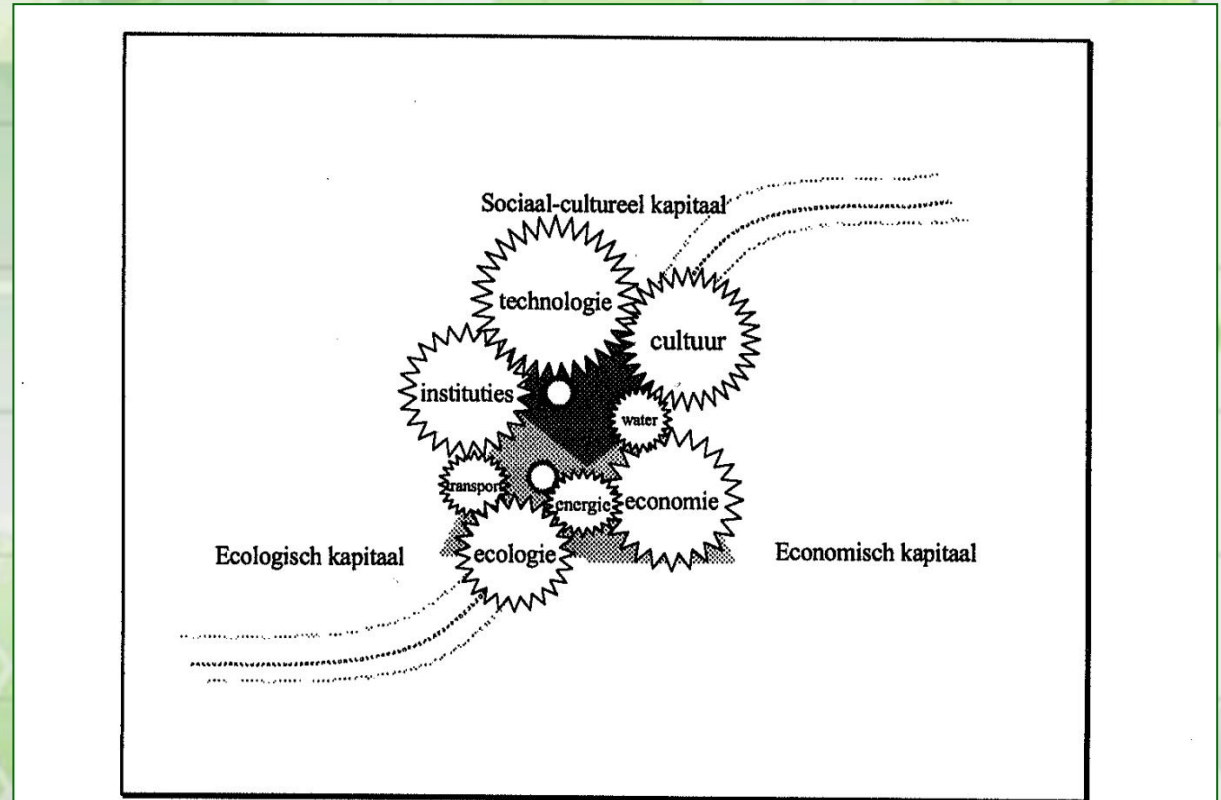
1. Rotmans J and Kemp R (2003) Managing Societal Transformations: Dilemmas and Uncertainties: The Dutch energy case study. Paper prepared for an *OECD Workshop on the Benefits of Climate Policy: Improving Information for Policy Makers*, 12-13 December 2002

3. Social Change/Transformation to Sustainability(cont)

Figure 4. The different phases of a transition- Rotmans and Kemp, 2003[1]

The same pattern of transformation appears to relate to each level and domain of society.

We need to identify our location on this transformational journey to sustainability, and then build momentum to move forward to the next phase-what is the role of HEIs?
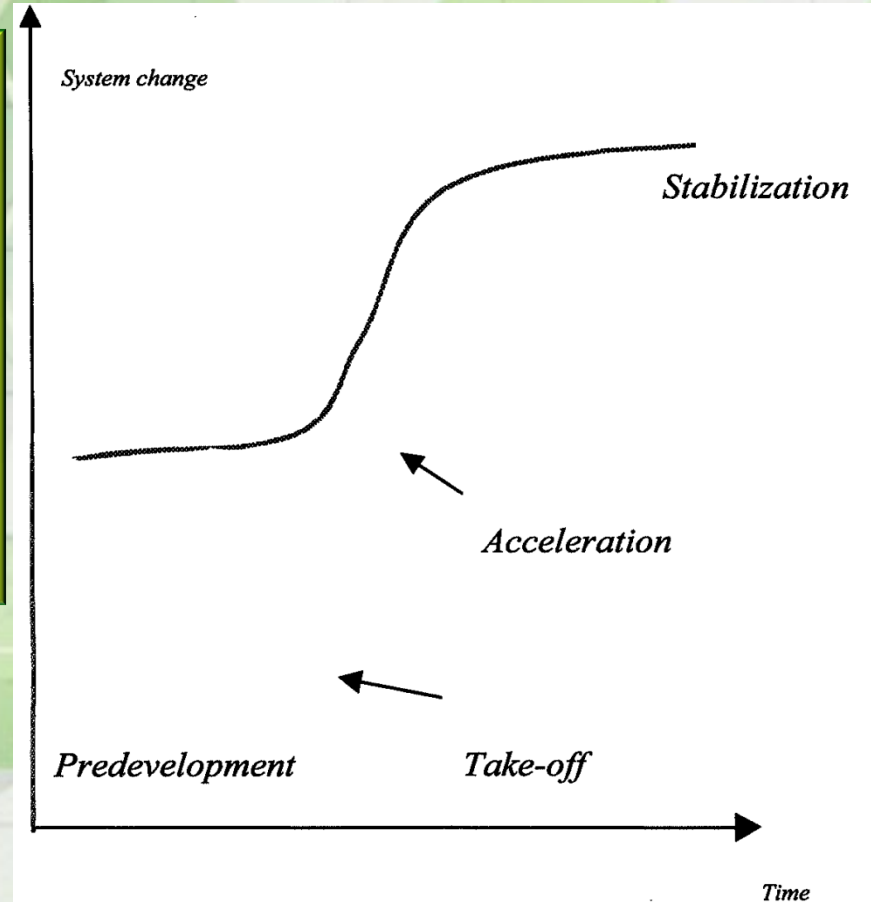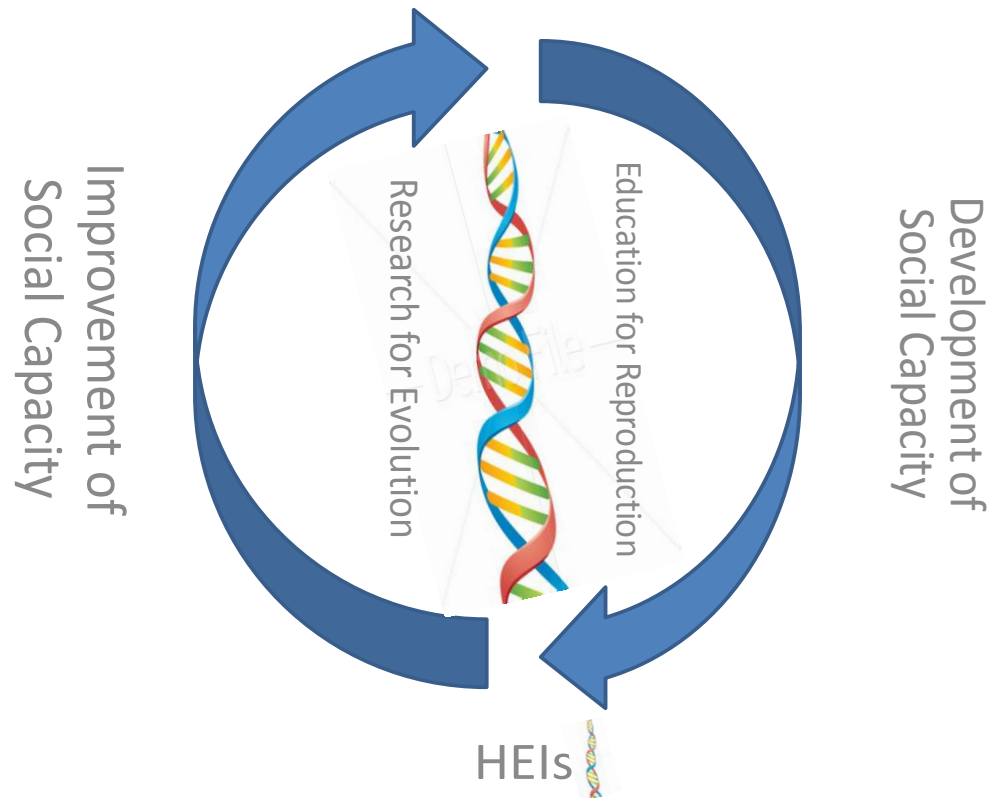

1. Rotmans J and Kemp R (2003) Managing Societal Transformations: Dilemmas and Uncertainties: The Dutch energy case study. Paper prepared for an *OECD Workshop on the Benefits of Climate Policy: Improving Information for Policy Makers*, 12-13 December 2002

4. Contribution of HEIs

The balance between the legacy and leadership roles of HEIs and their host society depends on the national Dominant Social Paradigm and the complex interplay of internal and external stakeholders

Figure 5. The Role of Higher Education Institutions in Society

Improvement of Social Capacity

Research for Evolution

Education for Reproduction

Development of Social Capacity

HEIs

What is the current contribution of HEIs to sustainability?

4. Contribution of HEIs (cont.)

Key activities by HEIs towards sustainability
.

- Campus operations (facilities management)
- Curriculum (teaching content and pedagogy)
- Research and knowledge development
- Consultancy activities
- Community outreach & support

➢ Sustainability performance varies within and between countries, although Western Europe appears to be leading

➢ Each HEI progresses along their own journey. Most Australian HEIs are in the "Pre-development" stage, some in early "Take-Off", few in "Acceleration"

➢ Strongest sustainability performance in a HEI requires support from top-down, bottom-up and at middle level (Ferrer-Balas, Cruz and Segalas 2006)

5. Contribution of HE Business Schools
Integration of sustainability in Business Programs

International MBA schools (McGaw and Gentile, 2005)

- Most advanced pedagogy/content is often connected to individuals and not always institutionalised

- Gradual improvement over time, although less that half of business schools integrate sustainability into content and/or have specialised courses

- Different approaches in different schools

5. Contribution of HE Business Schools (cont.)
Integration of sustainability in Business Programs

Australian MBA schools (Hunting et al 2006; Tilbury 2004; Tilbury 2005a, 2005b)),

- ARIES study showed little integration across top MBA schools, subsequently followed up by action research in several leading business schools

- MBA schools are now beginning to integrate sustainability across the curriculum but it is not yet mainstreamed across all HE business programs

Sustainability is poorly represented in almost all core courses in undergraduate business programs in Aust (Sherren 2005, 2006, 2008)

Developing Sustainability Literacy in Graduates

Research shows that key elements in developing EfS literacy are facilitated by the following activities:

- modifying curriculum content,

- taking a critical approach

- experiential and social learning,

- systems thinking,

- inter-disciplinarity,

- connecting curriculum to local contexts,and

- strong research programme

Navigating the journey of learning for sustainability…

Embedding Sustainability in core Business Program subjects

Business Courses

- Audit current content/offering
- Map against objectives*
- Embed for skills and knowledge
- Gradually build sustainability literacy/capability
- Connect to campus

Business Students/Teachers

- Audit current knowledge
- Locate current position on map
- Engage interest & scaffold learning
- Gradually build sustainability literacy/capability
- Experiential learning

* These objectives will reflect the position of the business school (and perhaps their host HEI) on its journey to sustainability

Learning progressions (journey)
Connecting Curriculum to Campus

- Can connect research, teaching, policy and practice.

- Organize and present research findings that make their applications to teaching, policy and practice clear.

- Learners gain insights or skills that enhance their agency with respect to their material and social world.

Implications for EfS in HE business Programs

HE business schools must educate ALL STUDENTS for literacy in sustainability.

The students' journey will be accelerated and enhanced if schools can identify their own position on the journey towards sustainability and then navigate the journey for their:

- UG and PG business students,
- Own school,
- Host institution,
- Consultant clients & industries,
- Local communities,
- Academic communities, and
- Government agencies

6. Australian Situation – Push and Pull Factors

Push Factors
- EfS initiatives by HEIs
  - Graduate attributes
  - Campus initiatives
- EfS by individual business schools
  - Curriculum initiatives
  - Research activities
- Development of Professional Stds[1]
  - Accounting stds developed
  - Other disciplines to follow

Pull Factors
- Growing demand from business for graduates with sustainability literacy BUT Australian organisational capability for sustainability is MIXED[2]
- Increasing government regulations for company accountability in resource and waste management

1. Mark_Freeman_Disciplines_Setting_Standards_Project-DeansCouncils-5Mar2010vFinal.ppsx (634.98 KB), viewed 24 April 2009
http://www.altcexchange.edu.au/group/ltas-project-business-management-and-economics

2. ACCSR 2010 "*The State of CSR in Australia – 2009 Annual Review*"
http://www.accsr.com.au/html/annualconf.html, viewed 24 April 2009

7. Conclusions & Recommendations for EfS in HE business Programs

- All countries are moving towards the sustainability value and business is a key component of social transformation
- There are <u>few sustainability principles embedded into most core subjects</u> in business such as Accounting, HR, Economics, Marketing & Strategy, Finance, Operations, Logistics, Organisational Behaviour, etc
- Our business graduates will not have competence in sustainability, therefore they will be unable to:
  - meet requirements of professional bodies or employers
  - contribute to meeting sustainability challenges in society, where ever they choose to live

- **It's time for schools to "hop on the sustainability train" ..**

  ➢ **Audit all courses/programs for their sustainability content/skills (literacy)**
  ➢ **Embed sustainability literacy into all core programs**
  ➢ **Be a leader and navigate the journey to sustainability**

ITS YOUR WORLD

You can make a difference!

Every choice matters…

Thanks for your attention

References

- Abraham Maslow, Motivation and Personality, 2nd ed., Harper & Row, 1970
- ACCSR 2010 "*The State of CSR in Australia – 2009 Annual Review*" http://www.accsr.com.au/html/annualconf.html, viewed 24 April 2009
- Aspen Institute (2008a) *Beyond Grey Pinstripes 2007-2008. Preparing MBAs for Social and Environmental Stewardship.* Aspen Institute, New York
- Aspen Institute (2008b) *Where will they lead? MBA student attitudes about business and society 2008*. Aspen Institute, Queenstown, MD
- Atherton J S (2010) *Support site for University of Bedfordshire PCE programme: Threshold concepts; angle 2*   [On-line] UK: "**Threshold concepts**" Available: http://www.bedspce.org.uk/threshold_4.htm Accessed: 23 September 2010
- Burke P (2008) The theory and empirics of the environmental Kuznets curve. Paper presented to the Australian Agricultural and Resource Economics Society (AARES) Annual Conference, Canberra.
- Campaign for Environmental Literacy (2007), http://www.fundee.org/facts/envlit/whatisenvlit.htm accessed 20 April 2010
- Facing the Future (2008) "UNDERSTANDING SUSTAINABILITY: Two-Week Unit for Social Studies Grades 9-12", Seattle
- Ferrer-Balas D, Cruz Y, Segalàs J (2006) Lessons learned from our particular "Decade" of Education for Sustainable Development (1996-2005) At UPC,in Holmberg J and Samuelsson B E(eds.) *Drivers and Barriers for Implementing Sustainable Development into Higher Education,* UNESCO Education for Sustainable. Development in Action Technical Paper No. 3 (Paris: UNESCO, September 2006), p23. Accessed at http://unesdoc.unesco.org/images/0014/001484/148466E.pdf on 6 May 2010

References (cont.)

- Hofstede G (1984). *Cultural consequences: International Differences in Work-related Values*. Sage Publications, Beverly Hills, CA

- Hunting SA, Mah J and Tilbury D (2006) *Education About and For Sustainability in Australian Business Schools: Embedding Sustainability in MBA Programs*, Report prepared by the Australian Research Institute in Education for Sustainability (ARIES) for the Australian Government Department of the Environment, Water, Heritage and the Arts, Sydney: ARIES

- Ingleheart R, 2009 "Inglehart-Welzel Cultural Map of the World" World Values Survey, http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_54 accessed on 24 Sep 2010 Johnson Controls (2010) *Generation Y and the Workplace. Annual Report 2010*, Johnson Controls Global WorkPlace Solutions, London, accessed at www.johnsoncontrols.com/...workplace.../oxygenz.../Oxygenz%20Report%20-%202010.pdf on 28 May 2010

- Mark_Freeman_Disciplines_Setting_Standards_Project-DeansCouncils-5Mar2010vFinal.ppsx (634.98 KB), viewed 24 April 2009 http://www.altcexchange.edu.au/group/ltas-project-business-management-and-economics

- McGaw N and Gentile M C (2005) Integrating Sustainability into Management Education: A Status Report. The Aspen Institute. Accessed at http://www.caseplace.org/d.asp?d=2649 on 12 September 2010

- Meyer and Land (2003) cited in Davies 2003 "*Threshold Concepts: how can we recognise them?*", Paper presented at the EARLI Conference August 26 – 30th 2003, Padova.

References (cont.)

- Net Impact (2007) *New Leaders, A Net Impact Survey of Undergraduate Student Opinions on the Relationship Between Business and Social/Environmental Issues*, Undergraduate Perspectives, September 2007

- Net Impact (2009) *New Leaders, New Perspectives: A Survey of MBA Student Opinions on the Relationship between Business and Social/Environmental Issues*, March 2009, accessed at http://www.netimpact.org/displaycommon.cfm?an=1&subarticlenbr=2581#mba on 1 June 2010

- Net Impact (2010) *Undergraduate Perspectives: The Business of Changing the World*, Perspective Series, accessed at http://www.netimpact.org/associations/4342/files/Undergraduate_Perspectives_2010_final.pdf on 1 June 2010

- Porter T and Cordoba J Three Views of Systems Theories and their Implications for Sustainability Education, *Journal of Management Education* 2009 33: 323, accessed 21 Sep 2010 http://jme.sagepub.com/content/33/3/323.full.pdf+html

- Ronald Inglehart and Christian Welzel, Modernization, Cultural Change and Democracy. New York, Cambridge University Press, 2005: p. 64, accessed on 24 Sep 2010 http://www.worldvaluessurvey.org/wvs/articles/folder_published/article_base_54

- Rotmans J and Kemp R (2003) Managing Societal Transformations: Dilemmas and Uncertainties: The Dutch energy case study. Paper prepared for an *OECD Workshop on the Benefits of Climate Policy: Improving Information for Policy Makers*, 12-13 December 2002

- Schwartz S (2007) Basic Human Values: An Overview. Basic Human Values: Theory, Methods, and Applications, The Hebrew University of Jerusalem, http://151.97.110.134/Allegati/convegno%207-8-10-05/Schwartzpaper.pdf. accessed on 22 Aug 2008

References (cont.)

- Sherren K (2005) Balancing the disciplines: a multidisciplinary perspective on sustainability curriculum content, *Australian Journal of Environmental Education* 21: 97-106, accessed at http://search.informit.com.au.ezproxy.lib.rmit.edu.au/fullText:dn=148391:res=AEIPT on 19 March 2010

- Sherren K (2006) Core issues: Reflections on sustainability in Australian University coursework programs, *International Journal of Sustainability in Higher Education* 7(4): 400-413

- Sherren K (2008) Higher environmental education - core disciplines and the transition to sustainability, *Australasian Journal of Environmental Management*, 15: 189-196

- Tilbury D (2004) Rising to the challenge: education for sustainability *Australian Journal of Environmental Education*, 20(2): 103-114. Accessed at http://search.informit.com.au.ezproxy.lib.rmit.edu.au/fullText:dn=141647:res=AEIPT on 19 March 2010

- Tilbury D, Crawley C and Berry F (2005a) *Education About and For Sustainability in Australian Business Schools* Report prepared by the Australian Research Institute in Education for Sustainability (ARIES) and Arup Sustainability for the Australian Government Department of the Environment, Water, Heritage and the Arts.

- Tilbury D, Keogh A, Leighton A and Kent J (2005b) *A National Review of Environmental Education and its Contribution to Sustainability in Australia: Further and Higher Education*. Canberra: Australian Government Department of the Environment and Heritage and Australian Research Institute in Education for Sustainability (ARIES).