

2008-01-01

A Competence-Based Curriculum for Environmental Health

Steven Konkell

Technological University Dublin, steve.konkel@tudublin.ie

Follow this and additional works at: <https://arrow.tudublin.ie/ehs1ehpp>



Part of the [Curriculum and Instruction Commons](#), and the [Medicine and Health Sciences Commons](#)

Recommended Citation

Konkel, Steven, "A Competence-Based Curriculum for Environmental Health" (2008). *Environmental Health Planning and Policy*. 1.

<https://arrow.tudublin.ie/ehs1ehpp/1>

This Presentation is brought to you for free and open access by the Environmental Sustainability & Health Institute at ARROW@TU Dublin. It has been accepted for inclusion in Environmental Health Planning and Policy by an authorized administrator of ARROW@TU Dublin. For more information, please contact arrow.admin@tudublin.ie, aisling.coyne@tudublin.ie.



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 4.0 License](#)



UNIVERSITY OF
BIRMINGHAM



One Road.....Many Paths!

A Competence-based Curriculum for Environmental Health

Maurice Brennan; Birmingham University, UK

Tony Lewis; Chartered Institute of Environmental Health, UK

Steve Konkell; Dublin Institute of Technology, Dublin, Eire



UNIVERSITY OF
BIRMINGHAM



The Problem

- In a fast changing world, qualifications that base themselves on the attainment of knowledge:
 - Have a limited 'half-life' - c.18 months
 - Tend to be parochial i.e. country-focussed
 - May be perceived as the keys to an 'exclusive' club



UNIVERSITY OF
BIRMINGHAM



Question

- Is there an approach that addresses this problem and focuses on what Environmental Health Practitioners can actually do?



UNIVERSITY OF
BIRMINGHAM



Chartered
Institute of
Environmental
Health

Solution?

“Competence.....not qualifications”

UK Cabinet Office 2007



UNIVERSITY OF
BIRMINGHAM



The key definitions - Competence

- A cluster of related knowledge, skills and attitudes that affect a major part of one's job (role or responsibilities), that can be measured against some sort of occupational standards and can be improved by training and development

(Parry 1996)



UNIVERSITY OF
BIRMINGHAM



More than just knowledge, because.....

- Knowledge without experience is merely information

Albert Einstein



UNIVERSITY OF
BIRMINGHAM



The key definitions - Capability

- Describes an individual's potential to develop and is to do with future competence

Chartered Society of Physiotherapists (2005)



UNIVERSITY OF
BIRMINGHAM



The key definitions - Competencies

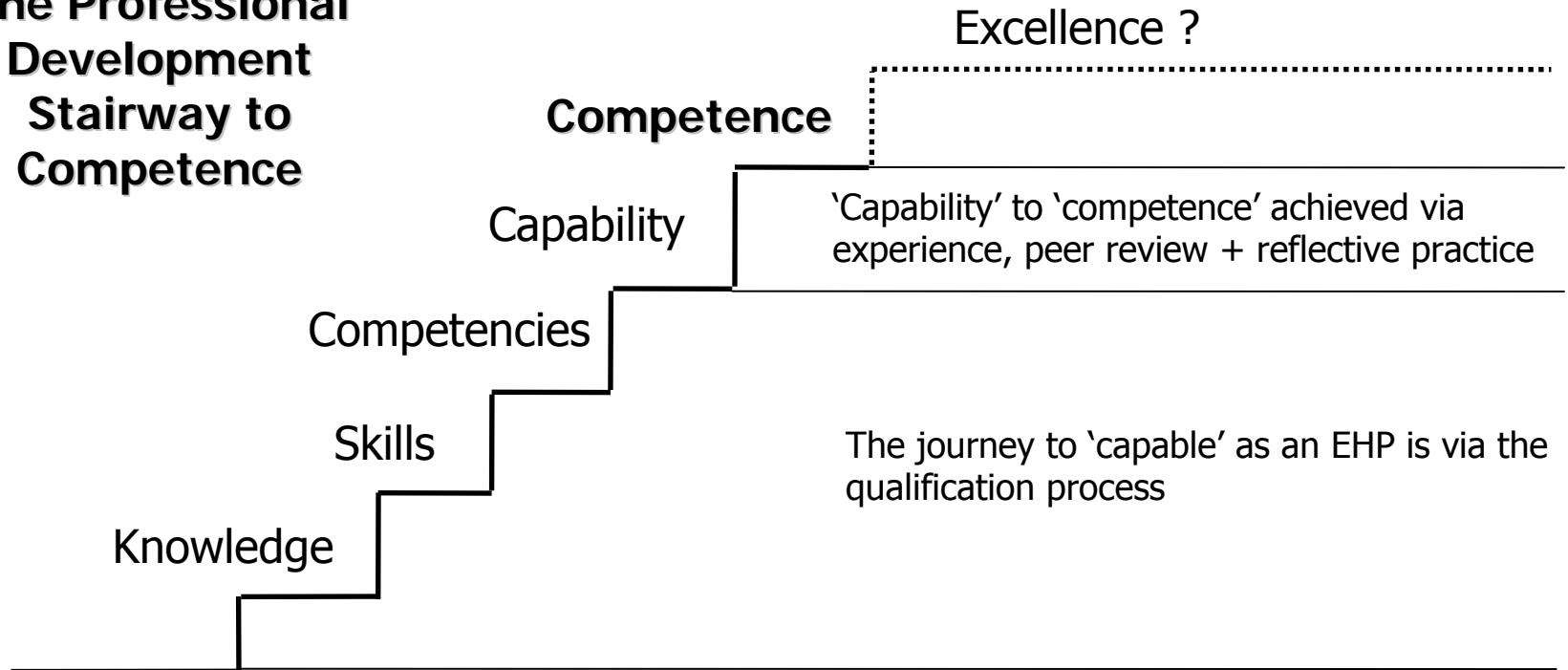
- A range of applied abilities and skills that relate to capability

Chartered Society of Physiotherapists (2005)



Competence - how do I develop it ?

The Professional Development Stairway to Competence





UNIVERSITY OF
BIRMINGHAM



Competence – the key questions

- Why is it important ?
- How do I develop it ?
- How do I (or others) measure it ?
- What if I'm not ?



UNIVERSITY OF
BIRMINGHAM



Competence - why is it important ?

To me:

- Personal satisfaction
- Career development
- Recognition by colleagues
- Recognition by employers/customers



UNIVERSITY OF
BIRMINGHAM



Competence - why is it important ?

To the Environmental Health Profession:

- Professional standing (legal, political, inter-professional, international)



UNIVERSITY OF
BIRMINGHAM



Competence - why is it important ?

To the wider Community:

- Confidence in us to deliver to the appropriate standard ('fit for purpose')
- Our decisions are accepted and trusted



UNIVERSITY OF
BIRMINGHAM



Competence - the bigger picture

- International Perspective
 - Global market
 - Transferability of qualifications
 - Irrespective of where we practice there is a common core to that activity



UNIVERSITY OF
BIRMINGHAM



Competence - how do I develop it ?

- Begins with:
 - Course of study
 - Practice and reflection upon it via learning portfolios
 - Professional assessments



UNIVERSITY OF
BIRMINGHAM

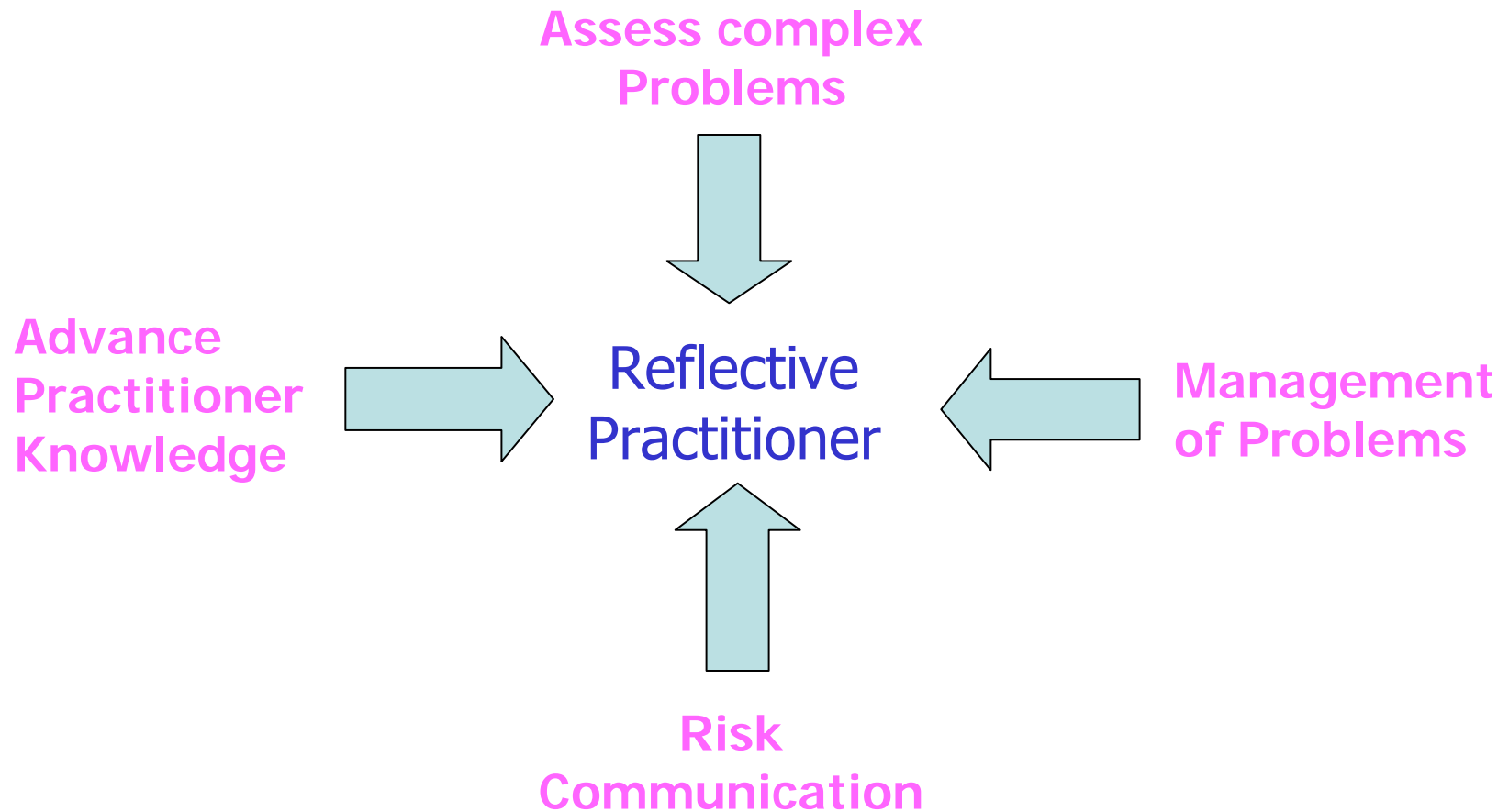


Continues with life long learning.....

- Vocational PG courses
- CPD courses.
- Conferences, seminars etc
- Work-based learning



Focuses on the reflective practitioner





UNIVERSITY OF
BIRMINGHAM



International recognition question

- Whilst competence might deal with the knowledge and exclusivity issues, how does it solve the international recognition question?



UNIVERSITY OF
BIRMINGHAM



International recognition question (2)

- It can do so IF we can construct a framework of competencies that encapsulates the essence of who and what we are!



UNIVERSITY OF
BIRMINGHAM



IFEH involvement

- In 2000 (Sweden) IFEH tasked the academic community to develop an international environmental health framework for curricula



UNIVERSITY OF
BIRMINGHAM

DUBLIN INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA ÁTHACLIAITH



Chartered
Institute of
Environmental
Health



10TH WORLD CONGRESS ON ENVIRONMENTAL HEALTH

International Faculty Forum

Griffith University

May 11, 2008



UNIVERSITY OF
BIRMINGHAM

DUBLIN INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA ÁTHA CLIATH



Chartered
Institute of
Environmental
Health



Sunday 11th May 2008

- Discussion facilitated by Steve Konkel
- Consideration of previously circulated document, “Environmental Health Qualifications (Draft 1) Dec. 2007 Draft” by Barbara Delaney, DIT, Dublin
- Essential to involve both Internal and External Stakeholders of IFEH
- Conclusions by consensus



UNIVERSITY OF
BIRMINGHAM

DUBLIN INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA ÁTHA CLIATH



Chartered
Institute of
Environmental
Health



Benefits

- Mobility / Useful “shield”
- Recruitment of EHOs and EHPs
- Retention of EHOs and EHPs
- “International Visibility” & Image
- Attracting Students to the Field
 - Mobility
 - Placement
 - Research opportunity



UNIVERSITY OF
BIRMINGHAM

DUBLIN INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA ÁTHA CLIATH



Chartered
Institute of
Environmental
Health



Challenges

- Representative of all countries
- Applicable to all countries
- Uniformity in application
- Problems with international transposition of terms and terminology



UNIVERSITY OF
BIRMINGHAM

DUBLIN INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA ÁTHA CLIATH



Chartered
Institute of
Environmental
Health



Understanding the Key Competency Base

- Transferable skills are most highly valued
- Problem solving and critical thinking skills are key to resolving pressing Environmental Health issues
- Examples of key words:
 - ‘identify’
 - ‘articulate’
 - ‘integrate’
- Additional articulation can be found in the work of Maurice Brennan and Tony Lewis



UNIVERSITY OF
BIRMINGHAM

DUBLIN INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA ÁTHA CLIATH



Chartered
Institute of
Environmental
Health



IFF outcomes

- Essential to develop a common framework for environmental health practice
- Use a competency-based approach
- Benefits greatly outweigh the downside
- Seek wide consultation of the IFEH Membership
- Before final decisions:
 - Instruct participants to fully represent their values in developing country-specific requirements
- Foster efforts to represent all countries



UNIVERSITY OF
BIRMINGHAM



2008

- IFF agrees that 'EHness' should be the basis of such a framework for curricula



UNIVERSITY OF
BIRMINGHAM



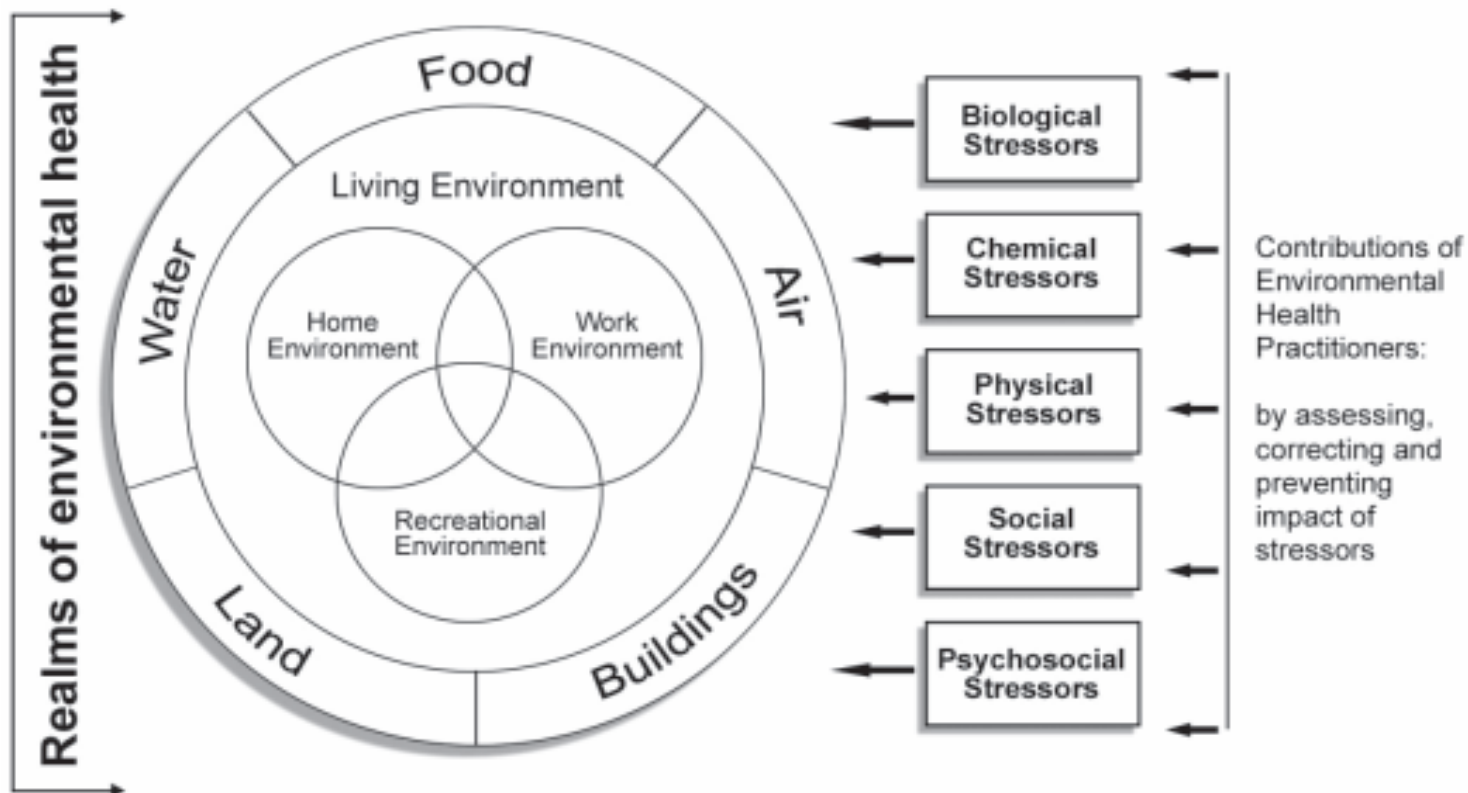
'EHness' is what EHPs have and others do not !!!

- It's an ability to identify, assess and manage risks to (public) health that arise from the impact of a range of stressors on our world



Environmental Health 2012 - A key partner in delivering the public health agenda

Sue Burke, Ian Gray, Karen Paterson and Dr Jane Meyrick; Health Development Agency, UK 2002





UNIVERSITY OF
BIRMINGHAM



There are three dimensions to 'EHness'

- Knowledge
- Skills
- Method



UNIVERSITY OF
BIRMINGHAM



The knowledge

- Anatomy physiology and basic toxicology
- Social, physical and natural sciences
- Communicable and non-communicable diseases – vectors and control mechanisms (surveillance and control)
- Research methods
- Basic principles of risk assessment and management
- Principles of pest control and management



UNIVERSITY OF
BIRMINGHAM



The knowledge (2)

- The built environment
- The principles of pollution prevention and control
- Health protection measures and methods
- Inequalities in health
- Principles of sustainable development
- Legal principles and processes



UNIVERSITY OF
BIRMINGHAM



The Skills

- Determine and articulate the nature of a hazard and quantify the level of risk associated with that hazard
- Plan and execute statistically reliable sampling programmes, analyse and interpret data
- Plan and execute inspections, investigations and audits
- Obtain admissible evidence and apply due legal processes
- Design, implement and evaluate a research protocol



UNIVERSITY OF
BIRMINGHAM



The Skills (2)

- Determining appropriate courses of action
- Organise self and work within organisations
- Effective communications
- Reflective practice
- Working with and within communities



UNIVERSITY OF
BIRMINGHAM



The Method

- Identify and articulate the range of actual and potential biological, chemical, physical, social and psychosocial stressors that may act upon and within the physical, social and human worlds
- Identify and articulate the points of possible impact of the stressors on and within the worlds
- Identify and articulate the mechanism of impact of the stressors on and within the worlds
- Identify and articulate the potential and actual public health implications that (may) arise from the impact of stressors on and within the worlds
- Identify and articulate the points at which EHPs may intervene to prevent, control or mitigate the impact of stressors on and within the worlds

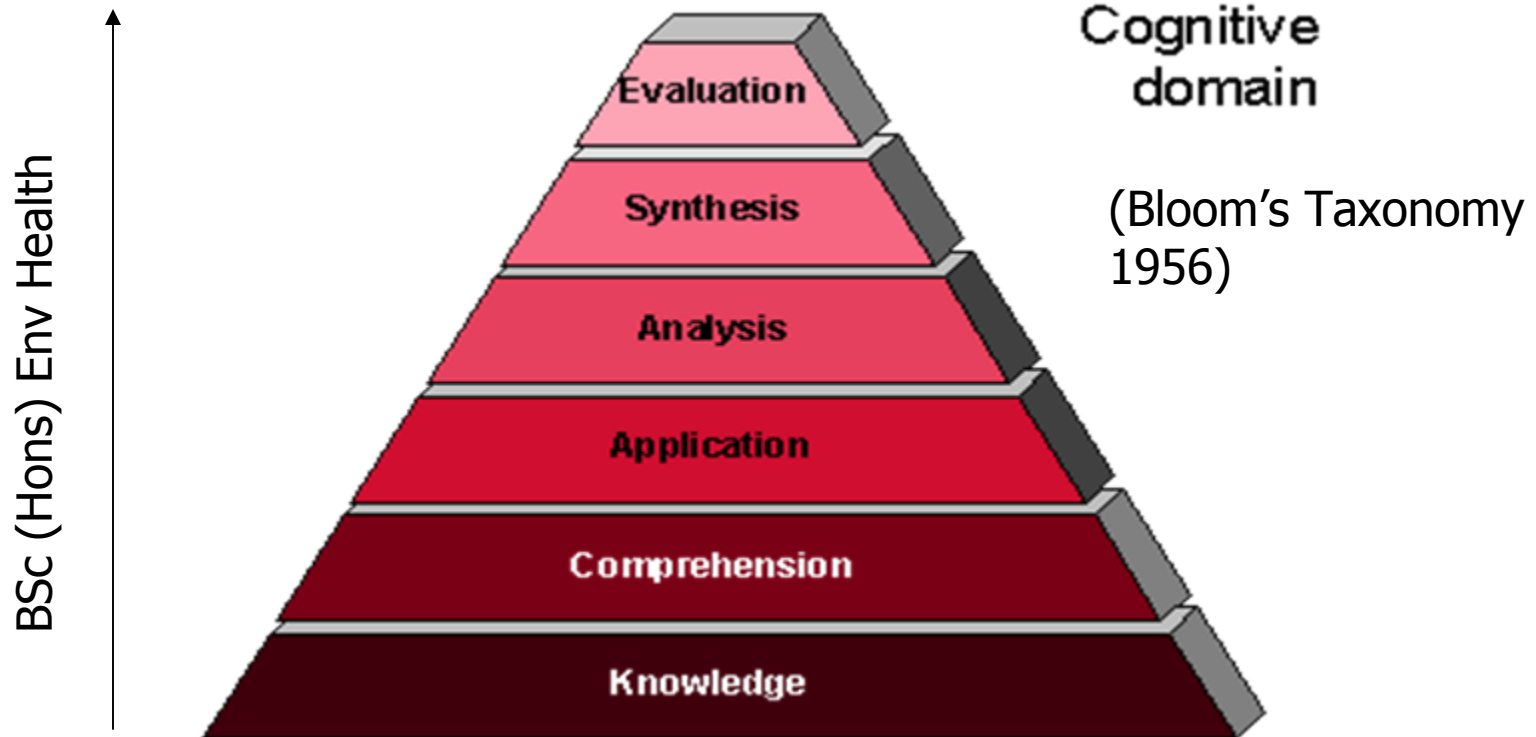


The Method (2)

- Identify, communicate and engage with partner organisations, agencies, fellow professionals and others with whom appropriate intervention strategies might need to be formulated
- Identify and articulate the most appropriate intervention to exercise, having regard to the factors, be they political, financial and technological that are likely to influence the decision making process
- Design and implement appropriate intervention strategies in collaboration with others
- Monitor and review the effectiveness of the intervention strategy; altering or adapting it, where necessary, according to the actual or predicted outcome



The Level

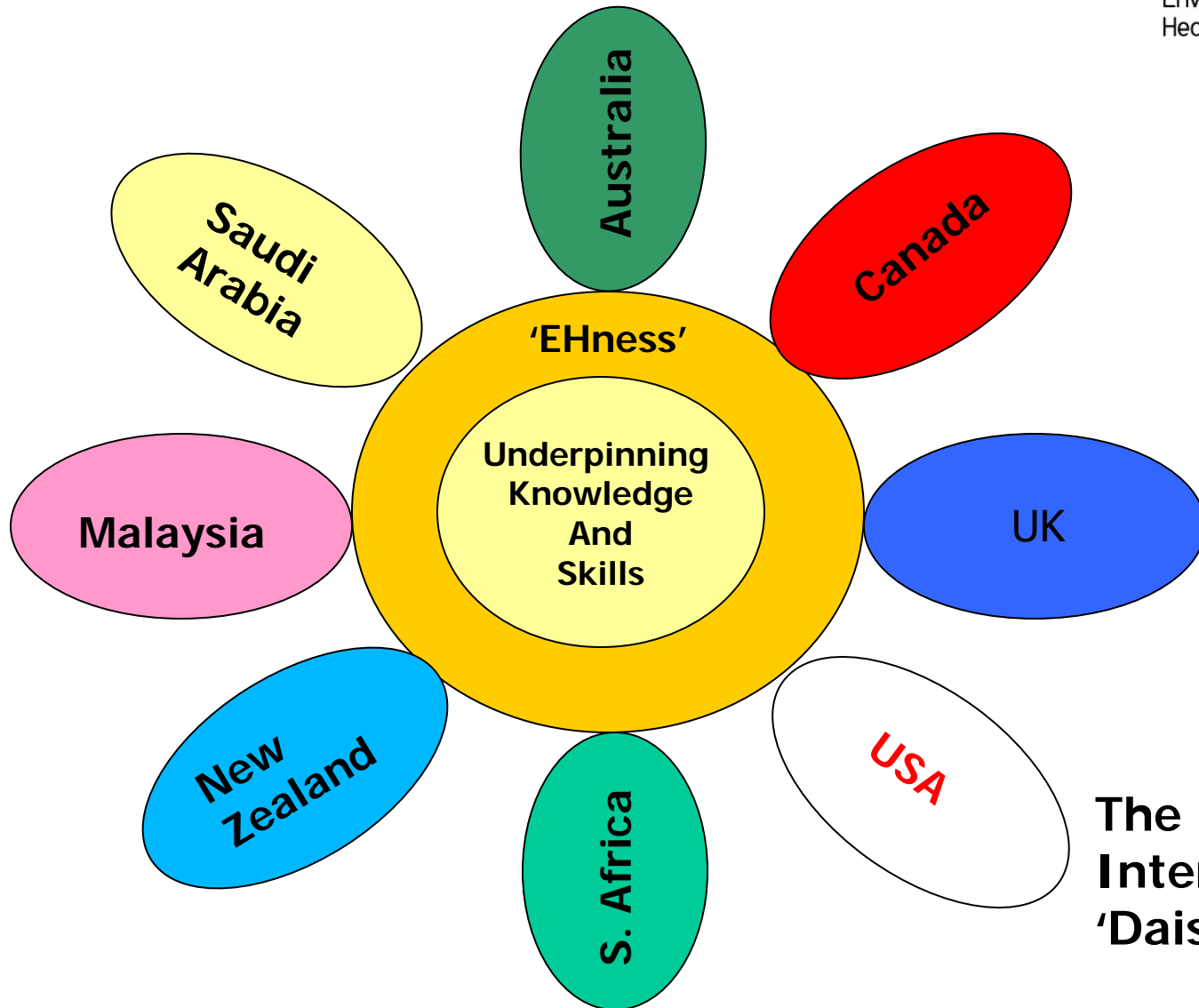




UNIVERSITY OF
BIRMINGHAM



Chartered
Institute of
Environmental
Health



The
International
'Daisy'



UNIVERSITY OF
BIRMINGHAM



Conclusions

- The world is small
- Environmental health practice throughout the world has a common base of knowledge, skills and competencies
- If we focus on these rather than qualifications then issues of mutual recognition will fade
- The concept of 'EHness' offers an international solution



UNIVERSITY OF
BIRMINGHAM



Your Views

What do you think!



UNIVERSITY OF
BIRMINGHAM



Send your comments to

Prof. Nancy Cromar, IFF Co-ordinator:

Email : nancy.cromar@flinders.edu.au

Phone: +61 8 8204 5731

Fax : +61 8 8204 5226

Rm 4E432.1 Level 4 Flinders University
Medical Centre