### Working Higher

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### Working Higher

- HEFCE Funding of £2.9m
- Piloting "sector bespoke" foundation degrees.
  - ➤ Refining/Petrochemicals
  - ➤ Nuclear
  - ➤ Chemical
  - **≻**Polymer
  - ➤ Bioscience/Pharmaceutical
- Foundation degree framework for each sector will be made available to all HEIs.

#### **Consortium Members**

- University of Hull (Lead HEI)
- Cogent Sector Skills Council
- HEA Physical Sciences Centre
- Foundation Degree Forward
- SEMTA Sector Skills Council
- Five HEIs (one per sector)
- Five Industry Champions (one per sector)

#### **Sector HEIs**

- Refining/Petrochemicals
  - ➤ University of Hull
- Nuclear
  - > Central Lancashire
- Chemical
  - ➤ Manchester Metropolitan University
- Polymers
  - ➤ London Metropolitan University
- Biosciences/Pharmaceutical
  - ➤ University of Kent

#### Overview

- Address blockages supply versus need
- Engage with employers Industry Champions
- · Minimise risks for the various stakeholders
- Project will develop set of generic modules
- Supplement with sector specific modules
- Consortium develops generic modules jointly
- Sector HEI develops the specific modules

#### **Gareth James**

- Industry champion Refining/Petrochemicals Jan 2010
- Director Process Industry Consulting Ltd
- Chartered Chemical Engineer with MBA
- 31 years multinational experience with BP
- Managed 2 top tier COMAH petrochemical sites
- Developed BP Operating Management System
- Developed BP operating and process safety training
- Formed UK Chemicals Industry Skills Network Group 2003
- Formed Cogent Chemicals Advisory Council 2005
- Chairman Humber Chemical Focus 2005/7
- Director Cogent SSC 2006/9

## **Employers Needs**

- Employers value degree level qualifications proxy for skills that employees will bring to the enterprise
- Employers value broad employability skills communication, motivation, independence, analysis, confidence and problem solving
- Refining and Petrochemical industries are based on effective risk management which demands sound understanding of scientific and engineering principles
- STEM based foundation degrees could address these needs

# What is the role for HE in educating the current workforce?

- Global competitiveness requires an additional 1 to 2 million of the existing UK work force to be qualified to level 4 by 2020.
- Massive opportunity but HE must become better connected to employers
  - □75% of employers think academics do not understand business needs
  - ❖52% of firms 5000+ staff engage with HE
  - ❖But only 15% of firms less than 50 staff engage with HE
  - ➤ Total employer training £33.6 billion
  - ➤ Of this £5 billion could have been provided by HE
  - ➤ HE actually earned £335 million (<5%)

Source Higher Education at Work - High Skills: High Value DIUS 2008

# Key Success Factors My Initial Thoughts

- Cultural & behavioural change required by HE and Industry
- · Create valued supplier/customer relationships
- · Clear demonstration of value to all parties
- Innovative use of regional and/or sector clusters
- Short courses with bite size credit accumulation
- · Modular, flexible and blended learning
- · Accreditation of employer led programmes
- Employers to participate in design and delivery
- · Secondments between industry and HE
- Financial and other incentives to encourage all parties