Developing employability skills through interdisciplinary industry challenges

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Exploration

- Best practice models – interdisciplinary collaborations in HE
- Key challenges, levers/mechanisms and intuitional barriers
- A blueprint – ICE
- Value to learning, employability and professional development

Bridging discipline gaps through the creation of a network of exchange to develop a legacy of learning
What do we mean by “collaboration”?

• Cross disciplinary: viewing one discipline from another
• Multidisciplinary: same problem independent perspectives
• Interdisciplinary: integration of disciplines
• Transdisciplinary: problem specific integration
  joint problem solving, science & society

Interdisciplinarity: Involves the combining of two or more academic disciplines into one activity. It is creating something new by crossing boundaries, and thinking between them.
Interdisciplinary

Why ?
Interdisciplinary

- Global Wicked challenges reach beyond one discipline
- New ways of working (prepare for real world)
- New knowledge / experiences – IMPACT
- Sense of belonging (developing network)
- Encourages – engagement / stimulus to learning
- Critical empowered learner – co-create / ownership / value
- Employable graduates (commercially/socially ready)
- Develops essential skills of:
  - problem solving
  - team working
  - negotiation / conflict management
  - Self awareness

Evidence: UKRC, RAE, DC, AM
Rationale: skills

71% of employers tailor their recruitment to find candidates with commercial awareness, but only 15% hire graduate intakes which have this skill and 79% of employers train graduates in this skill once they are on the job.

(AGR 2016 Supplier Survey)

Critically is a key skill and the ability to work with people

Problem solving / Team working and commercial awareness
Benefits

- Solving global wicked challenges
- New ways of working
- New knowledge / experiences
- Sense of belonging
- Encourages – engagement
- Critical empowered learner
- Employable graduates
- Develops essential skills of:
  - problem solving
  - team working
  - negotiation
  - conflict management
  - Self awareness

What about the challenges?
Challenges

- Solving global wicked challenges
- New ways of working
- New knowledge / experiences
- Sense of belonging
- Encourages – engagement
- Critical empowered learner
- Employable graduates
- Develops essential skills of:
  - problem solving
  - team working
  - negotiation
  - conflict management
  - Self awareness

- Discipline silos
- Understanding epistemological perspectives
- Commercial sector (trust)
- Cross-fertilization across discipline boundaries
- Interdisciplinarity is largely a new concept in UK HE
- Skill set in HE underdeveloped
- Balance differentiation
- Establishing ground rules
- Institution barriers
Consider.....

- Positioning
- People
- Environment
- Reward
- Factors for conduct
- Communication
“ICE”

- VPI – Jonathan Sand OBE (Chairman of Elmwood)
- Embedding Enterprise Education
  - through interdisciplinary industry challenge-led collaborations
- Dynamic and unique environment
  - outside the traditional curriculum
  - UG (second years) engage in industry-led challenges
  - challenges cross discipline boundaries (newness)
- Disruptive parameters to impact on learning
  - time controlled environments
  - challenging students both creatively and technically (competitive)
  - developing entrepreneurial skills

Bridging discipline gaps through the creation of a network of exchange to develop a legacy of learning
How......

>>>>>INSPIRE>>>>>INNOVATE>>>>>IMPACT>>>>>

Design Challenges

Industry Challenges
“It's a fun and creative event. I really enjoyed it. Very useful event, we should have more interdisciplinary activities to encourage the type of idea generation that has happened today.”
“judging the 24-hour design challenge was a pleasure and revealed an impressive arsenal of talent the University of Huddersfield has amongst the students. …… When placed under pressure, right brain instinct coupled with pragmatic decision making, causes inventive and exciting concepts and solutions. Events like the 24hr Design Challenge are a great example of where you'll see this in action.”
Creating Learning Communities (co-creation)

Interdisciplinary design led challenges

“The ICE project for me has been such a beneficial experience. I've learnt skills which I would never have gained through my degree and I'm still being offered brilliant opportunities and meeting new people due to taking part in this project.” Student 2017

“It has been an unbelievable experience that has offered me the chance to not only meet new people ... but learn things in industries that I have no knowledge of at all. I would recommend it to anyone not only as a confidence building experience but also the chance to pursue an idea or concept that you wouldn't otherwise get the opportunity to even look at.” Student 2017

BLUE BIN
-Interior Design – Heather Ward
-Graphic/Animation – James Betts
-Electrical Engineering – Philippa Hazell
-Product Design – Alex Li

Value to learning

I liked the techniques and one thing I really did enjoy was a good experience working in a team because I am used to working alone just based on my own ideas and experiencing other people’s ideas and focusing on them and trying to fuse them together was just a wonderful experience.”

It has shown me what some of my lecture have been trying to tell us which is that collaboration and working with people from different specialisms is when design can really take off and become exciting”.

“...today was thoroughly interesting and very relevant to my studies...I feel informed and [it] will leave me with a lot to think about, and a fresh boost of creativity

“A good way of learning how to work well and effectively with students who are from different courses and think in different ways”
Value to Professional Development

…I learned that everything is set up in stages and the advice given is something I feel can help me regarding my work. I really liked the mini tasks that were set, even if I did come into the room nervous (first time here) didn't know what to expect. Great lesson and talking with new people was fun to share their ideas with each other…

…as it has given me an insight on what to prepare for when working for clients … and I shouldn't be scared, but be more confident in my work. Perfection does not exist, you can still do better. The activities were really exciting as not only am I working with different people, engaging different ideas, enjoyed the teamwork

The challenge has made me even more interested in working with people I don’t know and also has inspired me to think about business ideas for my future career
As a chemical engineer in industry I am required to work with product designers and people in marketing. Very awesome to work alongside people from different disciplines.

Great to work in interdisciplinary teams. We were just told in a guest lecturer how speed is crucial so this is great in practice and an awesome piece to put in my portfolio.

I will be applying for placements again after almost giving up!

Networking, problem solving, communication, re-engagement, team working, boost of creativity
Summary

- Best practice models – interdisciplinary collaborations in HE
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ANY QUESTIONS?

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