
Measuring student success – are there alternative metrics?

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“Tell me and I’ll forget: show me and I
may remember; involve me and I will
understand”

Benjamin Franklin

Context

- Research /practice /scholarly
- Learning & teaching
- Engagement (internal and external)
- Integration of knowledge (leaders)

Improving Engagement

- Sense of belonging
 - Enabling full integration with studies
 - Engage with wider studies
 - Feeling valued/encouraged/included (Identity)
 - Making friends (critical/commuter)
 - Working outside discipline (networks are key)
 - Designing for learning (assessment/engagement)
 - Skills to succeed beyond university
 - Realizing dreams – going beyond expectations
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What 'we' were trying to achieve?

- Co-create knowledge (problem solving)
 - Knowledge communities
 - Exchanges and networks
 - Develop skills and attributes – fulfil potential
 - Entrepreneurial / intrapreneurial mindset
 - **Ability to work with other disciplines**
 - Engaged University – sector “We are the cause”
 - DRIVER – Commercial awareness, IP, co-creation
 - Ability to deal with uncertainty (wicked or complex)
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Innovative Creative Exchange (ICE) at University of Huddersfield

- **VPI – Jonathan Sand (Vexillifer)**
- **Interdisciplinary /challenge-led collaborations (complex and commercial)**
- **Dynamic and unique environment**
 - outside the traditional curriculum
 - UG (second years) engage in challenges-led learning
 - challenges cross discipline boundaries (newness)
- **Disruptive parameters to impact on learning**
 - time controlled environments
 - challenging students both creatively and technically (competitive)
 - developing entrepreneurial skills – mindset
 - co-creation



Challenge-led Learning

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

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

Design Challenges

- **24 hour Challenges**

Commercial Challenges

- **7 hour**
- **24 hour Challenges**

7 hour commercial challenge

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."

**...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**

**"We were told in a guest lecture how
SPEED is crucial – so this is great
practice and an awesome piece to put in
my portfolio**

24-hour Wicked challenge

“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.” David Bailey UX BBC

Reflection

“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

...To my surprise the value of the ICE challenge has been not only in the high pressure work itself, but in the experience & highlighted importance of cross discipline student collaboration. Personally as a designer, Project Blue has demonstrated an ability to not only craft and develop an idea into strong brand identity but then weave that brand into a styled companion digital role out & animation, all of which have become highly transferable skills when working in industry. Student 2017

“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. I am very grateful to the university staff members who mentioned it to me – it has definitely been worth it.” Student 2017

BLUE BIN

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

Analysis

“It has been an unbelievable experience that has offered me the chance to not only meet new people and make **forever friends**, 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 **(VALUE)**.” Student

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“The ICE project for me has been such a beneficial experience **(VALUE)**. 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. I am very grateful to the university staff members who mentioned it to me – it has definitely been worth it.” Student

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- **Friendship**
- **Commercial**
- **Skills**
- **Collaboration**
- **Value / benefit**

Participant Reflection

- **Love.....**
- **Framework**
- **VALUE – learning**
- **Metacognition**

Learning Process

- **Skills**
- **Commercial awareness**
- **Self awareness**

Learning Context

- **VALUE contribution**
 - **Friendship**
 - **Impact collaboration**
 - **Skills**
- **Holistic**
 - **General**
 - **Value collaboration**
 - **Further Prospects**
 - **Learning gain**

Reflection 2012 - 2016

Student

Impact

- Skills beyond their studies
- Metacognitive appreciation
- Value of networks
- Appreciation of positive disruption
- Change of mind-set (risk taking)
- Challenge-led learning benefits in career
- Awareness of opportunities (dreams)
- Better ENGAGEMENT (retention, employable, attainment)

Commercial

Impact

- Changed mind-set – what a university is for
 - changed branding strategy
 - exploring KTP
 - exploring research projects
- Inventive and exciting concepts and solutions
 - opportunities to explore new concepts (Nudge theory)
- Overwhelmed by new ideas (commercial awareness)
 - ideas were taken forward into the commercial sector
- Great design is a team approach –opens new perspectives
 - Resulted in recruiting fashion students for web design

University

Impact

- Brought people together (knowledge communities)
- Team of staff short listed for an international prize
- Opened up facilities (technical services)
- Snowballed into lots of other opportunities
- Benchmark statements (co-creation, IP, commercial awareness)
- Streamlined IP (two models)
- Changed mindset (entrepreneurial)
- Blueprint for innovation and learning (active)

Summary

- **Best practice models – interdisciplinary collaborations in HE**
- **Key challenges, levers/mechanisms and intuiotional barriers**
- **A blueprint – Challenge based learning**
- **Measurable Impact – students, commercial, university**

Thanks

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Stefan Gabriel

Royal Academy of Engineering

Q: What is a university for?

“Generate knowledge
for the good of
mankind”

Impact - output

- Power, E. J. (2018) Chapter 6: Embedding Interdisciplinary and Challenge led learning into the student experience: Hyams-Ssekasi, D and Cauldwell, E. Experiential learning for Entrepreneurship Theoretical and practical perspectives on enterprise education, Palgrave, UK. ISBN 978-3-319-90004-9
- Power, E.J., **Hazell, P and Braddock, H.** (2018) Knowledge co-creation connecting through interdisciplinary commercial/complex challenges. Teaching and Learning Conference: Co-creation 28th June 2018. Staffordshire University.
- Power, E.J. (2018) Exploring interdisciplinary challenge-led learning opportunities for knowledge co-creation. **HEA's Annual Conference 2018**, Teaching in the spotlight : Learning from global communities (Sector priorities) 3-5 July 2018 at Aston Conference Centre.
- Power, E.J. (2018) Challenge led learning - building interdisciplinary learning communities for impact. CHEAD seminar (invited speaker) Learning, Teaching and assessment: developing creative pedagogic practice and sympathetic organisational structure 3^{rs} May 2018, Wolverhampton School of Art. **(Guest Speaker)**.
- Almond K, Power J (2018) "Breaking the Rules in Pattern Cutting: An Interdisciplinary Approach to Promote Creativity in Pedagogy", **Art, Design and Communication in Higher Education**. 17 (1) 33-50.
- Power, J. and Handley, (2017) J. A best-practice model for integrating interdisciplinarity into the Higher Education student experience **"Studies in Higher Education"**.
- Power, E. J. (2016) 24 hour interdisciplinary Challenge, **Experiential Entrepreneurship Exercises Journal** - Enabling More Active Entrepreneurial Classrooms Through Sharing, Learning & Doing ISSN: 2374-4200 (online) Volume 1, page 70-75. Issue SI-ETC (special issue is a collaboration with "ETCToolkit" www.etctoolkit.org.uk). <http://launchideas.org/wp-content/uploads/2016/05/EEEJ-Issue-ETC-Special-Issue.pdf>
- Power, E. J. (2015) 24 hour interdisciplinary (Design) Challenge (QAA1,2,3,6), Enhancing the Curriculum (ETC) University of South Wales: **A Toolkit of Teaching Techniques Case Examples**: <http://www.etctoolkit.org.uk/science-technology-engineering-and-maths/materials/>
- Power, E. J. (Dec 2014) The 24 hour challenge: creating a multidiscipline environment for, design and entrepreneurship in engineering and design. Enhancing Employability through Enterprise Education: example of Good Practice in Higher education HEA case study. P22, In Owens, J. and Tibby, M (2014) Enhancing employability through enterprise education: Examples of good practice in higher education. **The Higher Education Academy UK**.
- Power, E.J. Promoting interdisciplinary collaboration through ICE and Honeypot – Academic Champion - **Royal Academy of Engineering** Visiting Professors Conference, Aston University, 19-20th Nov 2015. **(Invited speaker)**

References

- Design Council (Feb 2018) Designing in the public sector.
https://www.designcouncil.org.uk/sites/default/files/asset/document/Design_in_public_sector_evaluation_feb18.pdf
- Elsevier, (2015). A review of the UK's interdisciplinary research using a citation-based approach. HEFCE.
- **Leydesdorff (2007)** Does international collaboration yield a higher citation potential for US scientists publishing in highly visible interdisciplinary Journals?
- **Pan, Katrenko** (2015) Interdisciplinary research: How do 9 nations compare?
- RAE (2012) Educating engineers to drive the innovation economy, The Royal Academy of Engineering - www.raeng.org.uk/innovationeconomy
- Siraj K. K. and Azzah Al-Maskari (2018) Promoting Interdisciplinarity in Knowledge Generation and Problem Solving.
- **Wear (1999)** If interdisciplinary research is needed to solve critical problems, it seems logical that interdisciplinary research journals would be forthcoming.



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