Experiential Entrepreneurship Exercises Journal

Enabling More Active Entrepreneurial Classrooms
Through Sharing, Learning & Doing

Call for Articles

Experiential Entrepreneurship Exercises Journal (EEEJ), published quarterly, is a forum for the dissemination and exchange of innovative teaching exercises in the fields of entrepreneurship, creativity, innovation, and small business management. EEEJ is currently seeking original contributions that have not been published or are under consideration elsewhere.

The scope of all articles published in EEEJ is limited to experiential exercises, with maximum relevance to those teaching entrepreneurship, innovation, and small business management. The Journal appeals to a broad audience, so articles submitted should be written in such a manner that those outside of academia would be able to comprehend and appreciate the content of the material.

Format

All formatting requirements and author guidelines can be found at
http://launchideas.org/?page_id=2

Copyright

The copyright of published articles will belong to the publishers of EEEJ. Authors will be granted permission to reprint or otherwise use portions of their articles published in the Journal upon written request.

Review Process

All articles submitted to EEEJ will be double-blind reviewed. Authors will normally receive reviewers' comments and editor's publishing decision approximately 60 days after submission.

Submission

All submissions should be made at http://launchideas.org/?page_id=11.

All correspondence should be addressed to Doan Winkel at dwinkel@ilstu.edu.

Please visit our homepage at http://launchideas.org/.

This special issue is a collaboration with "ETCToolkit" www.etctoolkit.org.uk

The "Enhancing the Curriculum (ETC) Toolkit" was developed as a free resource to support educators, seeking to develop skills and knowledge in their learners through their teaching techniques and pedagogical approach.

Funded UK Higher Education Funding Council for Wales (HEFCW) ETCToolkit was researched, designed and delivered by University of South Wales to establish a legacy of the work undertaken by the Enterprise Support Programme.

The Toolkit brings together a bank of readily available resources to offer inspiration and support to staff as they look to use new approaches within the curriculum to extend subject knowledge, develop confidence and build skills within learners.

Building upon the UK Quality Assurance Agency (QAA) 'Subject Benchmarking Statements', the ETC Toolkit identifies enterprise skills that can be developed within each subject discipline. The Subject Benchmarks provided a universal structure, which could be applied to all HE disciplines, creating a method of linking the toolkit materials with specific and tailored QAA Subject Guidance on skill development.

Users are then guided to a range of "tried and tested" teaching technique guides that support the development of these skills. The guides are complemented by real-life subject-based case examples. Both the "how to guides" and the "case examples" are classified against the QAA "Enterprise and Entrepreneurship: Guidance for Higher Education Providers" (2012) http://www.qaa.ac.uk/en/Publications/Documents/enterprise-entrepreneurship-guidance.pdf to highlight which of the 7 enterprise/entrepreneurship themes they support. The themes are

1. Creativity and Innovation
2. Opportunity recognition, creation and evaluation
3. Decision making supported by critical analysis and judgement
4. Implementation of ideas through leadership and management
5. Reflection and Action
6. Interpersonal Skills
7. Communication and Strategy Skill

In order to ensure that this tool was beneficial to the sector, it has been "built by educators, for educators" and therefore submissions have been sought from educators in order to showcase genuine practice. Since launching in Sept 2015, the toolkit now has over 200,000 words, across over 200 resources, contributed by over 80 expert contributors. Seeking support and input from the sector was an approach that afforded an opportunity to link with the EEEJ and this Special Edition has been created. We would like to thank the EEEJ Board, and all our contributors for supporting ETCToolkit in its development, and we invite you to enjoy this Special Issue, and welcome your future contributions to EEEJ and @ETCtoolkit in the future.

Thank you

Emma Forouzan, ETC Project Manager, University of South Wales
Alison Price, Enterprise Evolution

For submissions to @ETCToolkit, please see the simple template and guidance:
http://www.etctoolkit.org.uk/contact/ or email hello@etctoolkit.org.uk

TABLE OF CONTENTS

1

Biotechnology & Business Module

Dr Zoë Prytaherch
Lecturer & Degree Scheme Co-Ordinator for Biotechnology
School of Biosciences, Cardiff University

Objective:

- Provide students with the opportunity to generate a business idea/product and identify opportunities/market needs within the Biotechnology field

- Provide students with the opportunity & guidance to test & create the feasibility of their product through the creation of a feasibility report

- Enable students to reflect on their own learning and use that to identify future learning needs/opportunities

- Provide students with ample opportunity to develop group working, communication and independent learning skills

ETC Toolkit Case Example Template

QAA Enterprise Themes: (please highlight relevant themes)	Group:	Learning Environment:
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	• Small group working (4-6 in a team) Max. total group size (based on current time allocated to class) 30. • Individual task	• Presentation Space • Carousel tables (small group working)

Case Example Title: Biotechnology & Business Module		
Subject: Biomedical Science & Bioscience	Course: Biotechnology, Biomedical & Bioscience	Year: 2

Introduction:

The module is based around students working in groups to form 'company teams' which collaboratively generated a (fictional, use of pseudo-science allowed) biotechnology product (e.g. medical device, new therapeutic etc). The product should answer a real-world biotechnology problem and/or market need, they then tested its business feasibility. Students receive 3 hours contact time per week, over 12 weeks; learning was further supported by directed and self-directed research and tasks. In order to form the companies students undertook a Belbin role audit and were ranked for their suitability for each role; from this, module leaders chose 'company leaders' (Highest Co-ordinator scores). Each company leader received their Belbin role audit back and selected their team members based on the 'skills'/roles they felt were most needed in their company.

The module contains numerous small tasks throughout (formative/summative, written/presentation and individual/group work) and culminates in a group Dragons' Den style pitch for investment and a group Feasibility Report for their product.

Activity:

The creation of the companies is done within the first week and when each student is selected for a company they have to give an elevator pitch on who they are, what are their strengths and what can they bring to the company. We also do some icebreaker games with the class to break down any barriers between the students both within a company and within the class. Once the companies are formed it is up to them to decide what real-world and/or market-need they will meet with their product. The three main fields of biotech are medical devices, pharmaceuticals and agribiotech, we guide the students (if required) to ensure that each of these fields are represented (as long as we have 3 companies).

The weekly sessions are designed to guide the students through the process of creating the feasibility report and are broken down into a 1-hour session early in the week and a 2-hour session later in the week. The 1hr sessions generally involve some content delivery (short lecture) by a lecturer and the rest of the time is a company development workshop based on the lecture content (for example, market analysis, IP, finance). The 2-hour sessions will contain a talk by an external speaker (someone who works either for a biotech company or in a related industry e.g. patent lawyer) and student presentations or company development workshops. Throughout the module students will come across barriers to their product (e.g. a saturated market or key patents held by other companies) and they have to problem solve and navigate these in order to keep their product viable.

Students will give a total of 6 presentations throughout the module (not counting the Dragons' Den Pitch), half will be formative and the rest summative, they are also broken down so that the students start with a group presentation then do a pair presentation, then an individual presentation before returning to a group presentation – allowing them to get sufficient practice at presenting and build up to an individual presentation. The student presentations are all based around a common theme (e.g. Biotech Ethical Issues) but the companies are asked to make their presentations relevant to their company. This way a student who is involved with a pharmaceutical based company can still learn about the subtle differences that would apply to the other biotechnology companies' fields (i.e. Peer-learning). All elements of group work are

subject to self- and peer-assessment. Apart from the individual presentation (summative) individuals also have a chance to display their own proficiency through weekly reflective logs (7 formative and 3 summative) and a final reflective log (summative).

The Dragons' Den panel is made up from some of the expert external speakers as well as two members of the module team (including the module leader). The students pitch is 20minutes long and they are asked questions at the end by the panel. The presence of the external speakers provide a critical real-world eye on the actual business feasibility side of the product both in terms of questions to the company and feedback on the pitch to the staff when considering the marks. We actually make an event of this part of the assessment asking students to dress smart for the occasion and have a small reception (with the Dragons) afterwards. The feasibility report is quite a substantial piece of work that they have been slowly creating throughout the module and is usually in the region of 40-60 pages in length.

Impact & Skills Developed:

Students gain a great deal from this 100% coursework based module. The module is very student-centred with minimal content given by the lecturer/s and the external speakers, developing great independence in the students. Having to work in a group for a whole module (12 weeks) poses a lot of challenges for the students, but also enables them to learn how to work effectively in a group (as opposed to being in a group for a couple of weeks to undertake one assignment) and how to communicate well. Giving the students repeated opportunities to give presentations in class is an excellent way to enable them to develop good presentation and communication skills. In fact after the first presentation I also inform them that from this point on they are no longer allowed to use notes during their presentations – this is met with horror initially but this simple act has an enormous impact on increasing the quality of the presentations. Students also appreciate the opportunity to 'work up to' an individual presentation, which otherwise they may not get the opportunity to do until their placement year or even their final year dissertation presentation. Throughout the module the students get the opportunity to be creative and innovative, as well as spot opportunities, critically analyse, problem solve and make decisions as they develop their product and their company (including name, logo and product design).

Learner outcomes:

Here are some comments from past students about the module:

"During this module **self-assessment** has been import and I have learnt about myself through **reflection** in order to **improve my skills & learning processes** more efficiently."

"I feel like this course has taught me **valuable lessons** in how to not only **work well in a team**, but how to best **resolve a conflict situation**"

"The **skill of presenting & speaking** has helped me throughout the term whilst taking part in **assessment days for companies,** where the final activity for both involved having to **present to the interviewers**. I believe this [module] provided me with a **strong advantage** over the other candidates and this **purely was due to this course**."

"Constant practice of **public speaking & presenting** also allowed me to work on my skills and **see the improvements I was making** first hand."

"**Working in a team** is clearly an important skill for nearly **any future job** and in normal life, as it is the skills needed for effective interaction with others and for being **productive and not disruptive** when working with others."

"The teaching process whereby we moved from doing whole group presentations to individual presentations, helped me **build up my confidence at presenting and my general presentations skills**."

"This [module] was **far more effective for long-term understanding and information storage** than hour lectures and cramming for exams as for nearly all my other modules."

"This module is **more useful for preparing me for an actual career**."

"I especially enjoyed **applying** some of the **developed skills** during the course."

"Having **applied the entrepreneurial skills** throughout this module, I now feel that I can easily **identify opportunities** within the field of biosciences and making **informed decisions** regarding the applicability of such opportunities."

"I feel **I have learned** to approach problems by immediately **developing a strategy** to tackle them."

"I found the whole **process of developing** these [enterprise] **skills, attributes and behaviours extremely rewarding** as I was **actively improving myself** in terms of **professional and personal development**."

"The **reflective writing** we had to do proved to be extremely useful and has helped me develop both **professionally and personally**."

"**It is ok not to always be perfect** or the best, even as a group leader. On occasion, it **can be useful as a leader to show your team that everyone can make mistakes** and then **use them to learn from** and act sensibly to this failure"

Resources:
- Powerpoint (or similar)
- Portfolio worksheets
- External Speakers

Pictures or images:

Total Module Marks 100%

(G) = Group assessed
(I) = Individually assessed
Red % = % of total available module marks
Blue % = component %

Overall group marks modulated by peer assessment outcomes resulting in individual marks

Feasibility Report (G) 25%

Strategy
25% of 25% = 6.25%

Market Analysis
15% of 25% = 3.75%

Company Definition
15% of 25% = 3.75%

Product Definition
15% of 25% = 3.75%

Funding & Finance
15% of 25% = 3.75%

Intellectual Property
15% of 25% = 3.75%

In addition to the specific criteria, the above components of the feasibility report task will be assessed according to their presentation and critical approach. See feasibility report task marking criteria for in depth description.

Presentation (G) 25%

Content
40% of 25% = 10%

Delivery
20% of 25% = 5%

Visual Aids
20% of 25% = 5%

Creativity and Persuasion
20% of 25% = 5%

In addition to the specific criteria, the above components of the presentation task will be assessed according to their presentation and critical approach. See presentation task marking criteria for in depth description.

Research Tasks (G&I) 20%

Research Tasks (G&I)
100% of 20% = 20%

Research tasks will be performed either as a group (company) or individually. Details will be given in class. See research task marking criteria for in depth description.

Reflective Logs (I) 30%

Personal Logs (I)
67% of 30% = 20%

Final Reflective Log (I)
33% of 30% = 10%

Both reflective task components are assessed by five equally weighted criteria: information; critical analysis; self-awareness; evidence of learning; linking of theory to practice. See reflective tasks marking criteria for in depth description.

7

References:

- **Adams & Sparrow (2008). Enterprise for Life Scientists: Developing Innovation and Entrepreneurship in the Biosciences.** Scion Publishing Ltd. Bloxham, UK.

Contact details: Dr Zoë Prytherch, Lecturer & Degree Scheme Co-Ordinator for Biotechnology, School of Biosciences, Cardiff University.

Mini-Marketplace Networking

Dr. Andrew Hirst

Sheffield Hallam University

Objective:

- Provide an appreciation of project subcontracting to Level 6 students
- Provide level 4 students with a safe environment for 'real world' business development experience
- The task provides an enjoyable and engaging opportunity for peer learning and support
- Enhance employability skills

Introduction:

This case study describes a speed networking event that enables 1st years Computing and Business students to engage with Level 6 students in 'live' projects.

Level 4 student teams compete for business opportunities by attending a networking fair and engagement with level 6 students. The task is supported by in-class activities, but the emphasis is on learning by doing. Students are encouraged to reflect on the experience as part of the assessment strategy.

Activity:

Participation at the event forms part of both year group's module assessment. At the beginning of the academic year, final year student teams identify a year long project opportunity. They meet the client and develop a project to deliver to them. In the 2nd semester, Level 4 student teams are introduced to key concepts of business development and prepare to engage with Level 6 students at the speed networking event. In preparation for the event, Level 6 groups prepare project briefs. These briefs create a 'mini' market place for Level 4 groups to segment and target based on their own team goals. Typically, the students work in teams of four. After the Speed Networking event the teams from level 4 and 6 work together to complete their part of the project.

Specifically, students at level 4 prepare by developing an understanding of the start up business cycle. Such as team formation, start up strategy and product/ service development. Students are given prior knowledge of potential projects, which helps them target their pitch and brand. They learn to create rudimentary business artefacts such as a brand name;

business cards and a sales pitch (see photo attachment). Students were also guided on networking skills, such as body language and professionalism.

Students at Level 6 prepare by developing a project plan with their project client. During the delivery phase of the project. They identify an outsourcing opportunity and produce a project brief, roughly 1 month in advance of the event. A pro-forma is provided to create a consistent look and feel to each teams brief, so that level 4 students can easily assess the merits of each potential project brief (see attachment). Around 20 projects are created by the cohort, which roughly matches the number of teams at level 4. The supply of projects can be increased by Level 6 students creating more than 1 outsourcing project. Projects range from simple tasks, such as logo design to more complex projects, such as research, web development, and media production.

The project clients are typically from external organisations, such as charities and local businesses, but can be internal clients, such as, as tutors. Project size for level 6 students should be complex enough too ensure that the challenge provides adequate work for each team member. The sub task project for Level 4 can be relatively simple. It is more essential to engender confidence and good team work at Level 4.

The competitive nature of the event means that teams are not guaranteed to get what they want. Success is often determined by the quality of planning carried out in advance of the fair, or by the professionalism of the team on the day.

Impact:

The event is very popular and student engagement in the event is close to 100%, with around 150 participants. While conducting the task, students have very little time to become distracted, which means that they receive the full benefit of the session.

Student feedback comments are also very positive:

Verbal and scored [Feedback](#)

- "*Very interesting to participate in quick pitches, improved communication skills, which was good. Wouldn't change a thing*"
- "*I think this is an excellent and well executed idea and is fundamental to the development of both sets of students. Excellent event overall and well organised*"
- "*Really good idea to broaden networks between students towards working together, co-working together*"
- "*Good set up/ layout within the rooms*"
- "*Really enjoyed it. Good opportunity to network*"
- "*Very good way to communicate with first year students.*"
- '*It was fun and provided an excellent opportunity to practice networking skills in a professional context*"
- "*I would recommend organising it again, as it brings confidence out in people*"

National Student Survey feedback comments single out the modules as a key benefit from the course.

"I really enjoy this course, as it's stimulating and pushes my boundaries. I have noticed vast improvements in my abilities, in terms of communication, presenting and teamwork. All staff are very helpful in terms of problem solving and it's nice to know that the support is there when needed. I enjoy the course content and how interactive the course is." NSS 2015

"The course really targets employability and it really appeals to employers that we gain hands-on business skills." NSS 2015

Learner outcomes:

Students learn the benefit of planning and preparation. They also understand that it is difficult to communicate in a time pressured environment. An interesting side effect of the event, is that students in level 4 can benefit from a peer mentoring experience; learn about the course and how to be successful at gaining a placement. The event is also a novel learning experience and adds a new dimension to the university experience. Final year students benefit from the reflection of 'how they used to be', which adds to their confidence.

Resources:

- Room design and layout is important (see attachment)
- Briefing Notes
- Working with clients briefing

Contact details: Dr Andrew Hirst, Teaching Fellow in Work Based Learning, Sheffield Hallam University
https://www.linkedin.com/in/drandrewhirst

Revealing the Entrepreneurial Potential in Arts students

Dr Peter McLuskie
Lecturer in Enterprise & Entrepreneurship
Coventry University

Objective:

- The learner will discover that they have entrepreneurial abilities and potential
- The learner will get an insight into the world of 'everyday' entrepreneurship
- The learner will become more alert to opportunity recognition
- This is a useful session for the reluctant entrepreneur – those who might think it's not for them, particularly arts students.

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. Creativity and Innovation 2. **Opportunity recognition, creation and evaluation** 3. **Decision making supported by critical analysis and judgement** 4. Implementation of ideas through leadership and management 5. **Reflection and Action** 6. Interpersonal Skills 7. **Communication and Strategy Skill**	• Small group working (3 - 4 in a group) • Individual task supported by the group • Individual tasks to go away with	• Presentation Space • Carousel tables (small group working)
Title: Revealing the Entrepreneurial Potential in Arts students		
Subject: School of Art & Design	**Course: MA in Contemporary Arts; Design & Visual Arts year 3**	**Year: 3**
Introduction The focus of this 2 hr session is around a hypothetical case study told in an engaging story-like fashion and featuring several of the students in your class. It is told by the session leader and is followed by group discussion and analysis of their colleagues' imagined journey which leads		

them to recognise and identify with the enterprising actions and activities. Particularly aimed at those students who do not identify with entrepreneurship.

Activity:
This is a two hour session and it will begin abruptly with the hypothetical case study. The idea is to pick on a student (say, John), and announce in 5 years' time that John will run a successful arts consultancy. This will raise some surprised gasps and giggles which will immediately engage students' attention. The narrative that unfolds will demonstrate: how John started out in one direction but discovered, and followed, opportunities elsewhere, how he took a few risks, demonstrated resilience in the face of setbacks and how he turned to his networks (other students in the room who come into the story) to help him fill skills gaps and capacity problems.

The case study is pre prepared and can be tailored to the cohort. It should be approximately 10 mins long and the story should be plausible – not extraordinary – a case of everyday entrepreneurship. It will be fun as it draws the students into a fictional story.

Following this there is a 30 min breakout to discuss in groups of 3 or 4 to analyse John's journey: how did he do it, the key factors for success, would you have done it differently, could you have done the same journey, have you encountered any similar situations to John, if so what did you do? Students post thoughts on post-its.

The management of feedback here is important because the students, who are reluctant entrepreneurs, should explain John's behaviour as entrepreneurial. However, the session is to not only identity the behaviour as entrepreneurial but to get the students to reflect on their experiences in similar situations and imagine how they would respond. The idea is for the students to see enterprise as tangible, every day (familiar even), as a series of minor steps and small scale risks and about trying things out to see what happens.

The upshot of the feedback session is that the students 'discover' the entrepreneurial mind-set for themselves (they have not listened to an expert talk about it for 50 mins), and that they identify with it as something they can do themselves.

Here is the Case Study I use for Arts students. Some practice and rehearsal is needed to make the story fluent, fun and engaging

Case Study Instructions
(Modify/creative your own)

Start by picking on a likely student and ask their name – they reply 'John' for example

Your script to the class:

In 5 years' time John will be running a successful technical consultancy for the art world providing a range of services, including haulage, framing, hanging and conservation.

How did he get there? Well, 1 year ago, as a 2nd year student he attended the 3rd year Arts degree show. Here he began chatting with a few people including the curator of the Hebert Art Gallery, Jeanette Smith. They got on well: they talked about the art, the exhibition, the Herbert programme and discovered a mutual interest in (ask John about his interests i.e. baking). They got on so well that a week later John decided to pop into the gallery to ask Jeanette if there was any chance he might get an exhibition at the gallery. After Jeanette stopped laughing she did say, 'but seriously, we do have an immediate opportunity for work experience'. The gallery was busy installing an exhibition by Douglas Rainford and was a bit behind schedule, could John help? Now John had planned to spend the next week finishing off assignments, which he was behind on, and there had been a baking festival in Northampton that he wanted to go to.

John took the leap and spent the next two weeks installing the exhibition at the gallery. At the same time he was getting to know Douglas, they discussed art, rail travel (Douglas was coming up from London most days) and discovered a mutual interest in (ask John about his other interests, i.e. cycling).

John said goodbye to Douglas at the private view a week later but kept in touch via twitter. John spent the rest of the summer, baking and cycling and then returning to university for his final year. He pursued his dream of getting an exhibition and continued approaching galleries, bars and cafés, but without much luck.

8 months later, round about the time of his degree show, John is invited to Douglas ' private view at the exclusive Charlie Smith Gallery in London, an independent gallery featuring some of the brightest young things. John is a bit torn, he is busy in Coventry, and the London train fare will be a few quid. But it seems like a good opportunity so he accepts the invite. The private view is full of London art glitterati and he chats to and swaps cards with several artists and gallerists. Douglas introduces him to Charlie Smith, the owner of the gallery they are standing in. They chat about the art and about Douglas and discover their mutual interest in (ask John) Silent Cinema. It transpires that Charlie is touring an exhibition through Europe over the summer and he is looking for technical help with the show, would John be interested? Well John had planned to go travelling that summer with some mates, but decided this would be more interesting.

So John started working freelance for the Charlie Smith gallery as a gallery technician and for the next two years was meeting other artists, other gallerists, he was speaking to specialist haulage companies and shipping agents. At the same time he was making ends meet working in a bar and finding other bits of casual work. But he was getting more and more offers from other galleries to help out, to tour exhibitions, moving from assistant roles to coordination roles. He was moving onwards and upwards. 3 years later there was a public tender to manage a European touring exhibition of medieval Masters for the National Gallery. This was John's big opportunity to move on to some very exciting work. But oh dear, the tender says the applicant must have arts conversation expertise. Them john remembers, (pick on a class mate) Charlotte went onto an MA in Arts Conservation at The University of Norwich. John picked up the phone:

'Hi Charlotte, how are you?'

10 minutes later Charlotte is on board.

John put in the proposal....he didn't get it. Main reason, he didn't have experience in bid writing.

But two months later a similar tender from the V&A was announced to tour an exhibition. This time John approached Jeanette, remember, the curator at the Herbert, she had lots of experience in assessing bids and she joined them in putting together a proposal. This time they we're successful.

Finally
The session finishes with 10-15mins reflection where students have to pledge to do something entrepreneurial that week. It could be something they had been thinking about for a while but had made excuses not to do it. Others may need a little help and guidance from peers about what they might do, so reflection and pledge setting should be discussed in groups. The follow up session (next week) will be when more detailed reflection can emerge and when students can get a measure of where they might be regarding their own development in terms of entrepreneurship and the enterprising mind-set.

Impact:(reflections; learner feedback)
There are certainly light bulb moments where students, who are often antithetical to the notion of entrepreneurship, suddenly recognise it as more than an economic activity and see it as something they could do in their development as artists. It also throws open discussions about making your own market as an artist and creative person and discussions ensue about how artists such as Damien Hirst might be considered to be entrepreneurial.

Students enjoy the case study and seem to feel that the hypothetical journey is close to their own aspirations as artists and fits with their view of themselves as persuing a portfolio career.

Students often come up with their own examples of similar situations outlined in the case study which they can now identify as moments of entrepreneurship

Learner outcomes :

Students engage with entrepreneurial concepts and behaviours and begin to feel that they could build this into their identity as artists and creatives.
The students see entrepreneurship not as something 'special' but as something we engage in as part of our everyday lives - everyday entrepreneurship.
Students become more alert to opportunities as a result of listening to the case study and hearing other students' stories and examples.

Resources:

- Post-its
- Flip Chart
- Pens
- I have produced a context paper for this session which provides useful insights and a theoretical perspective into how arts and creative students are 'naturally' entrepreneurial

http://drpetermcluskie.blogspot.co.uk/2015/09/arts-students-and-entrepreneurship.html

References:

I have produced a context paper for this session which provides useful insights and a theoretical perspective into how arts and creative students are 'naturally' entrepreneurial

http://drpetermcluskie.blogspot.co.uk/2015/09/arts-students-and-entrepreneurship.html

Contact details: Dr Peter McLuskie, Lecturer in Enterprise & Entrepreneurship, Coventry University

Building Contacts and Widening Circles

Dr Peter McLuskie
Lecturer in Enterprise & Entrepreneurship
Coventry University

Objective:

- To get students engaged in networking

- To get students to understand what networking is

- To get students to see the value of networking

- To get students to acquire networking skills and techniques

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. Creativity and Innovation 2. **Opportunity recognition, creation and evaluation** 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. **Interpersonal Skills** 7. **Communication and Strategy Skill**	• Small group working teams of 3/4	• Presentation Space • tables for small group working
Case Example Title: Building Contacts and Widening Circles		
Subject: School of Art & Design	**Course: several, including: BA Photography year 2nd; MA Contemporary Arts; Design & Visual Arts year 3**	**Year: 2, 3 & Post Grad**
Introduction :(short paragraph/ 2 -3 sentence) It goes without saying that networking is a really important activity. Yet students are often reluctant to engage in relationships beyond their immediate circle. They have powerful aversions to networking partly based upon fears and misconceptions about what it is: selling (it's all		

about selling yourself and pitching), that it is about being an extrovert (sociable and bubbly), that they as students have nothing to offer ('who would want to talk to me?'), that it seems pointless (students will have stories about going to events collecting business cards and nothing ever happening). They will have a multitude of good reasons why they can't and shouldn't do it. The challenge is to turn round these misconceptions and show students that networking is valuable, doable and indeed enjoyable.

Activity:
This works best as a 3 hour session but can be cut back if necessary. A group of 25 students would work best
     1. Introductions: 10mins
     2. Why networking? (talk and reflections) 30 mins
     3. What does a good networker look like task (45 mins)
     4. Principals of networks and networking: theory; 3 steps of networking; body language; listening skills; second degree networks - see slides. This element is delivered as a 30 mins lecture but with questions or short tasks in groups to break it up - for example: think of 5 ways to help create rapport with someone you are talking to.
     5. Practical role play and reflection (60mins)

Start with introductions: I go round the room and introduce myself individually and shake the students' hand. This is generally an uncomfortable experience and results in giggles and raised eyebrows. But it sets up the tone and expectations and becomes the basis for later reflections around personalisation and building rapport

The second part of the session continues with the value of networks and networking. This should be interactive, talking to students about their networks, how they found opportunities, but also using statistics about how many jobs are filled via networks rather than open advertising. This part of the session functions as a warm up and should get students feeling positive about networking.

The third part of the session is to get the misconception and fears about networking out into the open and to introduce different versions of what networking might be. This can't be done by asking students about their fears and why they don't currently engage in networking: this is sensitive and students may feel embarrassed talking about it. This is a task based session: get students into groups and ask them to draw a 'good' networker. This can be groups of 3/4 who will draw a picture of a good networker on Flip chart paper. This will bring out some of the negative misconceptions about it: it is likely that students will draw someone who is extroverted, experienced, knowledgeable, valuable, confident, good at pitching – all the things they may not be good at. This is your opportunity to demonstrate that a good networker is someone who is good at listening, (not talking), it is someone who is genuine and open (rather than focussed on their own agenda) and that it is about building trust and rapport leading to a lasting relationship. It's an opportunity to discuss their value as students – which they are very anxious about as they have little work experience. Here a discussion about their value in terms of innovation, fresh thinking, new ways of doing things is important.

The fourth activity provides students with some theoretical and practical information and reflection on the role of networks and personal relationships and can be delivered as a lecture with some elements of interaction and/or practical element. For example, to extend it you could introduce a listening activity where individuals have to listen to partners and paraphrase their dialogue. This session is about reinforcing some of the thinking that has come out of previous sessions and to provide techniques and strategies for undertaking networking activities: for example how to prepare for an event, how to follow up, what kind of events and opportunities to target.

The final session involves practical activity. The students will network amongst themselves. They will perform using the techniques discussed in previous sessions, including the handshake, listening, using small talk, body language, how to start/join a conversation, how to exit a conversation, etc.

The assignment is:

- Find a person in the room and introduce yourself: impress upon them your integrity and openness
- Take leave to break into a group of two people

Reflect on what you did and report back to the group on:
What went well
What didn't go well

Impact:(reflections; learner feedback)
During the initial discussion about the importance of networks and networking I usually draw out at least one example from the students where they have gained an opportunity as a result of someone they know and it's important to fish for these examples early on as it lends credibility to the activity.

There can be extremes of response to the practical element: some find it fun others find it awkward and embarrassing. However, I think either way, they find it memorable and I never found a student who wished they hadn't done it

Often students make a new connection with someone in the room which they hadn't realised before which leads to a relationship and further collaborations. Students recognise that these connections happen as a result of a different approach to engaging with someone: i.e. listening to the other person, finding out what their needs/interests/goals are.

Students usually say they should be doing more networking and often gives reason why - as outlined above. This session gives them a boost and the push they need to start making it happen - there is often a light bulb moment where the students realise they can develop contacts and improve their chances of accessing opportunities.

As a follow up, you can set students a task of going to an event and making contacts or reviewing their own contacts and reengaging with them otherwise the stand alone session may not have any lasting impact.

A group of students who know one another is not as good as a mixed group where they might be introducing themselves to strangers. However, the practical element can be modified by asking students to find out something new about their colleagues, or to find out a shared interest they didn't know they had with a colleague which will help build rapport.

Learner outcomes :

Ultimately students' misconceptions about networking are reversed: they understand that networking is a skill that they can practice and develop; they learn the importance of networks and collaboration, they learn that networking and professionalism is a 'performance' which they can adopt when necessary – in this context it can be useful to talk about wearing different hats as they often think of themselves as 'students' which can carry a lot of negative connotations. Students usually feel more comfortable with the idea of networking – they thought it was all about sales and the pitch but find it is actually something they could do. Some students struggle with the handshake, they find it very unusual but with a bit of practice and shift in attitude, do get it.

The session links into opportunity recognition, creation and evaluation as students learn techniques to help discover the interests, needs and goals of other people who could be potential collaborators or customers. They also develop interpersonal skills and acquire key techniques for developing rapport with others. Finally, students learn how to plan and prepare for networking events and to use communication tools such as LinkedIn to help manage relationships.

Resources:
- My slides on can be found at http://www.slideshare.net/PeterMcLuskie/making-contacts-and-building-relationships
- Post-its
- Flip Chart
- Pens

Pictures or images:
This triangle represents the principals of networks and developing relationships and is cited in Jan Vermeiren & Bert Verdonck, 2011

GIVE

CONNECT

ASK THANK
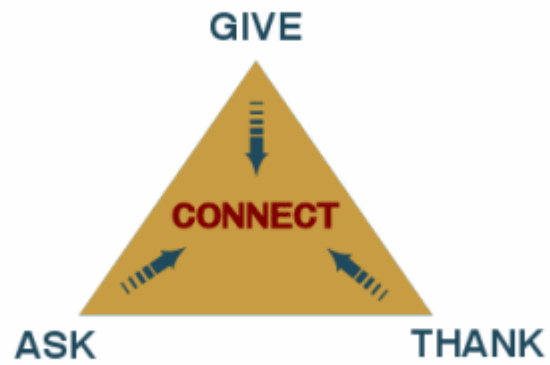
References:
- Endless Referrals, Bob Burg, Third Edition, 2005
- How to Really use LinkedIn, Jan Vermeiren & Bert Verdonck, 2011

Contact details: Dr Peter McLuskie, Lecturer in Enterprise & Entrepreneurship, Coventry University

Networking Connections

Jon Powell

Enterprise Team Manager, EEUK Board Member

Objective:

- An icebreaker (25 minutes) for a module or great background activity for a networking event
- To ensure the group engages in networking activities
- To introduce the importance of physical networking and hints and tips on how to go about it

Introduction:

A fun and interactive session that encourages networking which can be underpinned by theory and practical advice and support on how to improve physical networking. Each participant is given a card from a standard 52 deck. The participants keep their card for the duration of the game. Initially they find someone to pair up with to form a starting hand. The pair of participants then queue to visit the dealer who deals a Texas Hold'em hand and each participant is awarded points based upon the final hand obtained. Participants then have to find another partner to form a new starting hand and join the back of the queue. The gamification of networking encourages participants to meet as many people as possible and look to identify where they have commonality that could lead to mutual value. Each relationship is not equal as suits could represent sectors, face value could represent job roles. Yet sometimes cards that do not seem to have any strong connection can lead to a useful networking connection (and score in the game). The individual with the top score will win a prize; this is not always the person who made the most connections although playing as many scoring hands as possible (putting in the effort) obviously helps. Successful players are therefore selective in who they form a starting hand with. Through playing the game and talking whilst queuing to see the dealer, participants do engage in real networking as the conversation inevitable moves away from just game participation.

After a winner has been announced the sessions can be underpinned by introducing theory or practical tips.

Activity:

This session works well as an icebreaker at the beginning of a new module or extracurricular enterprise intervention or equally well at a formal networking event. This has been used with local Chamber of Commerce organisations, UGs, PGs and staff with excellent results. Please note a basic understanding of Texas Hold'em poker and hand dynamics does add

value to the participant's experience. If the educator is not confident then it is likely a student or member of the group has the necessary knowledge to help.

Resources:

- [Introduction handout](#)
- [Hand guide poster](#)
- [Score sheet](#)
- Standard deck(s) of cards

How can you create value from freely available resources?

Professor David Rae
Dean of Research & Knowledge Exchange
Bishop Grosseteste University, Lincoln
david.rae@bishopg.ac.uk

Objective:

- This activity aims to develop learners' appreciation and use of:
- Ways of creating value by creative thinking
- Opportunity recognition and development
- The potential applications of freely available resources of all kinds

ETC Toolkit Case Example Template

QAA Enterprise Themes: (please highlight relevant themes)	Group:	Learning Environment:
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	• Small group working (4-6 in a team) • Individual task • Large Group • Any	• Lecture theatre • Presentation Space • Carousel tables (small group working) • Any • Outside • Special
Case Example Title: How can you create value from freely available resources?		
Subject: Creating value	**Course: Entrepreneurial opportunities**	**Year: 2015**
Introduction: There is an abundant supply of free-to-use resources. These include tangible resources such as materials and products. Intangible resources include knowledge, social contacts, information and data. Financial resources are an important intangible resource. These can be used in new ways to meet people's needs and to create new sources of value. Note that there are multiple forms of value creation – financial, economic, social, cultural, environmental, aesthetic. This activity connects with both the Opportunity-Centred Entrepreneurship approach and with Effectual Entrepreneurship.		

Task:
How can you use one or more of these freely available resources to provide an innovative product, service or experience which creates value for its users?

Activity - group process:

1. Identify by listing or brainstorming all the 'freely available resources' you can think of. These must be resources you can use for free, without being challenged or acting illegally or irresponsibly. They may include physical, virtual, human, financial and knowledge resources, for example.

2. How can you combine selected free resources to provide products, services or experiences which create new value? Aim to identify at least 3 innovative combinations which could solve a problem, meet a need or provide users with a new product or service.

3. Select the best option where you think there is an opportunity to create new value. Who will the innovation be of value to? Whose problem does it solve?

4. What forms of value are you creating (specify from the list: financial, economic, social, cultural, environmental, aesthetic).

5. How can you 'make it happen' to implement the innovation?

6. Communicate your idea to the group and others as effectively you can, using currently available resources.

Impact:
The activity helped us to generate ideas based on the resources we had available. It forced us to look for innovative applications of these which people would actually use. We realised that you could find 'free' resources and create new applications from them. This can also reduce waste by recycling resources.

Learner outcomes :

- Appreciating that there are many resources 'out there' freely available which can be of value to others if viewed in new ways
- Creative thinking and applied innovation
- Looking at problems and opportunities from the users' perspectives
- Collaborative problem-solving

- Contributing to environmentally sustainable entrepreneurship
- Understanding that you can get started for free.

Resources:
- Post-its or similar sticky pads
- Flipchart or whiteboard
- Pens

Pictures or images: If you have any pictures, diagrams or images that you feel would enhance the case study please attach them to your case study submission.

References:
- Key authors Dr David Rae
- Books 'Opportunity-Centred Entrepreneurship'
- Web -sites: http://www.palgrave.com/companion/Rae-Entrepreneurship/

Contact details: Professor David Rae, Dean of Research & Knowledge Exchange, Bishop Grosseteste University, Lincoln
David.rae@bishopg.ac.uk

HOME: The Charity Shop Project

Mike Corcoran
m.a.corcoran@outlook.com

Objective:

- To provide creative industries students with a real-world context in which to apply their skills.
- To provide students with experience of operating within a high pressure environment.
- To provide students with experience of managing risk, uncertainty, and being responsive to changing parameters.
- To provide students with experience of delivering a project according to strict time and budgetary constraints.
- To provide students with experience of managing a project, from inception to completion.
- To provide opportunities for students to develop their communication and interpersonal skills through working with a variety of stakeholders.
- To support the University's community obligations through giving support to a local charity.

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. Creativity and Innovation 2. Opportunity Recognition, Creation and Evaluation 3. Decision Making Supported by Critical Analysis and Judgement 4. Implementation of Ideas through Leadership and Management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill.	• *Small group working*	• *Special*
Case Example Title: HOME: The Charity Shop Project		
Subject: Art and Design	**Course:** MA Design Practice	**Year:** 2013
Introduction: 'HOME' saw two students studying towards an MA in design practice gain invaluable industry experience, develop their professional skills and networks in a challenging and changeable environment, and put their academic theories into practice in a real world context. It saw		

numerous Art and Design students gain experience of working in, exhibiting and selling art, many for the very first time, and it saw a North Wales charity receive a huge boost from the creativity, energy and expertise of students.

This project was initiated as a collaboration between various departments at Glyndwr University, when an opportunity arose to offer an opportunity to students to develop their enterprise and entrepreneurial skills and awareness, and to support a valuable local charity in the process.

NE Wales based charity 'Save the Family' managed a shop (based approximately 12 miles from the main University campus in Mold, NE Wales) which was struggling to turn a profit, threatened with immanent closure, and the charity hoped that the expertise of students from the University may be able to help.

It was decided that students studying towards an MA in Design Practice would be good candidates for the collaboration, and furthermore, it was known that students from this programme were actively seeking real-world projects to engage with.

With such a large proportion of art, media and design students going on to work in a freelance capacity upon graduation, skills in enterprise and entrepreneurship are essential to their future success, and so all are encouraged to engage in enterprising projects in a variety of ways. This project had the potential to offer students a holistic real-world context in which to apply their academically developed skills, and fit within the existing structure of their Masters programme through the optional modules available (students on this programme are obliged to engage in real-world practice of some shape or form, on which they are assessed).

The project was initiated by way of an informal meeting between the students and key University staff, and all subsequent activity was developed thereafter.

Activity:

The activity associated with the project extended over a 14 week period. Key elements throughout that period were as follows;

1. Initial Introductions

Through discussions between the charity and University, it was established that MA Design Practice students would be well suited to meet the brief, and two students from that programme (Heather Wilson and Kirsty Gaughan) were identified who were looking for a project to engage with at that time. A meeting was arranged with these students to discuss the brief (which appealed to them), and to sketch out a broad plan of action going forward. A staff member from Student Services acted as a project contact for students, but the students themselves were given decision making powers with regards the forward direction of the project.

2. Research and Planning (6 weeks approximately)

In this phase, the students visited the charity shop space, met with its volunteers and managers, and conducted their own research, before presenting their conclusions as to why the shop was struggling to remain solvent. They then took these conclusions, and supported by further discussions and research, proposed measures which could be taken to transform the charities fortunes. Namely, they proposed to 'curate' the shop, up-cycling goods and giving the shop a 'boutique' feel, whilst integrating designated spaces for small workshops, performances and discussions. In line with the charities own objectives and ideals 'Home' was taken to be the shops theme. This proposal had to be sold to the shops managers, and amendments and changes agreed upon before the project could be carried forward.

Throughout this period, the University supported the students in a tutoring and mentoring capacity, financially by way of nominal travel and subsistence expenses, and attended meetings with the students and charity representatives on the students' request, whilst ensuring the students maintained project management control.

3. Installation (2 weeks approximately)

During this period, the shop was closed to the public, and completely redesigned. Students were required to work with the materials provided, and within the budgets set by the charity for this work, with additional materials being offered in kind by the University. Fellow art, media and design students (from various programmes and levels of study) were invited to support this process, by volunteering time, and by offering their own works to either exhibit or sell (all coordinated by the students themselves). Marketing materials for re-launch were produced and disseminated at this time too.

4. Launch

A launch event was held, with invited VIPs, press, charity and University representatives. This presented an opportunity for the students to receive feedback and recognition on their progress to date.

5. Trading (6 weeks approximately)

For the following 6 weeks, the shop was staffed by volunteers and open for business. The students made regular visits to the premises, met periodically with the shops managers, and monitored its performance, being responsive to circumstances and implementing changes wherever necessary. Throughout this period, the students continued to blog, market via social, print and digital media, and organise small events within the shop.

6. Final Report

At the end of their 6 week tenure, the students reflected on the success of their project, documenting their findings for academic assessment, and presenting them to the charity's team, and other interested third parties.

Impact:

The project had a significant impact on all students and stakeholders involved.

For the two MA students coordinating, the project endowed them with a wealth of invaluable real-world experience, a network of arts, media and third sector contacts, greater confidence and self-belief in their abilities, and an understanding of the wide ranging applications of their own skill sets.

For students participating through volunteering, exhibiting and selling work within the space, the project presented an opportunity to gain professional experience, be part of a team, and to network with colleagues from other degree programmes, other levels of study, and professionals working within their sector.

For the charity the impact was a significant increase (over 100%) in the shops profits, far greater media coverage for the charity and it's initiatives, and a repositioning of the charities branding and marketing going forward, with an emphasis on positivity (See figure 3 – the charity's post project re-brand). As a direct result of the collaboration with students, the charity raised over £1000, and received a new website, built free of charge, as a result of the networks established through one of the student-organised events.

"We're really pleased to be working with the team on such an exciting project. It's really good to have a fresh perspective on the charity shop and we're confident that it will be a success and help to raise much needed funds for our charity in the process."

Ann Bronnert, Save the Family

Learner outcomes:

For the two learners primarily involved in leading the project, it was a challenging, but rewarding experience.

It was the first time the students had to bring together such a wide range of skills into one, cohesive project. Ultimate decision making authority, the need to stick to strict time and budgetary constraints, and the fact that there were real stakes riding on every decision added an additional element of pressure, one that would not be easily replicable in a simulation setting.

The students reported that their most significant difficulties were overcoming points of contention regarding their plans with the charities own managers, and negotiating compromises where necessary, effectively managing their time with a workload of many disparate tasks, and maintaining a strong working relationship with one another, in what could sometimes be a stressful environment.

In overcoming each of these obstacles amongst many others, seeing the impact of their work, and establishing networks with a wide range of people, the overall project experience was a very positive one for the students, both of whom secured professional opportunities as a direct result of their participation.

Student Reaction

"Collaborating with a charity really helped to demystify how fundraising works. I hadn't fully realised how important it was for small charities to be business savvy before working with Save the Family. Collaborating with Kirsty was a great experience because although she was similar to me 'on paper' (another MA student, similar discipline, same gender, similar age), she had a completely different skill set and thought process from me, with a very different approach to organisation and design. We are still frequent collaborators on projects and events today.

"Working on the 'Home' project was very beneficial to me in terms of providing me with practical experience, confidence and a network of creative and supportive people that I continue to work with and rely on.

"The biggest challenges were interpersonal challenges. Working on an assignment where everyone felt they had ownership of the project led to friction and occasionally hurt feelings. Managing this diplomatically was difficult, but became easier as common ground was found and polarising ideas were reworked into more mutually agreeable ones. A lot of this was new for me as I was more used to having a more clearly defined subordinate or leadership role, or working entirely independently.

"Close behind these were the logistical challenges; neither Kirsty nor I could drive; there was an unexpected snowstorm in April; we had a lower than expected uptake of volunteers. We overcame all of these, but there were days that we felt like we wouldn't!

"If we were to repeat the project I'm sure that we would feel far more comfortable deciding tasks between us according to our strengths and skill sets. During this project, there was an incentive to make sure that we both got to try everything, but now we know what we each enjoy most and succeed best at.

"I'm sure that we would also work harder on the 'events' aspect of the shop. These were time intensive to organise, but really paid off in terms of shop takings, so organising more of them and promoting them more effectively would be our top priorities."

Heather Wilson – MA Design Practice, Glyndwr University

Resources:

- A team of key individuals within the institution, who can support various aspects of project management (academic tuition / risk assessment etc.).
- A partnership with an external charity / business / community group who can benefit from student creativity and expertise.
- A nominal budget to cover any travel, subsistence and essential material costs incurred by students in project delivery.
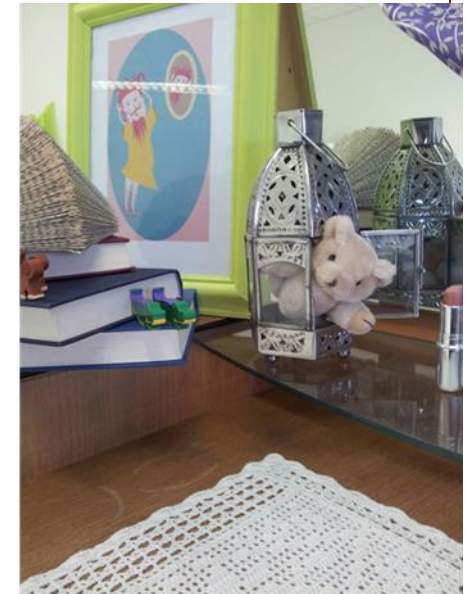
Pictures or images:
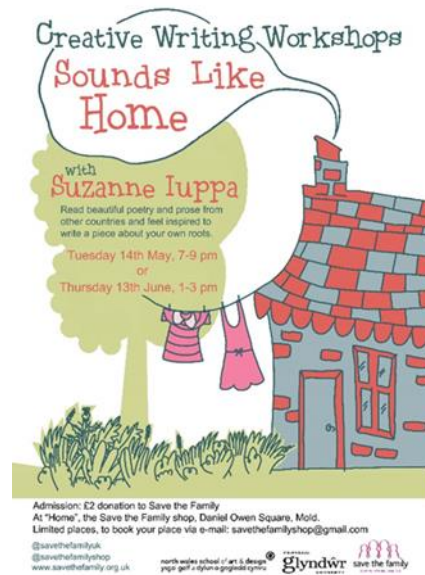
Figure 1. From left to right: A workshop poster, the shop space during installation, a display in the completed shop.

Figure 2. Save the Family Logo: Pre-project

Figure 3. Re-branded Save the Family Logo: Post Project.

References:

- Miss Heather. Save the Family. [ONLINE] Available at: http://missheather.co.uk/blog/tag/save-the-family [Accessed 21 September 2015)
- "Home" - Save The Family Shop on Vimeo. 2015. [ONLINE] Available at: https://vimeo.com/66924191. [Accessed 21 September 2015].
- Save the Family Shop. 2015. [ONLINE] Available at: https://savethefamilyshop.wordpress.com/. [Accessed 21 September 2015].
- Save the Family Shop - Home - This Project. 2015. [ONLINE] Available at: http://thisproject.co.uk/articles/save-the-family-shop-home/. [Accessed 21 September 2015].

Contact details: Mike Corcoran, www.macorcoran.com, m.a.corcoran@outlook.com

Selling a New Service to Prospective Clients

Inge Hill
ingehill@mystart-up.info

Objectives:

- Focus on benefits for clients in talking about a new service
- Enable clear communication in a short concise manner that is engaging.
- Identify the importance of re-framing features as benefits.

Overview:

The focus of this task is the application of communicating the benefits and features of a new service in practice in a role-play situation. Students gain peer feedback in a role-play and from an observer on how convincing their benefits are and how they communicate them. They learn how to adapt the benefits they communicate to the target customer.

Activity

This activity takes about 30 minutes from introduction to debrief, if run with one role play situation.

Ideally, it should be run using the following stages:

1. Introduction of the exercise with learning outcomes
2. For the given services, identify features and benefits (plenary)
3. Build small groups using a random member selection approach
4. Brief observers and role play participants on what they need to do
5. Go into roles and act out the situation
6. Peer feedback
7. If there is time for role changes: Change roles within the small groups
8. Repeat step 5 and 6 – as often as suitable, ideally three different situations are used by the small group
9. De-brief.

Overall, the role-play with three role-play situations can last about one hour.

The role-play situations offer three different scenarios for which the students need to adapt the generic list of features and benefits to the target customer in front of them. For each target customer they need to decide on the most important benefit.

The three target customers are:

1. Students
2. Single male parent with two children under 10 years of age, who is working full-time
3. Older people.

The short role briefs below are only a starting point, feel free to embellish them with further details or change them.

Role brief target customers:

Students: Peter (Kate) is a student staying in a campus based student hall. While the hall offers washing machines, they are either constantly full or broken, so that he has to go very late or early in the morning in order to be able to have his clothes washed. Peter works part-time so that he has some money to spare he could spend on a laundry service.

Single male parent: John works as an IT consultant for a Council. His wife died last year in a car accident and he is bringing up their two children by himself. Being a dedicated father, John would rather spend time with his children than doing the housework, but there is work to be done. The two kids use a set of clothes every day, as they are wild players. John has to be cautious with money, as he is the sole earner and is building up reserves slowly for university for both kids.

Kate and Rowland are a happy retired couple in their late 70s. They are both still fit and out and about a lot, hiking for example. Kate is suffering from arthritis and cannot move her hands as swiftly as she would like to, while John is not one for housework around laundry, as for the last 30 years Kate had always dealt with that side of the housework. Money is tight, as with all people living on their pensions, but they are doing OK.

Role brief observers:

As an observer, you are asked to watch the two role players for their body language, tone of voice and choice of words. Overall, how convincing does the start-up appear to you? What story do they tell? How responsive are they towards the needs of the customer? Have they adapted the benefits meeting the customer pain? Take notes and feed them back to the start-up, but also the customer. How convincing was the customer?

Role brief for the start-up for the laundry service:

You have developed a new service, to pick up laundry from clients, and return it to them within 24 hours. Naturally, the service comes at a price going beyond what the cost of using to-pay-for washing machines or doing the washing yourself.

You have to convince the target customer that it is worth spending money on your service. For the customer at hand, find the most important benefit(s) that will convince them that you are offering a solution to a big problem they have.

Assessment of the activity can be through an entry in a reflective diary students at level 5 and 6, or Master's level can be asked to write as part of an overall coursework assessment. The reflection needs to address skills development and learning about sales.

Skill Development:

The QAA (2012) highlights how important the development of communication skills is for employability in general, and running a business in particular. This exercise is supporting the development of entrepreneurial capabilities. The following skills are developed with this exercise:

- Communication skills (general), verbal
- Sales skills (communication skills)
- Giving and receiving feedback
- Reflection skills on own communication skills and sales skills.

Resources:

- Role briefs for observers and role play participants
- Pen and paper, A4
- (recording software every smart phone offers)

References:

Hill, I. (2015) Start Up. A practice based guide to new venture creation. London: Palgrave MacMillan.

Links:

- The companion site accompanying Start Up (Hill, 2015):http://www.palgrave.com/companion/hill-start-up/
- Embedding Employability HEA framework (2015)https://www.heacademy.ac.uk/enhancement/frameworks/framework-embedding-employability-higher-education
- QAA (2012) Enterprise and Entrepreneurship Education: Guidance for UK Higher Education providers. Gloucester: Quality Assurance for Higher Education.

Embedding Enterprise and Entrepreneurship into Education

Dinah Griffiths & Catherine Tarling
University of South Wales
dinahgriffiths@gmail.com & cathtarling@aol.co.uk

Objective:

- To enable 'educators' to:
    - explore the different contexts and definitions of enterprise and entrepreneurship
    - ascertain the relevance to stakeholders in an education context specifically the; government, educational organisation, educator, learner
    - appraise how different 'gogies' can be utilised to facilitate entrepreneurial learning
    - develop, deliver and evaluate appropriate teaching and learning resources
    - reflect on the importance to the educator in relation to the needs of the 21st Century learner.

ETC Toolkit 'How to Guide' Template

QAA Enterprise Themes: (please highlight relevant themes)	Group:	Learning Environment:
1. **Creativity and Innovation** 2. **Opportunity recognition, creation and evaluation** 3. **Reflection and Action** 4. **Interpersonal Skills**	• **Small group working (4-6 in a team)** • **Large Group**	• **Lecture theatre** • **Classroom** • **Presentation Space**

Title: Embedding Enterprise and Entrepreneurship into Education

Overview:
The interventions aim to provide educators with an overview of the knowledge, skills and competencies required to equip learners with entrepreneurial skills and attitudes to raise aspirations, so learners can fulfil their potential whatever they chose to do.
The interventions have a three stage approach:

- Engaging: Awareness raising – promoting the value of entrepreneurship to create opportunities and develop learners
- Empowering: Providing experiential learning opportunities – developing skills and attitudes through practical experiences (example Entrepreneurship in Education Live Briefs)
- Equipping: Helping to support learners to create and grow businesses.

Activity:

Engaging:

Icebreaker 10 minutes:
What do the terms enterprise and entrepreneurship mean to you? Individuals to draw an image associated with the terms, then in turn explain their image to peers. Facilitator to write down key words from each participant explanations.

Introduction:
Objectives overview

What is enterprise and entrepreneurship in an educational context?
- Provide a definition of enterprise and entrepreneurship education (E.g. QAA, Welsh Government, European Commission) - development of skills and application of skills in a practical context.
- Facilitator to link words from icebreaker activity to definitions but to emphasise that entrepreneurship is about developing a positive and proactive approach to whatever you do in life, whether it is setting up a business, working for someone else or doing something in the community.
- Provide an overview of local, regional, national or international strategies, policy documents, plans or recommendations that may be of value which provide a structure and focus for entrepreneurship education e.g. Welsh Government YES Strategy, Lord Young's report Enterprise for All, European Commission Rethinking Education.

Why is it important?
- Quick quiz based on current political, economic, sociocultural, technological and legal facts/figures/statements.
- Facilitator to provide an overview of the enterprise and entrepreneurship agenda for primary, secondary, FE or HE and link back to quiz. Emphasise that Entrepreneurship education has four key audiences; learners, education, business and the community who all have a vital part to play.

Where does Enterprise and Entrepreneurship education fit?
- Facilitator to link Employability and Enterprise/Entrepreneurship agenda to the organisation, wider community, learners, curricular (whichever is most appropriate) in particular the development of skills.

- Applies at different levels and in different contexts, for example:
  - At a personal level - being entrepreneurial or enterprising
  - In the community – as a social entrepreneur/setting up a social enterprise
  - As an employee - the practice of Intrapreneurship
  - Providing information - infopreneurs (specifically through social media).
  - Working as part of a team - intrapreneurial
  - Setting up a business and becoming self-employed
  - As an employer – running your own enterprise
  - As an educator – the teacherpreneur/edupreneur
- Participants can complete the Enterprise Catalyst, GET2 Test, ACRO questionnaire.

Empowering

How to deliver?
- Introduce pedagogies, androgogy, heurogogy. Participants to take part in and reflect on practical activities to develop entrepreneurial skills **(See Pass the Polo / live projects example).**
- Participants to develop, deliver and evaluate a teaching and learning session utilising enterprise and /or entrepreneurship education
- Discuss teaching philosophies and reflective practice.

Equipping

Who can provide additional support?
- Facilitator to provide an overview of local and regional support agencies, government organisations, programmes and provisions. E.g. NESTA, NCEE, EEUK, Shell livewire, banks and building societies, Business Wales, Big Ideas Wales.
- Role model sessions to engage learners
- Mentoring – signposting and guidance.
- CPD available – YES CPD HUB - IEEP, IEEC, EULP, EEUK

Skill Development: (short – focus on reflection; review; feedback; learning)

To develop educator skills and behaviours to meet the diverse needs of learners, business and the community.
- Attitude – the ability to understand yourself, your motivations and how to achieve your goals, including; self knowledge, belief and confidence, motivation, aspiration, determination and competitiveness.
- Creativity - the ability to generate fresh ideas, solve problems and spot new opportunities, including; problem solving, lateral thinking / ideas generation, spotting and creating opportunities and innovation.

- Relationships - the ability to communicate effectively, expressing your own views and ideas, appreciating others' viewpoint and working co-operatively, including; working with others, managing difficult situations, negotiation, persuasion and influence, presentation and communication.
- Organisation – the ability to make informed decisions and fulfil objectives by planning and managing situations, resources and risk, including; planning, managing resources, decision making, research and understanding the environment, managing risk and vision and goal setting

The Edupreneur (educational entrepreneur) - Jon Bacal (2013) -

An edupreneur, also known as an agent of change, they combine the concepts of education and entrepreneur and brings in new ideas and concepts from the business world into public education. Thus, you can also call an edupreneur, the educational entrepreneur. They bring passion, imagination, grit and a sense of urgency in their zealous drive to create and constantly refine optimal learning for young people, organization-wide and for every learner.

Resources:
- Post-its or similar sticky pads
- Pens
- Powerpoints
- IT/Internet
- Flip chart paper

References:

Key authors -

1. Biggs, J. B. and Tang, C. (2007), Teaching for Quality Learning at University, 3rd Edition, Maidenhead: Open University Press/McGraw Hill.
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3. European Commission (2013) Report to the European Commission on improving the Quality of teaching and learning in Europe's higher education institutions [Online] Available at: http://ec.europa.eu/education/higher-education/doc/modernisation_en.pdf
4. Gibb, A. A. (2007) 'Entrepreneurship: Unique Solutions for Unique Environments. Is it possible to achieve this with the Existing Paradigm?', International Journal of Entrepreneurship Education. 5: pp. 93-142. Senate Hall Academic Publishing.
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6. Kirby, D. (2002), Entrepreneurship, Maidenhead: McGraw-Hill Higher Education.
7. Mortiboys, A. (2005), Teaching with Emotional Intelligence: A step by step guide for higher and further education professionals, Oxon: Routledge
8. NESTA (2009) 'Creative Enterprise Toolkit'. (Online) Available at: http://www.nesta.org.uk/sites/default/files/cet_books_1-4.pdf
9. OECD (2012) Teaching Practices and Pedagogical Innovations: Evidence from TALIS

10. Quality Assurance Agency for Higher Education (2012) 'Enterprise and Entrepreneurship Education – Guidance for UK Higher Education Providers'. Gloucester: QAA
11. Rae, D. (2008), Entrepreneurship: from opportunity to action, 2nd Edition, Basingstoke: Palgrave Macmillan.
12. Welsh Assembly Government (2010) 'Youth Entrepreneurship Strategy an Action Plan for Wales 2010-15.' Cardiff: Welsh Assembly Government.
13. Young, D. (2014) 'Enterprise for all: The relevance of Enterprise in Education'. [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/338749/EnterpriseforAll-lowres-200614.pdf

Web -sites
- Big Ideas Wales – www.bigideaswales.com
- Business Wales - www.business.wales.gov.uk
- Enterprise Catalyst – www.enterprisecatalyst.co.uk
- Educational support and resources - YES National CPD Hub, EEUK, NCEE, ISBE, Kauffman, NESTA, STEM,
- Enterprise Support agencies – Princes Trust, Wales Coop, Unltd, Shell livewire, NCEE
- Other organisations – Banks and building societies, Councils

Author: Dinah Griffiths & Catherine Tarling, University of South Wales

Learner Feedback -

Cerys Hopkins – "I wanted to find out what resources I can use to help with teaching and integrating entrepreneurship into my lessons which I will now apply to my teaching".

Matthew Pewther-"The best part of the session was being shown how different strategies can be implemented during lessons to encourage entrepreneurial behaviours , I will definitely use some of the examples in my lessons which I think will be fun and valuable".

Tracy Cage - I learnt most from " All of it because I had not attended this type of training before and I will use the activities and ideas to incorporate entrepreneurship into my lessons ".

Anon "It's made me want to finish the course now and become an entrepreneur. The sessions have given me the information I needed, highlighted the skills I have and given me the confidence that I can do it".

Entrepreneurship in Education Live Projects

Dinah Griffiths, Catherine Tarling, Dr Rhiannon Packer, Jane Newby
University of South Wales
dinahgriffiths@gmail.com & cathtarling@aol.co.uk

Objectives:

- To enable learners to:

    - demonstrate learning and reflective practice through experiential group work

    - explore a range of paradigms, methodologies and research methods used in early years research

    - extend knowledge and understanding of collaborative skills and practices used in the wider Early Years education and practice settings

    - identify and evaluate a range of techniques and tools for developing reflective practice

    - support the use of Welsh language and interpret how Welsh culture is promoted through curricula strategies in the early years

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	Group:	Learning Environment:
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	• Small group working (5-8 in a team) • Large Group • Any	• Classroom • Carousel tables (small group working) • External organisations • Special
Case Example Title: Entrepreneurship in Education Live Projects		
Subject: Education	Course: BA (Hons) Early Years Education and Practice	Year: Two

Introduction :
Undergraduate BA (Hons) Education and Linked Named Award (LNA) programmes (Welsh/English medium) year 2 students for their Professional Learning and Practice 2 module are given the opportunity to engage with local community groups for live project work. Research findings suggested that the student experience on the BA (Hons) Education programme were closely linked to the quality of the experience within the placement setting. The live projects encourage new methods of delivery and assessment criteria within the education programme which allow students to engage in an innovative learning opportunity, simulating the workplace experience. These new settings provide placement opportunities on a voluntary basis where there is a variation in the student experience.

The purpose of the activity using a blend of academic learning and practical experience is to develop learners networking, confidence, team working and problem solving skills whilst engaging with real companies and not for profit organisations within the local community. Groups of students work with an organisation to create resources, education packs, or organise events for schoolchildren, young people or teachers (to introduce as part of the curriculum) to help encourage more interest in the aims and objectives of the company or not for profit organisation. All groups have to actively engage with their organisation and the community to; fulfil the brief; research, plan and carry out the task; pitch ideas and present to peers and representatives on their experiences; and feedback on the project.

Activity Example:
The Education Resource Manager and Arts Development Officer at a local theatre and arts centre were approached with regards to setting a live project brief for learners. Different project ideas were offered to a group of thirty five learners from a BA Early Years Education and Practice programme, for example; encouraging access to the building, promoting art works, engaging the local community including target groups, promotion of arts courses/classes.
Learners were split into groups, had to brainstorm ideas and then pitch the idea back to the theatre and arts centre staff determining whether their project would be arts or education focussed.
Once accepted groups spent 16 weeks; developing the proposal, delivering the project and presenting their feedback in a formal dissemination session with the theatre and arts centre staff. Personal and continual reflection were encouraged throughout the project. Students also presented experiences reflecting on the benefits and skills gained throughout the project. Huge learning areas highlighted included project management, financial management, marketing, exponential growth in skills and learning from the experience.

Specific Example:
Six BA (Hons) Inclusive Education students hosted a national premiere of the film 'The Pig Picture: Rethinking Dyslexia' and a networking event at the theatre and arts centre. The film provided personal and uplifting accounts of living with dyslexia from a variety of individuals including school children and iconic leaders, addressing common misconceptions and painting a picture of hope for all those who struggle coping with the condition.
The students worked with the theatre and arts centre staff and a local charity offering support and tuition for children with dyslexia. The students decided to increase revenue through alternate income streams by; selling popcorn and holding a raffle. They also utilised strategies for attracting different market (Students, OAP's) to raise income from ticket sales though price differentiation.

Impact: (reflections; learner feedback)

The impact was significant as ….

1. The majority of students wanted to repeat the opportunity showing a beneficial impact on the learner experience
2. Proceeds raised were donated to charity
3. Awareness of the Theatre and Arts Centre increased
4. Learners used and adapted knowledge and skills to ensure success
5. Positive feedback given by Dyslexia campaigner and former Welsh rugby international Scott Quinnell

Learner outcomes :

Learners were able to:

- Apply and evidence a range of appropriate practical skills and knowledge gained in placement, demonstrating clear links between theory and practice (supported by a professional practice monitoring report)
- Reflect and evaluate upon practice in an early years context and justify areas for professional development
- Evaluate the use of the Welsh language and the promotion of Welsh culture in an early years context
- Examine a range of paradigms, methodologies and research methods used in early years research

Specifically learners developed;

- Project management skills to complete and respond to a live brief
- Confidence within themselves and the ability of the team
- Team working skills through group work and team development
- Networking skills through liaising with external organisations and customers
- Commercial awareness
- Event organisation expertise.

Resources:

- Engagement of supportive organisations
- Input from lecturers
- Enterprise support
- Entrepreneurial students

Pictures or images: If you have any pictures, diagrams or images that you feel would enhance the case study please attach them to your case study submission.

References:

- South Wales Argus coverage
- University website

Contact details:

Catherine Tarling, Dr Rhiannon Packer, Jane Newby - University of South Wales

Student Reaction:

Laura Davey, Laura Harvey, Charlotte Hodge, Charlotte Portman, Jessica Porter and Martha Dickinson who took part in the live project work and hosted 'The Pig Picture: Rethinking Dyslexia' event stated the best thing about the activity was:

"Working with new people, new organisations and creating new ideas."
"Running our own events."
"The project was the best thing."
"Working with others."
"Using new and developing employability skills. Networking."
"It worked really well."
"The best thing was the final presentations of our projects."
"Working with new people and the community."

In addition:

Scott Quinell, former rugby international and campaigner on Dyslexia praised the students saying "The ability to actually put this together, get the film and the wonderful venue, sell the tickets and get people through the door is brilliant. Seeing the film highlighting awareness of dyslexia and helping people is superb".

Doctor Rhiannon Packer, course leader said "Working with the theatre has provided the students with an opportunity to work on a real life venture, not only has it refined their professional skills and confidence but has also given them an opportunity to play a part in the local community. The benefits of the live project were invaluable as the students commence working careers following completion of their degree. I am very proud of their success."

Jane Newby, Academic Subject leader for Education and LNA said "The students have thoroughly enjoyed taking part in these projects and have found them an extremely worthwhile element of their studies. This venture has been so successful I plan to include this type of partnership work in the syllabus for next academic year".

Hotbox 500

Sybille Schiffmann & Dr Emily Beaumont
Plymouth University

Objective:

- To devise innovative business proposals and prototypes to transform a waste asset into something that could be sold or traded; a product/service that creates impact for the community while also demonstrating a sustainable approach to using physical resources to achieve this, respecting the natural environment.

-

- In setting out to achieving this objective it is anticipated learners will be better able to:
- Explore sustainable business modelling
- Develop creative thinking
- Present in a Real world format
- Evidence the power of group work as more ideas are created through team work

ETC Toolkit 'How to Guide' Template

QAA Enterprise Themes: (please highlight relevant themes)	Group:	Learning Environment:
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	• Small group working (4-6 in a team) • Individual task • Large Group	• Lecture theatre • Presentation Space • Carousel tables (small group working) • Any

Title: Hotbox 500

Hotbox 500 placed within two modules; Introduction to Enterprise (Year 1, 20 students) and Entrepreneurial Thought and Action (Year 1, 300 students). These modules sit within either BSc (Hons) Business Enterprise and Entrepreneurship Two Year Fast Track Programme or BA (Hons) Business/BSc (Hons) Business Management/BA (Hons) Business Studies/ BSc (Hons) Marketing/ BA (Hon) International Business at Plymouth University. On taking part in Hotbox 500 students gave the following feedback:

Harry (Year 1, BSc (Hons) Business Management) *'It made you think outside of the box, and open your imagination to different solutions.'*
Feyi (Year 1, BSc (Hons) Business Management) *'It made me consider sustainability. Its provided another use to a product and given it a second life'*
Sammy (Year 1, BSc (Hons) Business Management) *'Excellent presentation practice, its improved the way I present'*

Overview: (short paragraph/ 2 -3 sentence)
Hotbox 500 provides a unique opportunity for students to develop their entrepreneurial skills for community and environmental benefit. In short, a company is asked to donate 500 units of a product. Given the sustainability element of this project these are typically products that would otherwise be recycled or go direct to landfill. The aim of this activity is for students to repurpose these products in another context.

Activity: (Potentially long – if including timings; approach; extensions; assessment; options for delivery)
Session 1 (1.5 hrs) In one large group students are introduced to the idea of flourishing organisations; that is those characterised by values-based, vision driven business, with stakeholders who are committed to creating products, processes, and business models that address the major issues of our time (Senge, 2014). Following this an introduction to the Hotbox 500 brief (see overleaf) is given and several units of the donated product distributed among the group.

Students are then separated in to groups working in 4-6 in a team. Between now and the following session each group is to go away and initially brainstorm ideas of potential alternative uses and applications for the product. They are prompted by three questions that will aid them in this process: 1. What is the opportunity they are trying to create with this asset?; 2. What are they trying to do differently?; 3. How are they trying to address a real-world need?

Session 2 (2 hrs) – The groups are introduced to creative thinking in the context of identifying what creative people do that is different- their methods and behaviours- to aid students in the formulation of alternative applications for the product. Following this students put into practice these methods and behaviours. This part of the session is informed and supported by the text *Sticky Wisdom* (Allan *et al*, 2002). The role of facilitator here is to nurture the student's ideas and build on the core questions set from the previous session. The facilitator sets 'SUN not RAIN' ground rules to the students (see below).

After establishing the ground rules the facilitator then leads the group through a creative thinking tool which enables students to explore the issues/challenges with their product from an entirely different perspective. Random Links (Allan *et al*, 2002) is suggested but others can be used by the facilitator.

Between now and the following session students are asked to complete a business case framework (see below) and develop a short presentation (10-15 minutes).

Session 3 (10-15 mins per group**)**- Each group gives their presentation in answer to the original brief in front a panel which includes the organisation that donated the original product. The panel will be looking for a product that incorporates the sustainable and environmental values of the brief.

Skill Development: (short – focus on reflection; review; feedback; learning)

- Creativity
- Team working
- Real-world Presentation
- Negotiation and persuasion with peers and clients
- Sustainable business modelling

Resources:
- 500 donated products.
- Random objects for random links exercise.
- Business Case Framework Template

References:

Allan, D., Kingdon, M., Murrin, K. and Rudkin, D. (2002) *Sticky Wisdom*. London: Capstone Publishing Limited.

Senge, P. (2014) Foreward. In Laszlo, C. and Brown, J. *Flourishing Enterprise- The New Spirit of Business*. California: Stanford University Press.

Author: Sybille Schiffmann, Programme Leader Futures Development: (Futures Entrepreneurship Centre) and Plymouth University. Dr Emily Beaumont, Lecturer in Entrepreneurship, Plymouth University.

Networking

Track Dinning
School of Sport Studies, Leisure and Nutrition
Liverpool John Moores University
t.m.dinning@ljmu.ac.uk

Objective:

- This case study presents an interactive method of introducing the skill and important of networking to a social enterprise .

- Students are introduced to the art of networking and given an opportunity to practice in a safe and fund environment

- Through setting a brief, students gain an understanding to the importance of networking   and in social enterprise in particular being able to bring together a range of roles and skills can be key to success.

ETC Toolkit Template: Internal code no		
QAA Enterprise Themes:	Group:	Learning Environment
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	Good for use with large groups split into smaller group working (4-6 in a team)	Flat open space Presentation Space – if you want students to stand up at end and present
Introduction Adapted from an activity introduced at the International Enterprise Educators Programme (UK), this is a networking game that gets students to role play and have conversation in character with each other. A challenge is then set for students to get into groups and consider the skills set in their group.		

Keywords: Networking, Entrepreneurship
Subject Area: Entrepreneurship
Student level : Undergraduate level
Time required: 1 hour
Groups: Group size of 5
Student number 15-40

Activity

The author uses this exercise at the start of a session, whilst it can be attached to almost any subject where you have a group task to undertake, this is used to allow students to self-select their groups based on the challenge brief set that they then subsequently work on in phase two.
Whilst the students are familiar to working in groups on class challenges , the first part of the task (The networking part) aims to get the students out of their comfort zone get them, away from working with their friends and the method of selection will mean speaking to nearly everyone in the group.

Phase one
As students enter the room they are handed a business card. The students are then told that they must assume the role of the person on the card as they take part in the game
Students are given one sheet of paper to take notes and given the instruction to circulate around the room speaking to as many people as possible and finding out what they do and how they might work together in a business sense. – This is time bound activity so can be as long as the teacher requires. I usually give 10-15 minutes depending upon the size of the group.
Student then have 3 minutes to look through their list to review who they have met and who may be of use to them in their business.

Phase two
The students are then set a challenge (this can be made specific to the subject you are teaching)
Example brief
You intend to set up a social enterprise that produces and sells a range of merchandise for fundraising events. To do his you decide to look through your immediate network to see who you could ask to join and support the development of the enterprise. You now have 5 minutes to get together a team of 5 people who you would want/need for the success of your enterprise.

Give the students the 5 minutes to get into groups, there sometimes is a lot of shifting around as students are asked to join one team and then another person comes along that seems more appealing. Student tend to respond to this in different ways, some jump at the chance to

get a range of job roles in their group, some stay within their friendship circle with no thought for roles in the group and some just see who's left .

Phase three
In their groups of 5, students are each asked to say what they can contribute to the social enterprise in terms of skills, contact and time. The time here can be flexible, I usually allow up to 15 minutes.
Next the students have to draw up a list of any missing roles/skills and using their collective networking contacts establish if there is anyone else in the room who would make their enterprise complete

Depending upon the number of group and time I then ask each group to do a three minute feedback on who is in the group, what they bring to the social enterprise and what is missing.   Student can then consider the consequence of those missing people to their business.

Impact:

Student's reactions to this task have been mixed. At the start there is a feeling of what is the point of doing this, but by the end they can see the connection with making good contact and more importantly having a clear understanding of what different roles and people have to offer.
One students commented 'whilst at the start I did not see the point to pretending I owned a merchandise company, however once the brief was given and we formed groups I could see how such a company was important in sourcing supplier of the products.

One group really got in to the role play and not only brought to the table the skills and knowledge the students thought they would have but also improved to add in fictions family members who could also be brought into support, which opened up a discussion with the students on how our family and friend can be a rich source of support for an enterprise.

Learner outcome :

To have an experience of networking with peers
To have an understanding of the importance of personal networks and how they can contribute to a business

Resources:

For the game you will need a set of business cards ideally created with a range of job titles that would suit the subject being taught (these can be purpose made or just a collection of local business cards)
Sheet of paper for students to gather names and job title/role in part one
Pen
Flip chart as a mean of students feeding back at the end (optional)

References:

Allerton, J.(2007) The 'Strength of Weak Ties': Social Networking by Business Owners in the Highlands and Islands of Scotland. *Sociologia Ruralis.Vol.47,(3) pp228-245* .

Johannisson,B.,Ramírez-Pasillas, M & Karlsson, G. (2010). The institutional embeddedness of local inter-firm networks: a leverage for business creation. *Entrepreneurship & Regional Development: An International Journal. Vol. 14, (4).*

Author/contact details:

Track Dinning
School of Sport Studies, Leisure and Nutrition
Liverpool John Moores University
t.m.dinning@ljmu.ac.uk
01512315278

Introduction to Human Anatomy (Organ Donation Project)
Dr Lauren Buck
The University of Sheffield

Objectives:

- To develop attributes in, and offer experience of, the following to students;
- Authentic problem enquiry and response
- Innovation and Creativity
- Risk-taking
- Taking action
- True collaboration

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	• Small group working (4-6 in a team) • Individual task • Large Group • Any	• Lecture theatre • Presentation Space • Carousel tables (small group working) • Any • Outside • Special Self-directed group work – meeting rooms
Case Example Title: Introduction to Human Anatomy (Organ Donation Project)		
Subject: Biomedical Science/Anatomy	**Course:** BMS 246 Introduction to Human Anatomy	**Year:** 2015
Introduction : (short paragraph/ 2 -3 sentence) This module is a core unit run over two semesters for second year undergraduate students studying Biomedical Science at the University of Sheffield. Students are introduced to the basic structure and functions of the human body, through a mixture of lectures and practical sessions.		

The 'enterprise' aspect of this module currently counts for 5% of the module assessment; students have to prepare and pitch an innovative organ donation campaign, based on their anatomical knowledge, targeted to a particular audience.

Activity:
Students are given an 'authentic' challenge – to design an organ donation campaign for a target audience. Students have the opportunity to meet and present their ideas to a specialist organ donation nurse from the NHS – making them aware of the audiences that most need to be targeted, and the profile of those audiences. The students are free to construct the campaign 'for real' if they want, and previous cohorts on the module have produced Facebook campaigns, apps, and pitched their ideas directly to the NHS.

Students are challenged to design a unique campaign which utilises their anatomical knowledge. Students are not limited to any particular format, and previous campaigns have ranged from Spotify adverts to apps and even a song! They are supported in their campaign development by guest lectures from Diva Creative, a local marketing agency specialising in health campaigns, and from other local charity campaigners.

Because this element of the module forms a relatively small part of the final assessment, students are free to try something different and perhaps 'have a go' at a new skill – e.g. coding a basic app.

Students work in self-directed groups. As instructions are minimal, the onus is very much on the students to take action and make a personal decision to engage with the task.

Students have to communicate their detailed knowledge of anatomy to a non-specialist audience. They have to work effectively in teams with a tight deadline and pitch their campaigns professionally to a target audience which includes external partners.

The first round of pitches is judged by the module tutor, after which a shortlist of the best campaigns (judged on both innovation and accuracy of anatomical knowledge) is constructed. The second round of pitches takes place in front of the whole cohort, plus external partners such as NHS specialist organ donation nurses. Clickers are used to vote for the final winners.

Impact: (reflections; learner feedback)
The impact on students is significant as it is often their first experience of enterprise education. Initially most students feel overwhelmed by the freedom to be creative in their approach to tackling a real life problem but many students gain confidence in decision making, creative thinking and presenting their original idea by the end of the project. The project has an impact on the employability of the student body, as individuals are able to provide hard evidence of team work, leadership, campaign planning and creativity. The project also raises student awareness of organ donation and ethical/religious issues surrounding organ donation.

In addition to the impact on students, the wider societal influence is clear; many students use social media to promote organ donation to the wider public and there has been local news coverage of the project (see references). This raises awareness of organ donation outside of the university and also marks us out as a civic university.

Learner outcomes:

"I'm not sure organ donation was something that our year group had really thought about before being set the enterprise task. Although it was a non-assessed piece of work, everyone seemed to be driven to produce something both sympathetic and effective that did organ donation justice. This task has been particularly useful to refer to in both CVs and personal statements for further employment or study. It addressed many skills that employers look for in candidates such as teamwork, communication skills and leadership. Presenting to a member of the Yorkshire division of the NHS Blood and Transplant service as well as lecturers and peers was also a great way to practice our presentation skills in a professional environment. I liked that we were given little instruction as it didn't limit our creativity and differed from the standard poster task many courses are set. It also combines both marketing skills and science which hasn't been done before in the Biomedical Science course. I thoroughly enjoyed the opportunity to do something new and creative in a team environment and hope it is kept for the anatomy module next year."

"Students were given the opportunity to develop creative solutions to a tangible current issue. This task required students to investigate the issue; finding out and analysing information outside of classroom based learning. Students were actively encouraged to ask questions, consider anatomy in a wider context and develop skills wholly necessary both during study and importantly, beyond. Effective team working, leadership and communication skills are of paramount importance in any chosen career; Dr Buck's project provided a valuable opportunity for students to obtain and develop these skills. Furthermore, students were empowered to employ their existing problem solving skills and be innovative; support and guidance were provided throughout."

"I really enjoyed the organ donation project as well, I was worried it would be too much work and I'd get really stressed about it, but it was really fun, and the guest lecturers were really interesting! It makes a change to not only think about the anatomy but also to think about real-life stuff, like planning a campaign. I hope the project continues for future years, because I really enjoyed it!"

Resources:
- All resources for the pitch are made/brought by the student but a projector/big screen with audio-visual capability for Mac and PC is normally required for the pitches.
- Large projector and screen in a lecture theatre for the finalist presentations
- Clicker system for voting (e.g. Turning Point)

Pictures or images: If you have any pictures, diagrams or images that you feel would enhance the case study please attach them to your case study submission. See PPT file here.

References:
- http://www.sheffield.ac.uk/enterprise-education/resources/case-bms246
- http://www.etctoolkit.org.uk/science-technology-engineering-and-maths/biomedical-science/
- http://www.yorkshiretimes.co.uk/article/Students-Put-Knowledge-Into-Practice-In-Organ-Donation-Project

Contact details: Dr Lauren Buck, Associate University Teacher (The University of Sheffield)

Pass the Polo

Dinah Griffiths & Catherine Tarling
University of South Wales

Ruth Jones
St David's Catholic College

Objective:

• To enable education learners to:

  • participate in a group learning activity adapted from a simple childhood game

  • apply learning in an enterprise and entrepreneurship context

  • discuss how skills can be developed through the utilisation of different pedagogies

  • reflect on how these approaches to teaching and learning can be used in own curricular area

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	• Small group working (4-6 in a team)	• Any
Case Example Title: Pass the Polo		
Subject: Education (Any)	**Course: PCET**	**Year: Two**
Introduction : (short paragraph/ 2 -3 sentence) The 'Pass the Polo' activity can be used in a number of contexts and subject areas with a range of audiences to introduce skills, creativity and innovation. It has been commonly used as an icebreaker to 'empower ' educators to deliver in an enterprising manner during a session on 'How to deliver? Where educators/education students are introduced to pedagogies, androgogy, heurogogy and participants take part in and reflect on practical activities to develop entrepreneurial skills.		

The activity based on a childhood game introduces the use of 'games' as a pedagogy and encourages learners to think about what 'games' they could adapt in an educational context as a learning activity to promote participation, inclusivity and reflective practice in the learning experience.

Activity:

Pass the Polo -

Objective: To pass a polo mint along a line of people using a straw held in the mouth

Instructions and rules attempt one:

- Divide the cohort into groups of between 6 and 8
- Ask the learners to stand in a line, learners cannot move out of the original line order
- Give each learner a straw and one polo mint per team
- On the shout of GO, the first person in the line can place the polo on their straw (which should be held in the mouth), but hands must then be placed behind the back. All learners must have their hands behind their backs for the duration of the attempt (unless retrieving the polo mint off the floor).
- If a polo is dropped on the floor, it should be replaced using the technique above.
- Allow 3-5 minutes for the learners to complete the task (usually impossible).
- The quickest team to pass the polo up and back wins

After the first go allow the learners to discuss tactics, adapt straws (using resources in the room or specifically provided) and/or move to different positions in the line.

Attempt two **-** Restart and time each group.

Which group won and why? Use any previous experiences to discuss the best solutions/winning times.

Plenary : Discussion questions
1. Was your first or second go more successful?
   a. Always second
2. Why?
. Write down responses
3. What skills/behaviours did they utilise?
. Creativity, Lateral/divergent thinking, Problem solving, Competition, Networking .
4. Where else can these be applied?
   . Employability
5. What is the relevance to Enterprise and Entrepreneurship education?
. Usually responses like – innovation, creativity, risk taking

Facilitator to link to skills and behaviours used by an entrepreneur – which of the following did the activity use or develop?
Explain why and put in the context of having an idea and making it happen.

Attitude	Creativity	Relationships	Organisation
1. Self Knowledge, belief confidence 2. Aspiration 3. Motivation **4. Competitiveness** **5. Determination**	**6. Problem Solving** **7. Ideas Generation/ Lateral Thinking** **8. Spotting and creating Opportunities** **9. Innovation**	**10. Working with Others** **11. Managing Difficult Situations** **12. Negotiation, persuasion, influence** 13. Presentation **14. Communication**	**15. Managing Risk** **16. Managing resources** **17. Decision Making** **18. Research/understanding the environment** **19. Vision/Goal Setting** **20. Planning**

Impact:
The impact was significant as ….
- It is a quick and easy way of demonstrating the use of the game pedagogy
- Learners quickly appreciate the purpose of the activity
- Learners can see how different skills are used throughout the activity
- Learners can apply the game to the entrepreneurial process

Learner outcomes :
Learners are able to connect the use of pedagogies and skill development (personal effectiveness, critical thinking and problem solving, creativity and innovation and planning and organisation) to enterprise and entrepreneurship education.

Resources:
- Pens
- Card/paper
- Scissors/stapler/glue/cellotape
- Polo mints
- Straws

Pictures or images: If you have any pictures, diagrams or images that you feel would enhance the case study please attach them to your case study submission.

References:

Contact details: Dinah Griffiths & Catherine Tarling, University of South Wales and Ruth Jones, St David's Catholic College.

Student Reaction:

"I'll definitely use this in my teaching"

"I'd never thought of using games with learners for an educational purpose"

"I can apply this in engineering "

"I can use this with my SEN (Specific Education Needs) learners"

"More of the same please"

"The best activity was the polo one – it was fun, competitive and I wanted to win"

"Who would have thought such a simple game could have been used to explain how as a starting point to embed enterprise into my subject area"

"I need a day on how to get these creative ideas"

Stimulating Enterprise via Peer-to-Peer Learning Through Film

Mike Corcoran
m.a.corcoran@outlook.com

Objective:

- To foster peer-to-peer support amongst the student population via new media.
- To provide students with inspiration and confidence with regards their enterprise capacities.
- To stimulate ideas generation for new enterprises amongst students.
- To develop the communication skills of students and recent graduates.
- To support the promotion and development of student and graduate start-up businesses.

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. *Creativity and Innovation* 7. *Communication and Strategy Skill.*	• *Any*	• *Any*
Case Example Title: STIMULATING ENTERPRISE VIA PEER TO PEER LEARNING THROUGH FILM		
Subject: Various	**Course:** Various	**Year:** 2014
Introduction: Throughout their academic studies, a student's peers are one of their greatest influences. The support and advice students provide to one another play an invaluable part in their development, and successful students and recent graduates can have a huge influence on their colleagues as positive role models. Furthermore, many students will go on to self-employment and the creation of new businesses and enterprises upon graduating, yet arrive at University with little or no previous knowledge and understanding of business, and often lacking the confidence, aspiration and self-belief to get there. Taking both of these facts into consideration and as part of a wide range of business and enterprise support at Glyndwr University in North Wales, a series of short films were created.		

The films featured students and recent graduates, from a range of subject areas and degree programmes, who had achieved success in the early stages of their own freelance careers, or in launching their own enterprises. The films targeted new university students and communicated key information peer-to-peer, including the personal learning journeys of the individuals, their successes and failures, how they had started out and how they engaged with the support available to them at University. Their aim was to show new students that successful businesses were created by people who were just like them, and to encourage new students to generate ideas for their own future enterprises, to follow the positive actions taken by their peers, and to utilise the support available to them at the University.

The films were disseminated widely, integrated into lectures, presentations and social media platforms, and achieved their desired effect. A secondary impact was the benefit of the project to the students and graduates who featured in the films: who developed their own communication skills, were given the opportunity to reflect on their own learning journeys, and who became equipped with a valuable resource for the promotion of their own products and services in the process.

Activity:

The project had three principle elements, planning, production and dissemination;

Film Planning (2 weeks approximately)

Through the existing networks of Glyndwr University's enterprise support team, student and recent graduate candidates were identified to feature in the films. Care was taken to ensure a wide range of subject areas and business types, an equal gender split, and a wide age range were reflected in the films. A total of 6 individuals were selected to feature in the films.
A recent graduate, who had established a successful new video production company himself (Filmage) was selected to produce the films, and the brief, fees, terms and deadlines were agreed upon. The individuals selected to feature in the films were provided with a series of questions in preparation, encouraging them to discuss their personal journeys and experiences, and working together, Filmage and the University's enterprise support team produced storyboards for each film to be shot. As former graduates themselves, Filmage also agreed to produce a film documenting their own journey.

For those featuring in the films, the offer of bespoke support in presenting and communication was offered, provided by the University, not only to help the individuals through the filming process, but to endow them with skills to utilise in their businesses going forward.

Final details of filming were agreed upon by all parties, and time and dates settled for the shoots.

Film Production (4 weeks approximately)

Filming took place at times, dates and locations of the participating students' and graduates' convenience. Wherever possible, filming took place within the participants' usual working environments, and they were encouraged to be informal, relaxed and candid. The recordings were then produced, and interview footage mixed with a variety of stills, location shots, and sound tracks to make films which were engaging, contemporary, and visually appealing. The completed films were supplied to the University as both digital files and hard copies, alongside various stills from film shoots to be used for promotional purposes.

Film Dissemination

The completed films were uploaded and shared via the social media platforms of the University's enterprise support team, and through the University's virtual learning environment. They were played to appropriate cohorts of students during Freshers' induction activities, as well as through a range of introductory lectures delivered to students by the enterprise support team.

The films were also shared with the featuring students and graduates, for their own promotional use, and were disseminated widely via their own networks.

Impact:

The films have proven to be an excellent resource. In their first 12 months, they have received over 1000 views through social media, and through their integration into talks, lectures and workshops, have been seen by many thousands of learners. This level of peer-to-peer engagement would not have been logistically possible without these films.

The direct connection learners have to the individuals featuring in the films makes their messages potent, and the information they communicate regarding starting up in business is invaluable. The individuals who featured in the films were all very pleased with the results, and all went on to use the films for their own promotional purposes.

The graduate who created the films (Filmage) were able to enhance their own reputation and networks through the project, leading to further work for them and supporting the development of their own business.

Learner outcomes:

The peer to peer learning fostered through the films achieved its desired effect. Prospective students, new students, and even more experienced students heard directly from their peers that self-employment was a viable option, and were told the steps they needed to take to make it happen. Many have subsequently engaged with the enterprise support service at the University, and cited these films as a contributory factor.

For the participants who featured in the films, the exercise was a valuable learning experience too, with many reporting the confidence they had gathered as a result, as well as bolstered skills in communication to support their future endeavours.

Student Reaction

Creating these short films gave me valuable insights into how other self-employed people went about setting up their businesses after University. It also provided new networking opportunities which in turn allowed me to pass on more business their way and vice-versa. I have since had several commissions off the back of people viewing these short films online.

With the film I starred in being shown regularly at the University it has gained me a lot of recognition from local students and business which has in turn brought me more work and opportunities.

Joey Edwards – Professional videographer, and recent graduate of Glyndwr University.

Resources:

- Students / Recent Graduates who are willing to share their stories on camera.
- A film maker who is able to produce films on your behalf within your available timescales and budget.

Pictures or images:

Figure 1. Filming in progress.

Figure 2. Title Shots from completed films.

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- Tree Carving - Simon O'Rourke - ZONE Enterprise Hub - YouTube. 2015. [ONLINE] Available at: https://www.youtube.com/watch?v=3T2S9VHiH78. [Accessed 07 August 2015].

Contact details: Mike Corcoran, www.macorcoran.com, m.a.corcoran@outlook.com

24 hour interdisciplinary Challenge

Dr E. J. Power
University of Huddersfield
e.power@hud.ac.uk

Objective:

To develop an interdisciplinary network of exchange which promotes innovation, design thinking, new-product development. Bringing together a students from across the University, who value innovative thinking, ideas generation and interdisciplinary working as part of their student experience.

- Developing problem-solving skills as team members
- Analysing information (and working with limited information)
- Negotiating and cooperating with one another.
- Listening and leading
- Group Decision making (consensus building)

ETC Toolkit Case Example Template

QAA Enterprise Themes: (please highlight relevant themes)	Group:	Learning Environment:
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. Communication and Strategy Skill	• Small group working (4-6 in a team) • Individual task • Large Group • Any	• Lecture theatre • Presentation Space • Carousel tables (small group working) • Any • Outside • Special

Case Example Title: 24 hour interdisciplinary Challenge

Subject: Interdisciplinary Skills	Course: Various – extra curricula	Year: 2013, 14, 15

Introduction : (short paragraph/ 2 -3 sentence)

Interdisciplinary has been recognised as a key contributor in solving complex global social problems (BIS, 2009; 2009a; DIUS, 2008, QAA 2012). It therefore follows that graduates as societies leaders with a genuine interest in making the world a better place must have the ability and

confidence to work across disciplines. In today's global economy and in society as a whole, we are faced with many complex challenges which require new ways of working and graduates need to be prepared for this through the integration of interdisciplinary working within their under graduate (UG) curriculum.

Activity:
The 24 hour design challenge
- Second year students from across 3 schools within the university were invited to register for this event, places were limited to 40 students, a maximum on 10 students from a single discipline area.
- Students were placed into interdisciplinary teams on arrival between 4-6 members
- Students were presented with a list of rules of play (mainly that the judge's decision was final, could not swap teams, shared IP)
- They were presented with an open "complex" challenge – eg: "future extremes", "sustainable solutions to global challenges", the ageing population"
- We provided a guest lecture to enhance the theme.
- The teams were given an information pack containing a pencil, pad, pen drive (with a template for presentation) and the title of the challenge
- During the remaining hours of the first day the teams were encouraged to brainstorm around the team using their team's skillset, knowledge and understanding.
- At 3pm on the first day we provided a 1 hour expert drop in workshop – (invited staff from various disciplines to be available to discuss the students ideas), some student teams took this opportunity just to pop in and get some feedback.
- The teams had a print slot allocated in the morning of the next day, to print off their design board
- The team presented their ideas to a panel of judges in a dragons den format (5 minutes presentation, 5 minutes questions)
- Winning team's announced, Certificate and Prizes.

Impact: (reflections; learner feedback)
The impact was significant as ….

"There is never a stop-point in learning – there is always room for more". (2015 student)

"Competing in this design challenge was a thoroughly enjoyable process. As an engineer, it is important that I develop the ability to work with multiple disciplines and in the 24 hours we were given I have been given a massive insight into how completely separate skill sets can come together to generate an idea. I also find it incredible that after only a day, I came away with a team that I had formed a friendship with and now have an insight into demonstrating an idea to someone who has the means to make it a reality. Overall I cannot fault the opportunity of taking part and enjoyed every stress inducing minute of it. I would definitely do something similar again." (2014 24 hour design challenge).

The impact on learning was evident through the student feedback, we categories it into skill development, Collaborative working, Entrepreneurial development.

Skill-development

"....in the 24 hours we were given I have been given a massive insight into how completely separate skill sets can come together to generate an idea" (student quote, 2013 challenge).

"It was an enjoyable challenge, bringing in different skills we have learnt throughout our time here so far. I would defiantly recommend it to anyone and do it again" (student quote, 2013 challenge).

"…enjoyed every stress-inducing minute of it. I would definitely do something similar again"
(student quote, 2013 challenge).

"I learned a lot from my peers in my team and this experiment will benefit me in future group projects" (student quote, 2014 challenge).

Collaborative working

"....I really enjoined the challenge and it was good to start viewing things from different
discipline angles" (student quote, 2013 challenge).

"This design challenge was great. I love working with all of my team who were from
different specialisms" (student quote, 2013 challenge).

"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" (student quote, 2013 challenge).

"I really enjoyed the 24 hour challenge as I valued meeting new people and exploring different areas of study" (student quote, 2014 challenge).

"It was really helpful to speak to the different tutors and pick their brains about our ideas, as I would never normally come into contact with tutors from these courses" (student quote, 2014 challenge).

Entrepreneurial development

"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" (student quote, 2013 challenge).

"It was a great experience, thank-you! It is a great insight to the business world that we are entering" (student quote, 2013 challenge)

"Overall it was a great experience and I now have contacts and friends on completely different courses to me who I will no doubt be calling on for help on future projects as well as the one we started" (student quote, 2014 challenge).

Comment from external Judge: (permission to use quote already sought)

"Judging the 24-hour design challenge was a pleasure and revealed an impressive arsenal of talent the University of Huddersfield has amongst the students. Each multi-disciplined team presented well thought out and researched concepts which impressed the judging panel and stimulated much debate. Being spoilt for choice meant the pressure was put back on the panel when it came to us choosing a winner. In my experience, great ideas occur when a creative person or team is constrained by time and/or budget. 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 Creative Director UX&D, BBC Future Media).

Learner outcomes :

The learning is not within the task objective, but within the team process, networking and cross-fertilization of skills and often the desire to complete the task can mask the transferable learning that has been gained. It is therefore key, that once the discussion of the challenge itself is complete, that the de-brief encourage the teams to explore the skill development within the task and team work itself. As a facilitator, it is important that you allow the teams to explore their team process and find the learning within that. Within the dragon's den the teams are asked to reflect on this experience.

Resources:
- Post-its or similar sticky pads
- Pens
- Pads
- Pen-drives with template (if you want a professional finish) – for fun or shorter challenges flip charts works just as well
- Lunch on the first day works well
- External judges (or internal)

Pictures or images: (Note: If required these can be provided in a higher resolution)
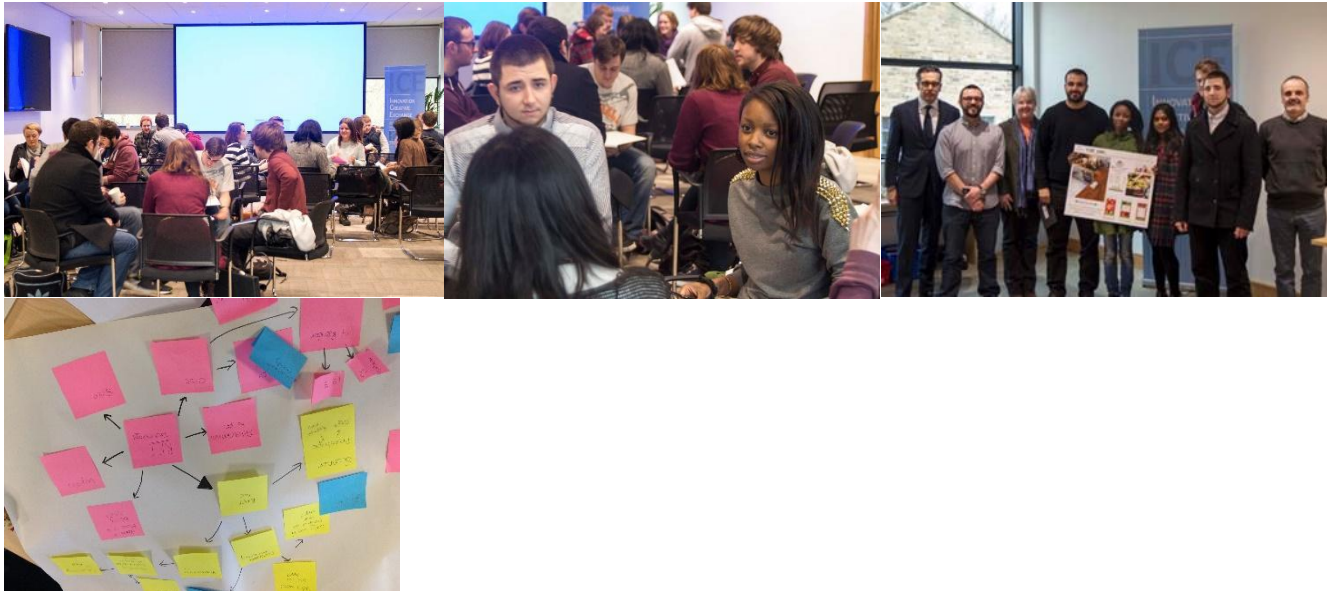
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- http://www.hud.ac.uk/news/2013/november/ice.php
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Contact details:
Dr E. J. Power
Director of Teaching and Learning
Reader, Textiles and Apparel
School of Art, Design and Architecture
University of Huddersfield
Queensgate
Huddersfield
HD1 3DH
UK

Tel: +44 (0) 1484 423523
Fax: +44 (0) 1484 516151
E-mail: e.power@hud.ac.uk

www.hud.ac.uk/ada

Idea Generation Workshop
Lynda Povey
University of Portsmouth

Objective:

- To evidence the power of group work as more ideas are created through team work
- The learner will be exposed to several future scenarios and develop and explore solutions to everyday world issues.
- Think speculatively, employing both convergent and divergent approaches to arrive at appropriate solutions
- Identify, analyse and respond to relevant opportunities

We use brainstorming and idea generation techniques such as

- Blue sky thinking and creative problem-solving approaches
- 'Napkin sketching' where you explain and defend your ideas and approaches
- The Merlin Trick where you stress test your ideas by shrinking, enlarging, or adapting them

To be successful you must be prepared to work like an entrepreneur. This means
- sharing underdeveloped thoughts and insights
- offering and receiving uninhibited feedback from peers and mentors
- a 'letting go' of ideas
- collaborative gathering of alternative ideas

ETC Toolkit 'How to Guide' Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. **Creativity and Innovation** 2. **Opportunity recognition, creation and evaluation** 3. **Reflection and Action** 4. **Interpersonal Skills** 5. **Communication and Strategy Skill**	• **Small group working (4-6 in a team)** • **Individual task** • **Large Group**	• **Presentation Space** • **Carousel tables (small group working)**

Title: Idea Generation Workshop

Overview: (short paragraph/ 2 -3 sentence).
We use brainstorming and idea generation techniques such as

- Blue sky thinking and creative problem-solving approaches
- 'Napkin sketching' where you explain and defend your ideas and approaches
- The Merlin Trick where you stress test your ideas by shrinking, enlarging, vanishing or reversing them.

The student must be prepared to work like an entrepreneur. This means
- sharing underdeveloped thoughts and insights
- offering and receiving uninhibited feedback from peers and mentors
- a 'letting go' of ideas
- collaborative gathering of alternative ideas
- the identification of ideas to take forward and develop through the rest of the programme
-

Activity:

- Students are introduced to the concept of effectuation and how this is a way of thinking that serves entrepreneurs in the processes of opportunity identification and new venture creation.
- They are also introduced to the concept of horizon scanning and exploring what the future might look like to understand uncertainties better.
- The students are presented with a minimum of 3 future scenarios, the resultant and potential problem and the challenge this presents to the innovators.
- Every student chooses one scenario and develops a basic, draft solution. This is then sketched onto one side of a folded paper napkin.
- All napkins are stuck to a wall/window/board.

- Each participant then votes for their 2 favourite solutions by placing a sticky dot on each.
- The top 3 (this can change accordingly) are selected to be taken forward for the group work.
- The participants are divided into groups of minimum 3 and maximum 5.
- Each group is given a solution as sketched on the napkin and one person takes ownership. This person will stay with this idea for the rest of the session.
- The facilitator then describes the 'Merlin' trick (Jonas Michanek and Andreas Breiler 'The Idea Agent'). Merlins magical powers can be channelled in four ways, to enlarge, to shrink, to make vanish and to reverse. But you can always dream up your own variations – for example, the worlds' cheapest, the worlds' most expensive, the worlds' smallest and the worlds' craziest.
- The facilitator gives an example of the first magic trick, preferably with a clear example. For example: *"What would happen if we took an existing product such as a Fitbit tracker and made it smaller so we could swallow it.*
- After about 10 minutes the group moves to the next table (except for the owner) and the facilitator announces a new perspective such as enlarging and gives an example *"if we were to enlarge the Fitbit perhaps we could create something we could walk through.."*
- The owner of the idea who has stayed at the table explains the developments, suggestions and the current status quo
- This continues until all perspectives have been covered.
- Students then write up or clearly sketch their ideas and develop them further.
- A final vote is taken on the most feasible and potentially significant idea.
- The facilitator re-emphasises convergent and divergent thinking and how this model can be applied to alternative situations.

Skill Development:
- Evaluation
- Idea Refinement
- Communication
- Reflection

Resources:
- Paper napkins
- Pens
- Coloured sticky dots
- Flip chart paper

References:
'What makes Entrepreneurs Entrepreneurial' by Sara Sarasvathy
'The Idea Agent' by Jonas Michanek and Andreas Breiler
Penaluna and Penaluna 2006

Author: Lynda Povey, Enterprise Adviser, University of Portsmouth.

MBTI and team working activity

Dr Simon Brown, Visiting Professor UWTSD, Head of Enterprise Development NCEE, Fellow EE UK

Objective:

- To introduce the group to the increasingly popular MBTI (Myers Briggs Type Indicator) Test that is felt by many to help individuals identify their personality type and thereby inform them how best they might work or operate in a team/ group situation.

- To conduct a "quick and dirty" MBTI test. The to construct teams based on the individual's responses before setting a task to complete and then reflect upon.

ETC Toolkit Case Example Template

QAA Enterprise Themes: (please highlight relevant themes)	Group:	Learning Environment:
1. Creativity and Innovation 2. Opportunity recognition, creation and evaluation 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. **Interpersonal Skills** 7. Communication and Strategy Skill	• **Small group working (4-6 in a team)** • Individual task • Large Group • Any	• Lecture theatre • Presentation Space • **Carousel tables (small group working)** • Any • Outside • Special
Case Example Title: MBTI and team working activity		
Subject: Skills Development	**Course:Any**	**Year:Any**

Introduction : (short paragraph/ 2 -3 sentence)

The increased popularity of Psychological tests to help recruiters or managers select characteristics that they believe will make their work teams more effective is something all students and tutors need to be aware of.

While the practice may (or may not) be well founded, it cannot be ignored. Personally I have been given several opportunities to have my personality and working style measured through a variety of tests. Clearly the results will be shaped by the environment in which the test is

taken. I would feel my responses were different when I was a Business School Director involved in managerial decision making when compared to my earlier life as a humble academic or even when I was a research scientist.

What has to be made clear is – your preferred working style or approach to team situations will change as you change. The results are not set in stone, rather they are an indicator.

The "quick and dirty" exercise here is just that – it is far from rigorous! It should be used to raise awareness of the issue and for those who wish to take it further; then most Universities have licences for the real thing and will be more than happy to pay for a proper test to be completed.

Activity:

I tend to introduce the session by running though the Power Point slide deck to explain the background and the rationale for the activity.

Then I ask the four questions and invite everybody to select a letter response.

When everybody has a four letter code, we look how the "population" breaks down (I guess this is still correct- though I think my data might be US and dated…). WE then can talk about how the group feel about the four letter codes they have chosen. Do they relate to the characteristics attributed to the four letter codes from the full MBTI test?

I then invite individuals to adopt a specific role within a group context. I then link a four letter MBTI code to the roles and start to construct teams based on the role mix.

Individuals can do this in a variety of ways. I simply ask for teams of four to be created. A show of hands for each role allows me to go – "OK you ; you; you and you – you are one team." And so on. Individuals can create teams/ groups based on their knowledge of the cohort and student's ability to work collaboratively.

You will have teams of varying levels of maturity and motivation and you will find some teams do not have the exact or optimum role mix.

The joy of this activity is to watch how the teams perform when the open ended task is given.

As experienced tutors, you can float and pick out the team dynamics. You will soon hear gentle laughter and see smiles on the faces of those in the teams that are starting to relax and work to their preferred style. This will be contrasted by the teams that have individuals who are not comfortable in their role or team.

Leave the exercise to run for as long as you wish. Make sure you spend time drawing the learning from the exercise. Why did some teams laugh more than others? How did the individuals feel about the role they were asked to perform? How did the team come together? What did they learn about themselves and about team working?

Impact: (reflections; learner feedback)
The impact was significant as ….

I have used this activity when a lecturer with groups of students before they embark on a major assessed team work activity. I conducted this activity with L5 students before they were expected to go out on their Industrial Placement year. An awareness of how to operate in a team is essential preparation for the world of work.

I also have used this with Enterprise Educators in Wales (ELVIS) and when running staff development activities with tutor teams in departments I am supporting. I have also shared this with IEEP participants.

Everybody can take something away from this and use it in their teaching or working lives.

Learner outcomes :

At the end of the session the participants will;

Appreciate the different roles that are required for effective teams.
Recognise that personality types impact on effective teams performance
Understand that they have a preferred learning / work style that will change over time
Be more understanding of how fellow team members feel when put in situations that do not allow them to work to their preferred style.

Resources:
- PPT deck
- (Print off a number of the slides and hand these out as resources for the task)
- Post-its or similar sticky pads
- Pens

References:

- Press articles
- Key authors
- Books
- Web -sites

Contact details: Dr Simon Brown, Visiting Professor UWTSD, Head of Enterprise Development NCEE, Fellow EE UK

Dragons Den in Reverse (Ned Snogard)

Paul Peachey and Emma Forouzan
University of South Wales

Objective:

- Develop questioning skills
- Compare and contrast pitching styles
- To question and evaluate business ideas in a limited time frame
- View a business idea through the eyes of an investor

ETC Toolkit Case Example Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. Creativity and Innovation 2. **Opportunity recognition, creation and evaluation** 3. Decision making supported by critical analysis and judgement 4. Implementation of ideas through leadership and management 5. Reflection and Action 6. Interpersonal Skills 7. **Communication and Strategy Skill**	• Small group working (4-6 in a team) • Individual task • **Large Group** • Any	• Lecture theatre • Presentation Space • Carousel tables (small group working) • **Any** • Outside • Special
Case Example Title: Dragons Den in Reverse (Ned Snogard)		
Subject: Business	**Course: HND Business and Enterprise**	**Year: 2**
Introduction : (short paragraph/ 2 -3 sentence) Ned Snogard (Dragon's Den in reverse) tasks business experts to pitch fictitious business ideas to students. The session aims to help students to understand the art of pitching and securing funding for new business ideas.		
Activity: Time required 1:30 – 2 hours.		

Pre-session

Entrepreneurs are invited to take part in the event and are given the chance to pick from a list of fictitious business scenarios or come up with one of their own. Their task is to prepare a 5 minute funding pitch to an audience of students and then be questioned by the students for an additional 5 minutes.

In this case study the ideas included iBooze, an iPhone app which turns a phone into a breathalyser, To Dye For, a clothes up-cycling business, and Silky Road Tyres, a new composite tyre formula using traditional rubber combined with recycled materials to produce a tyre which reduces road noise and fuel consumption.

The winning pitch can be decided through a show of hands, cheering the loudest for the preferred pitch or if time/space permits allowing the students to decide as a group and a nominated student feeding back the pros and cons of each pitch and why the winning pitch was chosen as the one they would be most likely to invest in.

The entrepreneurs are given time to confer which they felt was the most relevant and insightful question of the session. The winning student is presented with a gift voucher or other small prize.

Finally it is revealed to the students during the round up session that the business ideas are fictitious – which so far has been a complete surprise to the students, further embedding the importance of confidence.

Impact: (reflections; learner feedback)

Paul Peachey: "We initially trialled Ned Snogard as an extra-curricular activity, it will now run annually as part of the undergraduate degree programme. The students were stunned at the event when it was revealed that none of the ideas were real – demonstrating the polished pitching skills of the entrepreneurs.

Emma Forouzan, Enterprise Start-up manager at the University, said: "This is the second Ned Snogard event we have run at USW and it provides a fantastic learning opportunity for our students to take the seats of the Dragons and learn from the pitches of real entrepreneurs. We were all impressed by the quality and range of the questions from the students – they didn't hold back in asking tough questions."

Learner Feedback:
- Mark Button: "This event helped me to understand how to run a business and the skills I can use to pitch ideas."
- Djamilo Trovoede: "I now feel much more confident of knowing how to develop and deliver a skilled business pitch."

- Benjamin Prentice: "I was shocked that the business ideas were not real as all of the entrepreneurs pitched so well – it showed that will confidence you can convince others to believe in your business ideas".

Resources:
- Award or voucher (usually provided by one of the businesses) for the best question.

References:
- http://www.southwales.ac.uk/news/2015/ned-snogard-turns-tables-dragons/
- Key authors: Idea originated by Stuart Miller of Bybox
- Books
- Web -sites

Contact details: Paul Peachey (Senior Lecturer, Faculty of Business and Society) and Emma Forouzan (Enterprise Start-Up Manager) University of South Wales

Social Enterprise
Dr. David Bozward
University of Worcester

Objective:

- To understand and be able to define Social Enterprise
- To explore the business models used within Social Enterprise
- To understand the cross-sector theories of Social Enterprise
- Identity popular companies with the health sector and discuss their business models

ETC Toolkit 'How to Guide' Template		
QAA Enterprise Themes: (please highlight relevant themes)	**Group:**	**Learning Environment:**
1. **Creativity and Innovation** 2. **Opportunity recognition, creation and evaluation** 3. <u>**Decision making supported by critical analysis and judgement**</u> 4. **Implementation of ideas through leadership and management** 5. <u>**Reflection and Action**</u> 6. <u>**Interpersonal Skills**</u> 7. <u>**Communication and Strategy Skill**</u>	• **Small group working (4-6 in a team)**	• **Carousel tables (small group working)**
Title:		
Overview: (short paragraph/ 2 -3 sentence) This session starts with a short introduction and then allows groups of students to discuss and decide where in the cross sector diagram popular health service companies should be placed, based on publically available data. It's a great way to introduce social enterprise and the business models used to create social good through an interactive session and group working.		
Activity: (Potentially long – if including timings; approach; extensions; assessment; options for delivery) Introduction		

Social enterprises use a wide variety of legal forms and these forms normally depend on the business model being employed by the enterprise. As these enterprises change and the mix of their business interests change we can see that a full spectrum of companies exist for most industry sectors. This session uses the UK health sector and popular organizations to understand how these alternate between being more mission focused (social) to more market focused (surplus generating). In this task we shall look at the UK Health Sector and key players within the industry:

- AstraZeneca
- Boots
- British Red Cross
- BUPA
- Cancer Research UK
- GSK
- NHS
- Nuffield Health
- St. John Ambulance

Sheets are provided with details of these companies (See link below).

The session is split into six parts:
1. Provide a definition of Social Enterprise
2. Present the Cross Sector Model
3. Set the Criteria for Discussion and Selection
4. Split the class into groups of 4-6 people
5. Teams then discuss and place
6. Class Discussion and Reflection

Criteria for Group Discussion and Selection
For each company we shall use only a limited set of information (to bring out key points during the session), and therefore we shall limit selection using

1. Company Structure
a.   Strategic Intention
b.   Governance
2. Financial
a.   Total Turnover
b.   Turnover dedicated to social impact

1. Social Impact
a. Interventions
   b. PR & Policy

The group place the name of the company on the Cross Sector Venn diagram depending on their business models being employed:
- Public Sector
- Corporate Social Responsibility
- Private Sector
- More Than Profit
- Third Sector
- Non Profit
- And Multi-Stakeholder

The majority of the enterprises used in the session have multiple business models and as such overlap on the Venn diagram which generates discussion and debate within the group. This realisation that the social enterprise sector has to develop a highly profitable income stream and also a mission focused social business is at first controversial, especially in the Health sector, yet when applied to other sectors is easier to accept.

Skill Development: (short – focus on reflection; review; feedback; learning)

This task requires listening and communication skills and also helps builds trust and connections across the pairings.

Student Experience Statement
I am interested in working in a social enterprise or charity when I graduate as it will allow me to help others, especially in my community. The seminar David ran opened my eyes to how they make money and also the range of activities they do. I never thought of Business models before and this got me thinking about how the social mission has to be balanced with the market focused money making activities. Really enjoyed it and think I look forward to the next seminar.

Resources:

Prezi Presentation -
https://prezi.com/s2tpjmnayxh6/social-enterprise-cross-sector-theory/

Handout & Slides
https://www.dropbox.com/s/qnclusq03oqvqli/Social%20Enterprise%20Cross%20Sector%20Theory.pptx?dl=0

References:
Key authors
Books
Links:
- Social Enterprise Definition: See DTI (2002) A Strategy for Social Enterprise, London: HM Treasury, p7.
- Cross Sector Theory
  - Hybridisation (Nyssens, 2006:318)
  - Leadbeater's Model (1997)

Social Enterprise Web –sites
Harvard Business School: http://www.hbs.edu/socialenterprise/about/history.html
Brief history of social enterprise at a leading US university

Social Enterprise Alliance: http://www.se-alliance.org/
The lead organisation advocating for social enterprise in the USA

The Social Enterprise Coalition: http://www.socialenterprise.org.uk/
The lead organisation advocating for social enterprise in the UK

EMES European Research Network: http://www.emes.net
Leading European network of researchers examining Third Sector and Social Enterprise

Co-operatives UK: http://www.cooperatives-uk.coop/
One of the founders of Social Enterprise Coalition in the UK.

Social Enterprise Magazine: http://www.socialenterprisemag.co.uk/
Popular sectoral magazine.

The Social Enterprise Institute: http://www.sml.hw.ac.uk/socialenterprise/
Scottish institute researching social enterprise at Herriot-Watt University

Office of the Third Sector: http://www.cabinetoffice.gov.uk/third_sector/social_enterprise/

CIC regulator: www.cicregulator.gov.uk

Companies House: https://www.gov.uk/government/organisations/companies-house (Please note that company information and annual returns can be downloaded for FREE)

Health Sector Web –sites (Data used in Handouts)
http://www.redcross.org.uk/About-us/Who-we-are/Governance-and-annual-reports
http://www.nuffieldhealth.com/about-us/reports
http://www.sja.org.uk/sja/what-we-do/who-we-are/annual-reports.aspx
http://www.cancerresearchuk.org/about-us/how-we-are-run/annual-report-and-accounts
https://www.england.nhs.uk/2014/07/22/ann-rep/
http://annualreport2013-14.allianceboots.com/
http://www.gsk.com/en-gb/investors/corporate-reporting/annual-report/
http://www.astrazeneca.com/Investors/Annual-reports
http://www.mentalhealth.org.uk/content/assets/PDF/publications/annual-review-2011.pdf?view=Standard

Author:
Dr. David Bozward
Senior Lecturer in Entrepreneurship
Worcester Business School, University of Worcester

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SPECIAL FEATURE

Physics in an Enterprise Culture
Alastair R. Buckley, Ali Riley, David G. Lidzey
University of Sheffield

Abstract
In this article we describe an enterprise learning module delivered in the physics department at the University of Sheffield. We reflect on the development of the module over the last 5 years and describe the current state of the module. We then engage in a reflection of the learning objectives of the module in the context of divergent and convergent thinking as components in the creative process, and discuss some of the tensions of the open ended, divergent learning experience from an assessment point of view. We draw on student feedback collected during the module delivery as well as a more detailed interview conducted several months after the module concluded. While much student feedback is very positive we do find a minority of vocal students that show there is a deep tension between the student desire for a "sense of fairness" in the assessment and staff desires to provide an authentic enquiry experience that includes responding to differing and sometimes contradicting feedback and constraints.

1. Introducing the module – "Physics in an enterprise culture"

The module has been delivered for the last 10 years. The objectives in the module have remained similar but the context, structure and support provided have changed over time. It is a level 3/4 optional module, where students are asked to develop a plan for an innovative product, service or research project, based on a combination of their subject knowledge of Physics and Astronomy and their personal interests and knowledge. The learning contact hours in the module are used to provide a combination of relevant but general support sessions such as introductory lectures by external speakers, (for example a lecture on intellectual property), business planning games, creative thinking games etc... In addition more individually tailored support sessions are also given where formative feedback on ideas, work in progress and presentation concepts can be gained. However, the bulk of the work is student led and leads up to two presentations. The first is written and is submitted in the form of a proposal (with the precise guidance being defined by the theme and context). These proposals are reviewed by student peers and experts prior to and during a discussion panel. The panel provides feedback allowing students to adapt their ideas and work towards the second submission – a 5 minute oral presentation (or pitch) of the final idea to two experts. Students typically have to work within a brief which differs from year to year. In the latest instance of the module, students were asked to investigate the funding competitions and priorities that the UK Government support through Innovate UK (specifically the 'future Cities' and 'Satellite Applications' themes), and develop a business idea for a technological product that would fulfil their criteria and attract funding.

For many years the assessment was weighted heavily towards the outputs – either the written proposal or the presentation. However, in the last year of delivery we attempted to separate out assessment of the output from the assessment of the process. In a sense what currently

94

makes this module different is the attention given to the process of coming up with ideas, not just at the beginning of the module but throughout. This process is documented in more detail in section 2, before the student voice is brought into a reflective discussion in section 3. We conclude in section 4 by bringing our experiences together with some of the assessment literature from the higher education sector.

2.   The leaning process that leads to enterprise capabilities?

Authentic Problem Enquiry and Response

Students are given details of a real business and funding opportunity, as provided by Innovate UK. Students must identify and work within the constraints and opportunities offered by this brief. Considering Physics and Astronomy through the lens of UK government priorities and funding streams helps students to situate their subject knowledge, well developed by this stage of their studies, within a wider context.

Innovation and Creativity

There is a particular focus in this module on guiding students through a process of 'double diamond' innovation. Students are first asked to identify as many problems/opportunities as possible, along with as many potential solutions as possible. Students then select one idea and submit this to a feedback panel composed of module staff, USE staff and peers. Students then use this feedback to examine all the possible pitfalls and opportunities associated with their selected idea. They then refine their idea based on this analysis, for the final presentation. The use of the double diamond model (Penaluna et al. 2010) (the explicit incorporation of both divergent and convergent processes in innovation) was introduced following concerns (both student and staff) that the module tended to focus around the need for "a good idea". Students that did not find "one" tended to get increasingly concerned throughout the module that they had not got one. It was felt that by making the creative process explicit and temporally structured and by providing assessment targets for doing background research and generating multiple initial concepts that could then be questioned and refined there would be less emphasis on the "good idea" and more emphasis on a process that supports the creation of good ideas.

Risk Taking

Students have to choose one idea based on many that they initially generated – they can choose how and whether to implement the phase one feedback provided by staff and peers. This involves risk analysis, and students are supported by both the academic members of staff and guest speakers from industry to understand and fully evaluate risks, and make decisions based on this.

Taking Action

Students work individually in this module, and so work largely in a self-directed manner, choosing their own project and directing its development. Students are made aware that they have access to a vast wealth of knowledge and support from the module tutors, other departmental staff, and University of Sheffield Enterprise, but that it is up to them to take advantage of this opportunity.

True Collaboration

Peer critique and feedback forms an integral part of this module. By participating in this 'critical review' process, students learn to evaluate their ideas by listening to the fresh perspectives of others. This is a type of collaboration that moves beyond that which students may have experienced in the past, but which is highly relevant to their future careers. Students are also guided in the process of effectuation, leveraging their social capital to develop ideas with a chance of success. Finally, students have to present their ideas to a non-specialist audience, adapting their ideas accordingly.

3.   Discussion

In this section we bring in the student voice to comment and reflect on the module design and objectives as described in the sections 1 and 2. The tension between supporting open ended and creative process and the requirement for a set of assessment criteria is brought forward and discussed. Module feedback was collected online (up to 2 weeks before the end of the module) and 30% of the student cohort submitted data. In addition an informal interview with one of the best performing students in the module was conducted.

Overall student feedback shows a good understanding of the overall objective of the module and in general a good engagement with the learning process. The module is praised by many for how it stands out, and although some students felt out of their comfort zone it was appreciated.

> "One of the best modules in terms of student led development and a different format"

> "Interesting concept. Welcome break from other modules. Good to be examined via coursework as opposed to exams. Opportunity to exert a small amount of creativity was welcome. Panel week was especially fun."

> "It was really great to experience a different type of physics and it has been the most interesting module I have ever done as it has taught me to think different"

> "This module is a welcome change from the normal subject matter and provides a nice relation to the real world. The use of the lecture time, though sometimes seemingly full of silly activities, is a good use of time when reflected upon and a much better way of teaching than traditional lecture-based content."

One student refers directly to the contrast between divergent and convergent thinking that was highlighted during the modules delivery and discussed in section 2.

"I like that the fact that there is emphasis on divergent thinking, as well as convergent. I believe more courses should take this approach, in fact education in general should."

However the module is not without criticism, in particular concerning the assessment. Several students highlighted the conflicts of advice given by the lecturers delivering the module – in that they were both assessing and guiding the students to develop their own ideas, but also that the advice given by these staff could in certain cases contradict each other. Such contradiction was something that was made explicit in the module since it replicates very well the "real world" authenticity of industry, research and commerce where ideas are not right or wrong but developed and negotiated over time. This was received by a minority of students very negatively,

"Sometimes the lecturers gave conflicting information and didn't seem to be on the same page. It also feels as though if you don't have a brilliant idea you can't do well in the module and this should be made clearer. There should be more time devoted to ensuring you have a good idea. Also it sometimes felt that you had to take on suggestions from the lecturers as they would be marking it

"Drs Buckley and Lidzey have tried to make a module that is accessible to everyone undertaking it in their own way, which in many ways they have achieved, but this approach fails during the assessment phases. Without very clear guidance about what it is they are looking for, many people have been severely marked down for missing the target."   "the two course leaders differ on their opinions of what constitutes a good piece of work. This kind of contradictory advice is exactly what is NOT needed when trying to craft a piece of work tailored for assessment"

These points were explored further with one of our top students (alias Rob) in interview. Rob framed the contradiction issue in terms of his experience of the tension between assessment of the idea and the objective of learning the process of creativity – the divergent and convergent elements. Rob initially spoke about how it should be mainly about the process rather than the output, so that you can learn it and then apply it,

"You should try and take the actual 'how good the idea is' out of it"

"someone who has a bad idea but a good thought process should be able to get a good mark".

"maybe everyone should start with the same idea and then go onto develop it"

"they should be able to get a good mark if they explore it fully"

"One option might be – first come up with an idea but if you're not happy chose one from a list. Some people had negative view because they knew their idea wasn't very good."

However as the conversation progressed Rob started to reflect on his idea a little more and the value he had placed on it,

"but then it's quite good to be able to come up with your own idea"

And later,

> "More fun to be able to come up with your own ideas but…"

> "but there is an element of luck as to whether it's plausible"

> "I don't think you can control the timescales as much as you were maybe trying to."

So early on in the module Rob felt he had been lucky in coming up with a good idea and that in some senses he saw this as unfair. This is an interesting point, Rob seems to undervalue his idea and not really value his process of creating it either. He seems to implicitly value the more formal learning of a new process and t hen being able to apply it successfully. The fact that he excelled at the ideas creation process early on in the module doesn't sit easily with Rob since he can't see the explicit link between being taught something and applying it. When asked about the need to come up with multiple ideas to fulfil the divergent phase of the assessment

> "but some of those I kind of thought up after the first one because you had to put multiple ideas in"

What this points to is that enforcing a particular temporality on the module – ie. Modelling through the 'double diamond' takes away from the authenticity of creativity. When specifically asked about the issue of contradiction between different staff feedback Rob responded with an interesting idea about using role play for the academic staff, so that they took on different roles that could be clearly seen as different by the students.

4.   Conclusions

Overall there is a strong student engagement with the module and for many the experience is truly valuable in a future employment context. For others the issue of fairness of assessment places a burden on them that is difficult to overcome. In some cases their ability to find inconsistencies in the assessment rulebook of the module leads them to criticise its construction and value it less. We suspect that this finding is common in many enterprise based modules in higher education. Further examples within our own practice are the use of external assessors, whose opinions of student work often contradict those of the academic assessors who are looking for different qualities in a presentation or report. Students struggle with contradicting feedback even if both points of view are valid within their own frame of reference. These tensions are starting to be identified as significant within enterprise education. Pittaway et al (2010) review the assessment literature in enterprise education. The find few (3) studies they find uncover a tension between traditional rulebooks for assessment practice and the open ended philosophy of learning in enterprise education. The problem being that in enterprise education learning objective are often not defined in ways that are consistent with a pre-determined set of assessment criteria as is found in more traditional teaching; the sort of teaching that students are very familiar with in other courses. As in our example in this paper most students are happy with less structured and more open learning, but some, for probably a range of reasons, struggle to come to terms with such openness (and in particular

contradictory feedback) to such an extent that it compromises their learning in a significant way.

In conclusion we find that the relationship between assessment and learning experience in enterprise education is very strong and that the student value placed on experiential learning (a key outcome of enterprise education) is in tension with the modes of assessment. Many students are able to negotiate the tension without significant detriment but for some an alternative formulation of assessment would lead to better learning outcomes. Maybe this should be a reversal to output only oriented assessment so that the module is more authentic or, referring to Rob's initial reflections, maybe the assessment should be entirely process focused and feedback on the output should only be formative?

References

Penaluna, A., Coates, J. and Penaluna, K. 2010. Creativity-based assessment and neural understandings. *Education + Training* 52 (8/9) 660-678.

Pittaway, L., Hannon, P., Gibb, A. and Thompson, J. 2009. Assessment practice in enterprise education. *International Journal of Entrepreneurial Behaviour and Research* 15 (1) 71-93.

SPECIAL FEATURE

Fostering learning for capability and assessing authentically: a vision for Enterprise Education

Track Dinning

Liverpool John Moores University

Sally Brown

Independent Consultant

Abstract

This paper explores how universities working in partnership with employers and students can design, deliver and assess a curriculum that actively encourages student engagement and helps prepare students for future multiple career pathways. After discussing a range of contextual factors impacting on employability, the authors propose an eight stage approach to developing a fit-for-purpose curriculum, with a particular focus on authentic assessment, and conclude by arguing for the necessity of an approach to curriculum design and delivery that is aligned to current and potential future graduate and employer needs.

Introduction

We are currently preparing students for careers that we can't envisage in employment contexts that don't yet exist, so setting out to teach a fixed body of knowledge isn't sensible. Employers covet graduates who possess relevant skills demanded by industry (Jackson and Chapman 2009) so students will not only need to be competent at locating, accessing, evaluating and using source material we also need to help students to be flexible, adaptable, creative, empathetic and competent. Drawing on scholarship and experiences of working globally, this article considers how universities can design, deliver and particularly assess a relevant and appropriate curriculum that actively encourages student engagement and proposes some thoughts on how best to prepare students for purposeful and productive futures.

Contextual factors impacting on employability

On vocationally-orientated programmes, authentic assignments that relate to real world tasks tend to be highly prized by students and employers alike (QAA, 2014, Wharton, 2003), hence the need for authentic learning experiences and assessment. Increasingly theorists suggest that experiential learning is key to generate the meaning of theory (Huq

and Gilbert, 2013), to develop higher level skills, operate in an enterprising manner are so clearly sort after by today s employers (Jones and Irdale, 2010). Universities worldwide take pride in ensuring that their graduates are employable, particularly when students pay substantial fees to study, and in the UK employability data is seen as a key metric by funding councils as well as being a matter of high interest to all stakeholders including university governors, students themselves and their parents/funders and employers.

An example of the views of the latter can be evidenced in a major initiative, 'Job Ready', between 2012 and 2014 which explored how universities and businesses could best work together to create opportunities for UK students and graduates to develop their skills. Based upon extensive and in-depth interviews with 50 employers, it captures a snapshot of the 21,000 interactions between businesses and University Alliance universities (University Alliance, 2014). Within the report, Libby Hackett, Chief Executive of University Alliance, said: "At a time when most of the employment growth in the UK is in [jobs] involving analytical, problem solving and complex communications, it is important that we ensure universities are working closely with employers". The report provided examples of employers' views on the need for job-readiness including:

> *"We wanted to align with a university that is being strategic and innovative in what it's doing and looking at ways to grow the employability of their students. This mission fits with our values on innovation".* (Annalise Hayward of IBM working with Kingston University).

> *"For us to maintain our competitive advantage, we need to be finding and nurturing talent to develop a future pipeline of highly skilled employees"* (Rhys Williams of GE Aviation working with University of South Wales).

> *"I expect students to come in highly motivated, energetic and with a very good core base of up-to-date skills in terms of technology, computing and presentation skills. I also expect them to come with an enquiring mind, because all of those skills are immediately applicable to the roles we put them into. After this, it's the task specific knowledge that we are looking to provide for them. We're looking for self-starters really."* (David Webber, Business Development Manager for Agustawestland working with Plymouth University).

> *"To ensure our long-term prosperity and to ensure that we will be able to provide a competitive maintenance service back to our airline into the future (the next 10, 15, 20 years) we needed to transform our skills and experience. For example, simple things like the way we conduct repairs to the aircraft and the challenges around things like fibre optics, avionics, hydraulics, that's all moved forwards from a technological standpoint and we really needed to sit back and ask how we prepare our engineers".* (Bill Kelly of British Airways working with University of South Wales).

Each of these employers is emphasising the crucial role universities play not only in designing fit-for-purpose programmes from which they can recruit, but also shaping the student experience in such ways that graduates can bring to employment a range of skills and capabilities that enable them to be 'job ready', that is, able to fit into working environments well prepared for their roles and committed to self-development and lifelong

learning in an ever-changing work environment. Jones (2010) would suggest that this evolves from the students displaying entrepreneurial behaviour and skills that allows them to adapt as a result of learning in the work environment

Students' commitment to employability

It is clear too that students want to be employable when they graduate since they (and their families) are making an investment in their personal and professional development by undertaking higher education. Hence they tend to have high expectations of the usefulness and relevance of their programmes and particularly the means by which they are assessed. In the current climate, since so many students regard university study as a career advancement or progression route, they are likely to regard programmes which do not add value to their capabilities and knowledge as perceived by potential employers as a poor investment of their time and energy.

Final year undergraduate sport students and graduates at Liverpool John Moores University typically make comments such as:

> *'Understanding what employability is has been an important part of my education at university. I now understand that employers expects so much more than just knowledge of my subject.'*

> *'In the interview for my current job, I was asked more about my personal qualities than subject knowledge: things like problem solving, organising and planning, leading. I was confident with my answers as I was able to give examples from my both my work experience but also my university work'.*

> *'The environment in which we have assessed at university made us think on our feet, respond to new information quickly , re- negotiated deadlines and lead other students. I much preferred this type of assessment than writing essays as I can now see how it is much more relevant in the real work to have such skills.'*

A fit-for-purpose curriculum

Employers want universities to provide relevant and appropriate curricula but unfortunately, are not always impressed with the work-readiness of new graduates, particularly those who have been taught and assessed in conventional ways, who are lacking the competencies required for a modern workplace (Cummings 2010) Arriving with a sound body of knowledge is, of course, expected, but more than that, graduates need to be able to demonstrate interpersonal skills, digital literacy, familiarity with and confidence in the relevant use of social media, as well as a commitment to ongoing personal and professional development.

Good curriculum designers pay meticulous attention to ensuring that the subject content taught is relevant, current, suitably benchmarked against Professional, Regulatory and Subject body and national requirements, and paced and sequenced appropriately, and this is, of course, essential.

Nevertheless authentic learning experiences, which have a key role to play in helping students become employable by helping them to be flexible, adaptable, creative, empathetic and competent require more than this. This requires a focus on 'learning by doing' (Race, 2015) but while subject content and knowledge are essential for competence, students in the digital age need less reliance on 'learning by heart' and a greater focus on 'learning by use'.

Many argue that creativity can't be taught, but it can be fostered by providing learning environments in which trying things out without a fear of failure is actively encouraged. Similarly lessons in theories about empathy are less likely to be productive than getting students working in groups and finding out for themselves about conflict resolution and collegiality.

> *"In an increasingly globalised world, businesses are looking for excellent graduates with international experience while at the same time attracting lifelong learners with appropriate working experience and state-of-the-art knowledge and skills"* (Morgan, 2013).

Eight steps towards a curriculum for employability

We argue that curriculum design can be seen as an eight-element process, which is often concurrent rather than cyclical: the following diagram illustrates these eight dimensions of activity:
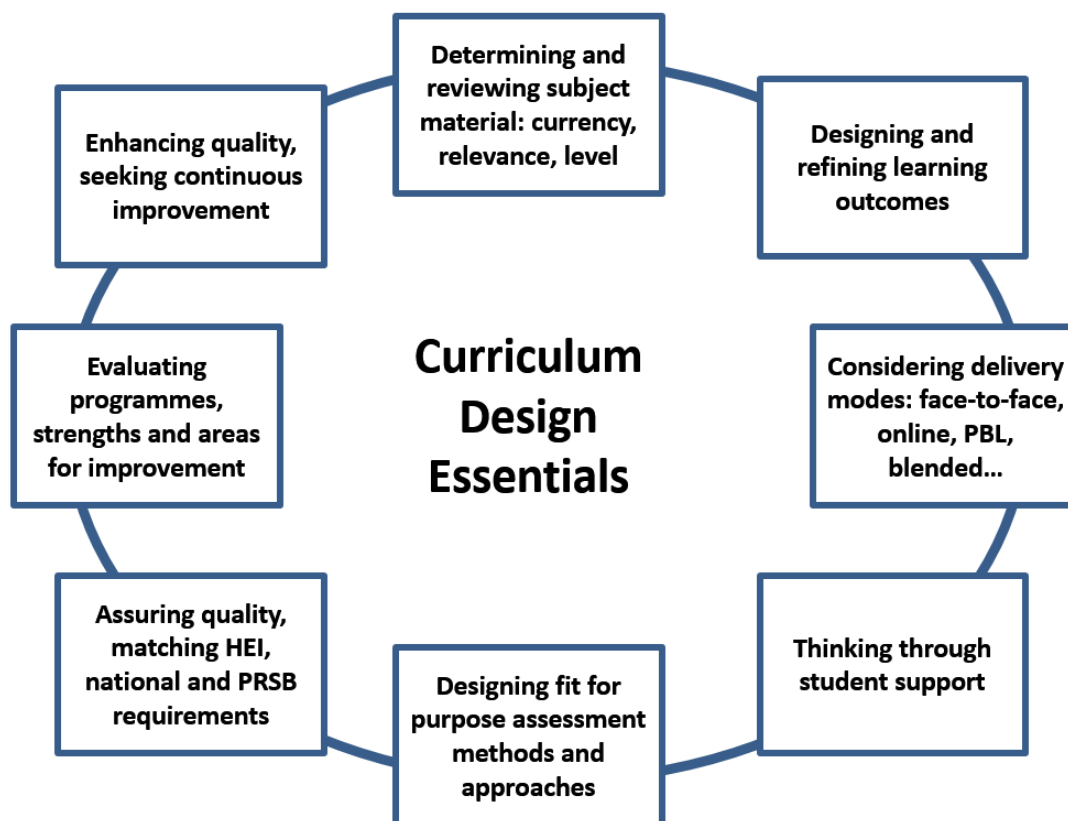
1. Determining and reviewing subject material:

In earlier decades curriculum designers pointed students towards what they needed to know in order to successfully graduated by giving them reading lists of books and articles to be read for each subject area. Subsequently academics and what were termed in some nations instructional designers produced syllabi, that is, lists of what would be taught. Latterly university teachers have focused on learning outcomes, that is, what students need to be able to know and do at the end of a programme. Subject material needs to be current, relevant, at the right level for the mode of study and particularly nowadays focused on the employment contexts towards which students are aiming.

Meyer and Land (2003) argue that some areas of the curriculum encompass what they describe as "troublesome knowledge", that is, areas of the curriculum with which students regularly struggle, and which therefore need particular attention in order for students to succeed. Typically such material is conceptually complex and provides a threshold beyond which students have great difficulty passing, therefore requiring thoughtful and strategic curriculum designer and delivery helping student pass through these 'conceptual gateways' leading to transformational ways of understanding, interpreting, or viewing material with which they formerly had problems. Using live employment contexts, virtual simulations and case materials which brings subject context to life can be invaluable in unlocking these portals of complexity.

2. Designing and refining learning outcomes

Race (2014) argues:

> *'A well-designed set of intended learning outcomes is evidence of good curriculum design, but more importantly should link really strongly to the evidence of achievement which will be developed by successful learners. After all, it is such evidence of achievement which is drawn from learners in assessment contexts, and such achievement can be regarded as the whole point of education and training. The word 'attainment' is sometimes used by policy-makers, but I don't think this adds much to our thinking about curriculum design, as attainment is only 'real' to the extent that we are able to quantify and accredit achievement.'* (pp.52-3)

A constructively aligned curriculum (Biggs and Tang, 2007) requires learning outcomes to be clear for all who use them and suitably link what students can be expected to know and be able to do at the end of a programme with the curriculum delivery process, the means by which what has been learned is assessed and how the whole learning experience is made coherent. They should be designed to support and align learning across and between levels. Good learning outcomes are written in a way that find them sufficiently specific for learning to be guided (without being over-prescriptive), susceptible to suitable and manageable measurement processes, achievable by students at that level of study, realistic and real-world aligned, and appropriately paced, sequenced and timely.

Students on 21st century programmes need a range of graduate attributes which are likely to include:

☐ team work, leadership and working effectively in groups;

- interpersonal communication, emotional literacy, social skills, social competence, self-efficacy;

- writing and speaking fluently and accurately in a variety of contexts relevant to their professions and workplaces;

- problem-solving;

- essential numeracy relevant to the job;

- competence in the uses of information technologies; digital literacy; the ability effectively and confidently to use basic packages like Word, Excel, PowerPoint, Prezi; confidence in appropriate uses of social media;

- Autonomy, independence, self-management, time management and diary management;

- The ability to think creatively and 'out of the box'. (Brown, 2015)

Race *op cit* would include:

- Having demonstrable intellectual curiosity, generosity of spirit, understanding of purpose, and adaptability;

- Being positive, responsive, thoughtful, well informed, organized, sociable and, above all, able to listen and try to fit in while also contributing to the workplace;

- The ability to interpret appropriately your role within an organization.

Deakin University in Australia for example demonstrate their commitment to the development of employability skills and advocate:

> *'educating learners for effective citizenship and employability through courses enhanced for highly personal, engaging and relevant learning experiences through premium cloud and located learning. We focus on clear expectations and standards, evidence of learning, personal and connected learning experiences and enhancing courses (rather than focusing predominantly on units)'.* (O'Brian and Oliver, 2013).

They suggest that 'excellent student learning is most likely to be achieved when:

1. Learning outcomes are clearly articulated and relevant to graduate destinations;

2. Assessment and feedback are carefully designed opportunities to enable students to demonstrate, improve and evidence achievement of graduate learning outcomes;

3. Educators engage, enthuse and inspire;

4. Learning experiences, on location or in the cloud, are highly personal, interactive and focused on engaging learners in authentic tasks and work-integrated challenges'.

Hence when designing a curriculum to enhance employability, the chosen learning outcomes must clearly represent (and require the demonstration of) fit-for-purpose graduate skills and attributes.

3. Considering delivery modes and methods

Curriculum designers who want to enhance employability of their students have key decisions to make about both delivery modes (should teaching be face-to-face, online using virtual delivery mechanism, using problem-based learning or using and blended approach combining two or more of these approaches?) and delivery methods. Traditional lectures continue to have high value where they are well-designed and effectively executed (Brown and Race, 2002), but the repertoire of available delivery methods is substantially greater nowadays and challenges the orthodox pedagogies (Rae 2010) than it was even twenty years ago.

University teachers seeking to enhance employability are likely to draw on open educational resources including YouTube videos and Ted talks, enabling students to encounter top practitioners in their professional fields, as well as a wide range of case study and simulation material. Increasingly delivery is 'flipped', with students being directed towards significant amounts of content resources in advance of lectures and face-to-face or virtual sessions focussing on interaction rather than content-delivery, and active learning in technology-rich contexts being actively fostered (Beetham, 2007). Having a blend of active learning with external inputs can prove valuable to students: Liverpool John Moores University Education students frequently praise the LJMU approach to project work in these kinds of terms:

'During the course last year I was involved in a project with an external agency, so I got to experience first-hand what it meant to work in a specific industry. Not only did this experience improve my subject knowledge as I got to see some of the theory from the classroom in practise, but it also made me realise that I needed to be much more confidence and willing to put my ideas forward in order to contribute to the work of the agency'.

'What was good about the experience I was able to get feedback on my ideas from the external agent, which was not always positive I might add and from this I felt learned more as the feedback as it was based on what would happen in the real world. Also I was able to set my own learning goals that I would later be assessed on, so it allowed me to pin point some key skills to be assessed on'.

4. Thinking through student support

Graduate employers often seek to employ students who are self-motivated, self starters capable of autonomous and self-directed task fulfillment. They want to recruit people who can work with incomplete information and act calmly, confidently and collegially in changing environments. They prefer students with all the graduate attributes discussed above. However, universities recruit students from all kinds of diverse backgrounds, and not all bring with them the social and cultural capital necessary to demonstrate all these things. Hence universities

106

need to offer a range of support that includes but also goes beyond traditional student services to enable students to develop and demonstrate such behaviours and attributes This also fulfills the UK government's key economic and educational objective is to ensure a legacy of a skills and productive workforce that are able to act in an enterprising way (Department of Trade and Industry 2001).

This inevitably implies that the curriculum must necessarily include support systematically to develop all the capabilities students that need to succeed. These include the capacity to locate, evaluate and use a range of information derived from both traditional text based and electronic resources, the progressive ability to self-organise and manage time to get the work done, the ability to work as a member of a group, taking turns in various roles including leader, the capability to manage and resolve conflict and the self-knowledge to seek help when needed as well as to identify possible sources for such help.

Acknowledging these needs, proficient and supportive curriculum designers build into programmes opportunities to learn about these capabilities, but to interrogate what they really comprise, to rehearse and practice them and to get advice on them in advance of summative assessment as well as feedback on how to improve them when they have been assessed. This implies a recognition that support for student activity and entity within programmes is as important as content delivery which may be a substantial shift in thinking for traditionalists, but is crucial to enhance graduate employability.

5. Designing fit for purpose and authentic assessment methods and approaches

We often assess what is easy to assess, or proxies of what has been learned, rather than the learning itself. A valid assessment is one that has close relevance to the criteria, which are in turn constructively aligned to the stated learning outcomes of a programme. Effective assessment is highly relevant to ensuring that graduates can demonstrate the knowledge, behaviours, qualities and attributes that were described in the course outline or programme specification. We would suggest that assignments that require students to write about something, rather than *be* or *do* something, may not be fit-for-purpose. (Brown, 2015)

If we are to devise and manage fit-for-purpose assessment that validly and reliably captures students achievement, we must ensure that students learn the theory they need to practice and develop the practices they need to be effective in their chosen fields of work and research as well as ensuring that programme or institutional assessment strategies are pedagogically sound, and are manageable for both staff and students.

Liverpool John Moores University undergraduate sport students generally comment that 'assessment that involves creating reports, videos a product are more meaningful to their learning than writing an essay'. They can see the theory in practice, and the end piece of work they see as an additional industry skill that they need.

Authentic assessment happens when we directly examine student performance on worthy intellectual tasks, when students are required to be effective performers with acquired knowledge, and when we can make valid inferences about the student's performance from the assignments presented for assessment (Wiggins, 1990).

Wiggins further argues that authentic assignments present the student with the full array of tasks that mirror the priorities and challenges found in the best [teaching] activities, attend to whether the student can craft polished, thorough and justifiable answers, performances or products and involve students coping with potentially ill-structured challenges and roles, with incomplete information, that help them rehearse for the complex ambiguities of adult and professional life.

There are multiple benefits of using authentic assessment (HEA, 2012). Students undertaking authentic assessments tend to be more fully engaged in learning and hence tend to achieve more highly because they see the sense of what they are doing. University teachers are able to use realistic and live contexts within which to frame assessment tasks, which help to make theoretical elements of the course come to life. It is also clear as discussed above that employers value students who can quickly engage in real-life tasks immediately on employment.

By contrast, inauthentic assessment is when proxies for assessment of competence performance are undertaken rather than performative elements themselves and the tasks being undertaken by students have little intrinsic value in themselves in terms of advancing students learning. In such assignments, theory is prioritised to the detriment of practical applications, and activities lack currency to contemporary practical contexts.

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To achieve authentic assessment, we must take a proactive approach to assessment design, interrogating and clarifying purposes, applications, approaches and methods, agency and timing (Brown, 2015, *op cit*). What students learn needs to be quickly and effectively translated into practice, so students can make the connections for themselves. In addition it is necessary for institutions to ensure that up-to-date means to manage the assessment process, including Electronic Management of Assessment (Ferrell, 2014) are implemented.

A fit-for-purpose approach to assessment involves systematically and progressively fostering assessment literacy among students. This includes ensuring that students can make sense of key terms such as criteria, weightings, and level as well as encountering a variety of assessment methods (e.g. presentations, portfolios, posters, assessed web participation, practicals, vivas etc) and get practice in using them. With such support they can gain clarity on how the assessment regulations work in their HEI, including issues concerning submission, resubmission, pass marks, and so on so that they are not disadvantaged by ignorance of how the regulations work.

Students who have developed good assessment literacy not only cope well with diverse assessments and examinations while they are on programmes, but also become skilled at seeking the cures that lead to high performance in the employment context, since they are

used to interrogating what are the expected outcomes implied within tasks and they become experienced in self-review and evaluation which are valuable graduate attributes (Boud, 1995).

6. Assuring quality, matching HEI, national and PSRB requirements

In many nations, national bodies like the UK's QAA, New Zealand's NZQA and Australia's AQA take a proactive role in specifying what good curriculum design should encompass and to provide guidance on matters including employability (QAA, 2014). In many cases, national quality bodies as well as Professional, Regulatory and Subject Bodies provide helpful guidance not only on curriculum content, but also on quality assurance and benchmark standards for graduate achievement which are normally designed in close consultation with PSRBs and employers to ensure graduates meet professional requirements. If universities are keen to ensure their students are successfully 'job ready', then academics must fully and proactively engage with their employer partners in conjunction with regulatory bodies to ensure that benchmarks and standards as well as content specification remain up to date and relevant.

7. Evaluating programmes, strengths and areas for improvement

Partner employers, students and alumni can be invaluable at all stages of the process and can help course teams to remain focused, periodically reviewing the feedback received on teaching, assessment, feedback and support to ensure problems are redressed promptly and programmes continuously improve. Curriculum review must be an ongoing process rather than a single event, with regular refreshment to keep programmes up-to-date, context contingent and in line with employers' current needs. As noted by Campbell (2000), both practitioners and policymakers must have intelligence on the needs of an industry in order to inform academic programme developments.   Programme leaders normally have access at a local and institutional level to substantial volumes of data on student satisfaction, levels of achievement, employment destinations after graduation and the financial viability of the programme concerned. Institutional support in comparative analysis of data year-on-year and across and between programmes may be available, but otherwise programme leaders should take responsibility for annual 'health checks' looking at causes for celebration and information to guide improvement as part of an ongoing cycle at last annually. Such systematic review is in many HEIs a requirement.

8. Enhancing quality, seeking continuous improvement

 "You don't fatten pigs by weighing them" is a traditional saying and in terms of curriculum design and development, obtaining and holding data is meaningless unless it is used for diagnosis, analysis and remedial action. Where student feedback suggests students don't feel they are well prepared for post-graduate employability, as well as providing in-programme employment-related activities and assignments, programme leaders would do well to build in opportunities for dialogue, updating and professional and employment-related inputs to improve students understanding of how they will need interface with the employment context to improve their confidence. If student achievement doesn't match their or your institutions' expectations, then it might be necessary to explore the barriers to student success and locate any areas of 'troublesome knowledge' that may require extra explication and expansion. If

graduate destination data suggests students aren't getting jobs in graduate professions in their field, then consultation with employers about what they want from graduates in terms of attributes and capabilities so new material, approaches and activities can be built in. If your programme is not viable financially, then increasing recruitment, using higher levels of technology to support assessment or using higher levels of open educational resources might be useful options. In each case the impact expected is positive transformation of the programme.

Conclusions

Universities cannot work in isolation in designing and delivering curricula: while in former years it might have been sufficient for academics to develop programmes in isolation without liaising with the employers and students about graduate outcomes and attributes, that is certainly not the case today. Even though graduates are very rarely recruited to careers for life, an orientation towards employability is essential for all programmes. Curricula must be aligned to graduate and employer needs as well as fitting those who invest their time, energies and resources in higher education for unforeseeable and unpredictable future work and personal lives. In proposing a systematic and articulated approach, the authors seek to contribute to the debate and suggest constrictive ways forward.

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