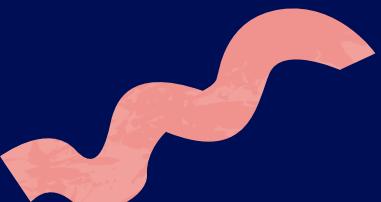


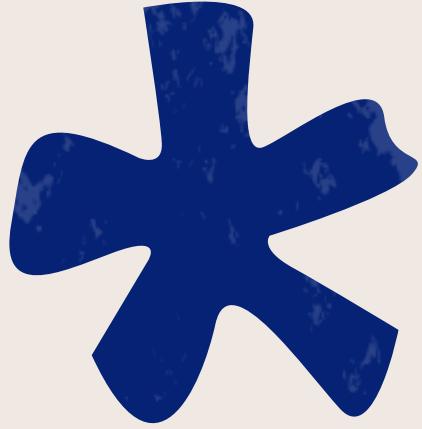
# Embedding Enterprise Education

5 steps to embed  
Enterprise Education into  
any degree subject



**Written by**  
**Helen Hook**  
**Enterprise Educator**





# Welcome

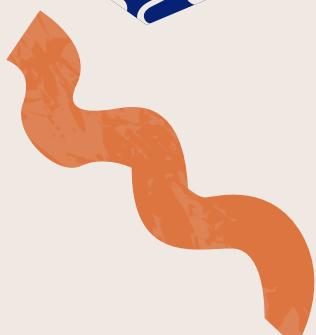
I work for Careers Network at the University of Birmingham as an Enterprise Educator. My role focusses on embedding credit bearing Enterprise Education into degree programmes across the university to support student employability.

This toolkit provides 5 steps to support academics, educators or staff in roles like mine, to embed enterprise, entrepreneurship, and employability into the curriculum.

Each section of the toolkit will provide information, guidance, suggestions and quick-wins to support embedding Enterprise Education into modules.

*Kind regards,*

*Helen*



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# Student Knowledge Exchange Reimagined: Breaking Down Barriers and Connecting Communities

Keele University and the University of Birmingham have partnered on a project called 'Student Knowledge Exchange Re-imagined – Removing the Barriers, Engaging Communities'. This is one of the 20 projects focused on student knowledge exchange funded by the Office for Students and Research England.

The 5 Steps to Embedding Enterprise Education Toolkit supports the project by:

- Raising awareness amongst academic communities on the relevance and importance of embedding enterprise education across all subject disciplines, along with benefits to students, the university, and the wider society through embedded external engagement
- Providing a practical step-by-step framework for academics and educators to use so that they can explore where and how to embed Enterprise Education into their teaching
- Providing case examples of how Enterprise Education has been embedded, along with tips and pointers on wider literature available

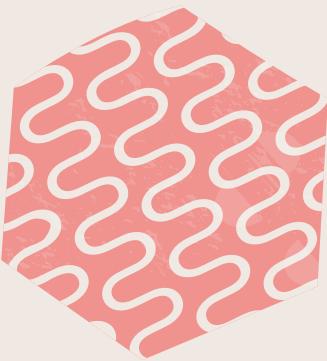
In addition to this toolkit, you might also find other project outputs useful as well, for example:

Impact Tool – The impact of the student-mediated knowledge exchange will be evaluated to consider the impacts of the project on four aspects: the students, the businesses, the university/departments, and the wider economy and society.

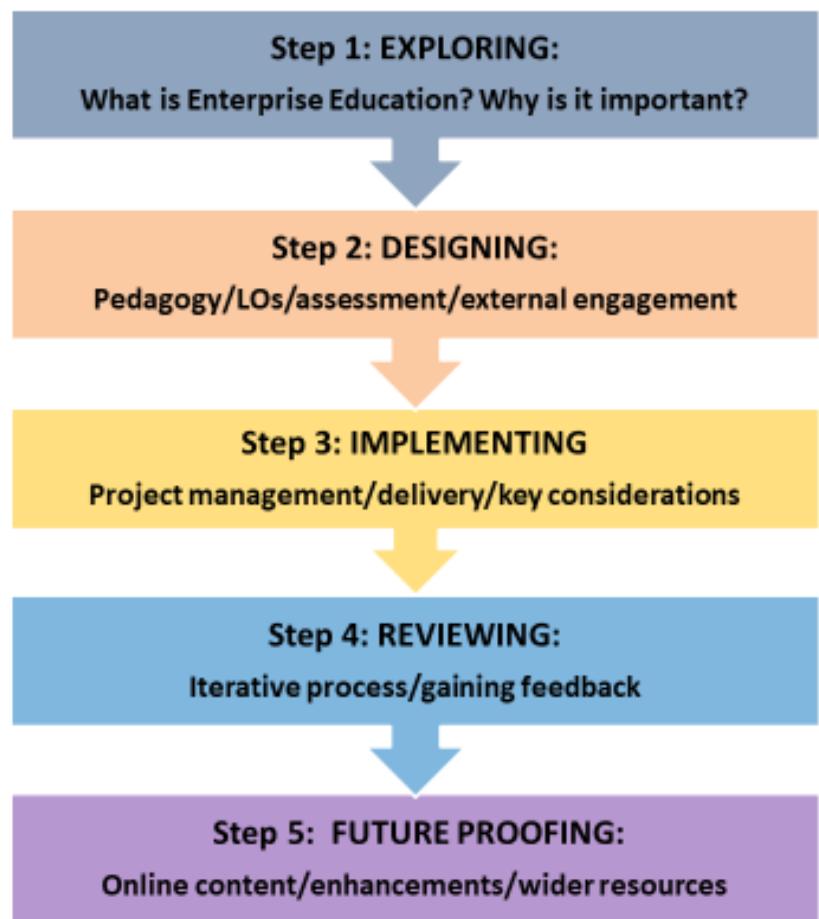
For more information head to:

<https://www.keele.ac.uk/kiite/projects/studentknowledgeexchange/impacttoolteam/>

# What are the 5 steps?



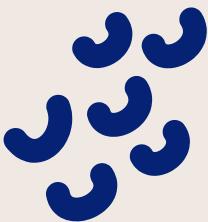
5 Steps:



Hook, H (2019)  UNIVERSITY OF BIRMINGHAM

These five steps (EXPLORING, DESIGNING, IMPLEMENTING, REVIEWING, FUTURE PROOFING) are a non-linear process and so you can refer to whichever part of the toolkit you feel is most relevant to you.

The key focus of this toolkit is for academics/educational developers to explore how embedding Enterprise Education into curriculum design could support their students' employability.



# Step 1: EXPLORING

## What is Enterprise Education?

'The Quality Assurance Agency for Higher Education defines Enterprise Education as:

'The generation and application of ideas, which are set within practical situations during a project or undertaking. This is a generic concept that can be applied across all areas of education and professional life. It combines creativity, originality, initiative, idea generation, design thinking, adaptability and reflexivity with problem identification, problem solving, innovation, expression, communication and practical action'

QAA Enterprise & Entrepreneurship Education (2018)

These are all underlying factors that can enhance employability prospects as well as be taken further through Entrepreneurship Education, which is defined as the application of enterprise behaviours, attributes, and competencies into the creation of cultural, social, or economic value. This can, but does not exclusively, lead to venture creation.

To learn more about the differences between Enterprise Education and Entrepreneurship Education, please refer to the QAA for Enterprise & Entrepreneurship Education.



# Enterprise behaviours, attributes and competencies

Below is a useful list which demonstrates how broad the enterprise behaviours, attributes and competencies are:

**Enterprise behaviours can include:** taking the initiative, making things happen, reflecting, communicating, pivoting and adapting, storytelling, taking responsibility, networking, personal effectiveness and managed risk taking.

**Enterprise attributes can include:** open mindedness, proactivity, curiosity, self-efficacy, flexibility, adaptability, determination and resilience.

**Enterprise competencies can include:** intuitive decision making, identifying opportunities, creative problem solving, innovating, strategic thinking, design thinking, negotiation, communicating, influencing, leadership and financial, business and digital literacy

[QAA Enterprise & Entrepreneurship Education \(2018\)](#)

This list is a useful way to demonstrate that enterprise can be built into and contextualised for all disciplines, not just for business school degree programmes.

It also highlights that the term enterprise isn't just about starting a business. Enterprise behaviours, attributes and competencies are essential for all types of employment and sought after by employers. Here are two useful reports to read: [The Global Skills Gap Report 2019](#) and [PwC: Workforce of the future](#)

# Why is Enterprise Education so important?

External lens	Universities	Students
<ul style="list-style-type: none"><li>• Changing job markets</li><li>• Globalisation</li><li>• Skills gaps</li><li>• Employer needs</li></ul>	<ul style="list-style-type: none"><li>• Transformative education</li><li>• Future proofing graduates</li><li>• Civic agenda</li><li>• Innovation/spin-outs</li></ul>	<ul style="list-style-type: none"><li>• 21<sup>st</sup> century skills</li><li>• Entrepreneurial mindsets</li><li>• Agile/adaptable</li><li>• Resilience</li><li>• Links to self-efficacy and wellbeing</li></ul>

Government and universities are increasingly talking about importance of 'graduate attributes' and '21st-century skills' – qualities necessary for our students to navigate the fourth industrial revolution and contribute to a rapidly changing society.

Universities are needing to react and respond to these changing needs through an agile, future-focused curriculum to support our students to be employable, entrepreneurial, innovative, adaptive, resilient, and flexible, to navigate the ever-evolving labour market.

'Educators are often tasked to tackle the 'wicked' problems of preparing students for jobs that don't yet exist, using technologies that have not yet been invented, and spotting and solving problems that we have yet to define clearly. To face this challenge, we need to develop students and graduates who are enterprising, flexible and innovative'

According to the European Commission: 'the development of the entrepreneurial capacity of European citizens and organisations has been one of the key policy objectives for the EU and Member States for many years. There is a growing awareness that entrepreneurial skills, knowledge and attitudes can be learned and in turn lead to the widespread development of entrepreneurial mind-sets and culture, which benefit individuals and society as a whole'

### [EntreComp: The Entrepreneurship Competence Framework \(2016\)](#)

The sustainable development of our economy is reliant on the development and application of entrepreneurial competencies along with all forms of intrapreneurship (where an employee acts like an entrepreneur within an organisation).

New areas of entrepreneurship are also being embraced: for example, social entrepreneurship, green entrepreneurship, and digital entrepreneurship all feature within the [QAA resource titled 'Education for Sustainable Development'](#) and within the [European GreenComp Framework](#). Both resources provide examples of how you can embed this into your teaching.

Enterprise Education has the potential to play an important part in helping our students to develop future-facing skills by embedding opportunities within the curriculum.

This toolkit aims to provide examples of how you can do this through module design, whether that be adapting a module or creating a new one. This resource includes case study examples, how to design enterprising learning outcomes, examples of assessment as well as a wide range of complementary Enterprise Education related literature.

# Step 2: DESIGNING

## Where to start?

### QAA Subject Benchmark Statements

As a starting point, I find reviewing the subject benchmark statements for the degree programme a great place to start.

For example, the subject benchmark for History now has a section on Entrepreneurship & Enterprise Education:

'Enterprise and entrepreneurship education supports behaviours, attributes and competencies that are likely to have a significant impact on the individual student in terms of future-ready employability and successful careers. It prepares students for changing environments and provides enhanced impact through placements and activities that build links between academic institutions and external organisations (see Partnership on page 10). Beyond employment, entrepreneurship education develops competencies to help students lead a rewarding, self-determined professional life, well placed to add social, cultural and economic value to society through their careers' ([QAA 2022 Subject Benchmark History](#))

These documents provide insights into the skills that should be developed through your discipline, along with ideas on assessment.

What I do next is map these skills against the Enterprise & Entrepreneurship literature to gain further insights and inspiration on how I could bring those skills to life in a module.

Look at your own subject benchmark statement and see which skills you want to focus on embedding first. I have included a list of literature to help get you started with this on page 28.



Once you have identified the skills you want to embed, you can now start to think about how this can be designed into your module. The next few pages will provide you with some tips, ideas and examples of how you might want to consider doing this.

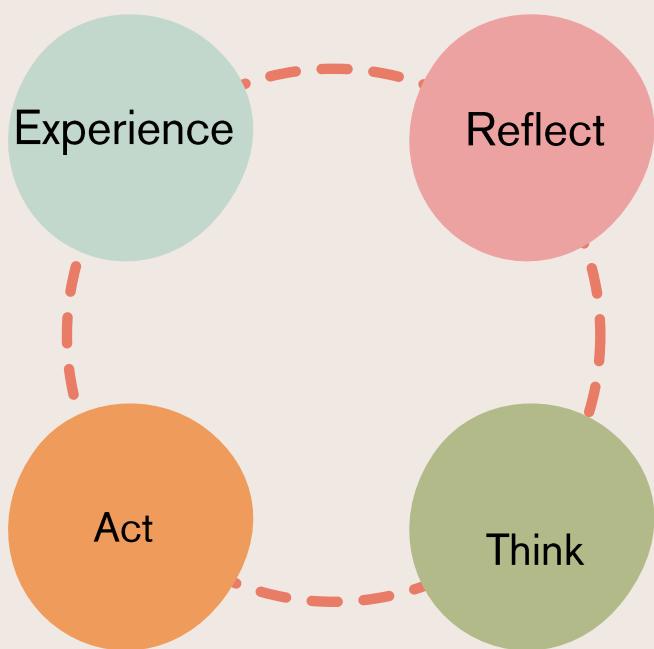
- **Look for quick-wins:** sometimes enhancing an existing module or adapting the assessment is easier than creating a brand new one.
  - **Pedagogy:** provide opportunities for students to learn by doing. Experiential learning, inquiry-based learning, problem-based learning are all great examples of this
  - **Constructive alignment:** review learning outcomes, assessments and activities
  - **Reflection:** provide opportunities for students to reflect on skills they develop
  - **External engagement:** build industry and/or alumni involvement into modules

Pedagogically, Enterprise Education has a strong focus on experiential learning and reflection. This is so that students can learn by doing, whilst also reflecting on the skills they develop.

'There are two goals in the experiential learning process. One is to learn the specifics of a particular subject, and the other is to learn about one's own learning process.'

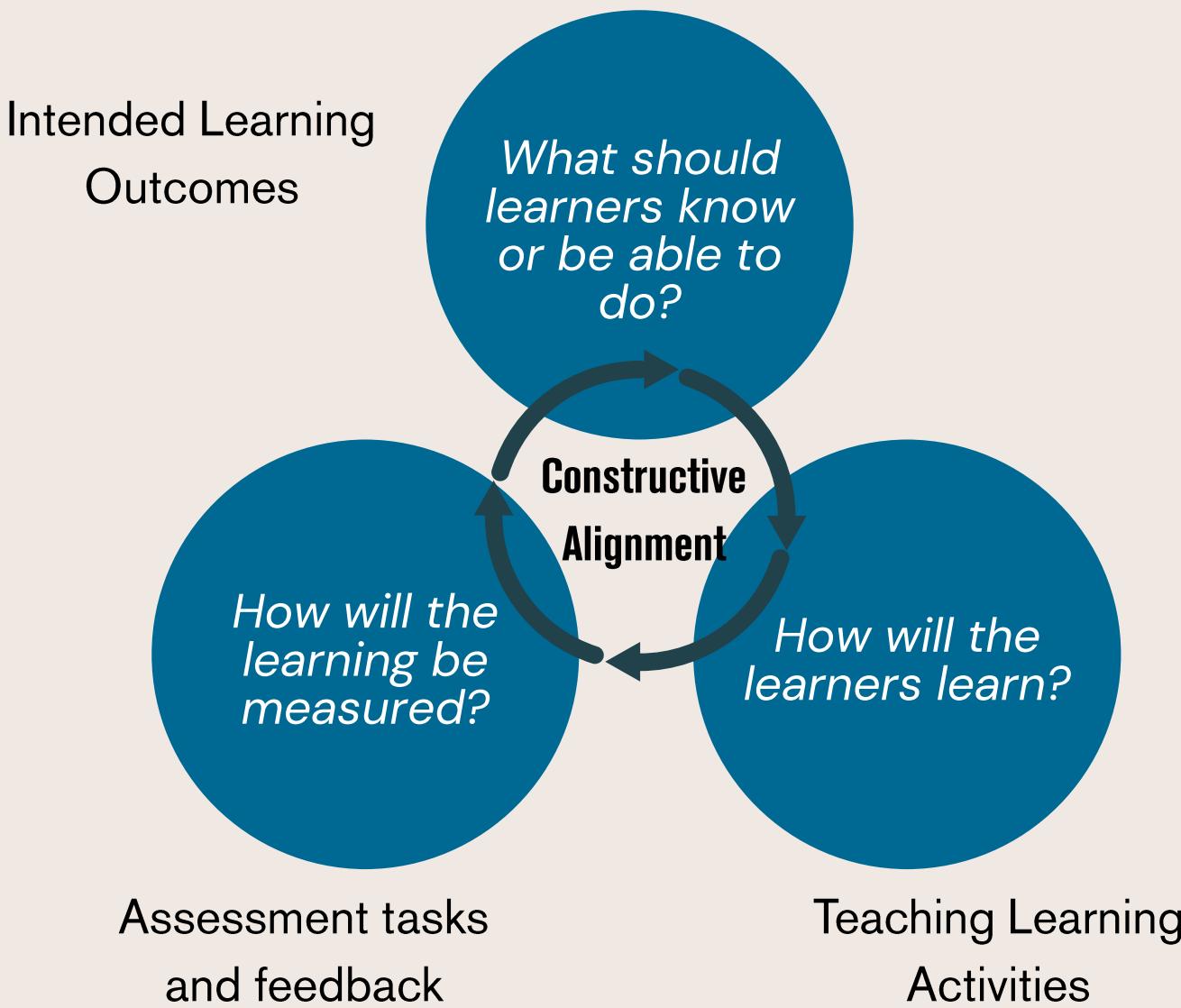
Kolb, D. 1984

David Kolb's work on the experiential learning cycle is among the most influential approaches to learning. The experiential learning cycle is a four-step learning process **Experience – Reflect – Think – Act.**



The process is initiated by a concrete experience, which demands reflection, review and perspective. This then supports abstract thinking to reach conclusions and conceptualise the meaning of the experience; leading to a decision to act, engaging in active experimentation or trying out what you've learned. Learn more about this online at the [Institute for Experiential Learning](#).

For more tips on delivery methods for Enterprise Education, there is a section dedicated to this in the [QAA Enterprise & Entrepreneurship Education resource](#).



**Constructive alignment:** is a great approach to use when thinking how everything fits together in your module for your learners (see above diagram). It has an out-come based approach to teaching which connects the learning outcomes to the assessment and the activity where the learning takes place. To find out more, read John Biggs (2003) resource on '[Aligning teaching for constructing learning](#)'.

**Learning outcomes:** a good place to start with learning how to write effective learning outcomes is to review the literature on [Blooms Taxonomy](#). You can also review entrepreneurial learning outcomes in the [EntreComp Framework](#), and there are also examples you can review from the case studies provided between pages 16-22 of this toolkit.

# Building in reflection

It is important to provide students with the opportunities to reflect on the skills they are gaining during their time as a student. Supporting students to reflect on experiences they encounter both in and outside of the curriculum will support them to articulate these skills and experiences to future employers.

There are lots of useful models you can use when embedding reflection into your teaching. Here are some to consider:

- Gibbs reflective cycle (1988)
- Kolb reflective cycle (1984)
- Schön model (1991)
- Driscoll model (1994)
- Rolfe et al's Framework for Reflexive Learning (2001)

One of my favorites is Borton's 1970 Model Of Reflection, which consists of three simple questions: What? So what? Now what?

Borton (2018) describes this model as a fluid process where no part of it can exclude another – it is a continuous integrated flow with no beginning or end.

To find out more about these models, review this useful resource titled '[Guide to models of reflection - when and why should you use different ones?](#)'

# Review assessment, can you make it more authentic?

'Authentic assessment aims to replicate the tasks and performance standards typically found in the world of work, and has been found to have a positive impact on student learning, autonomy, motivation, self-regulation and metacognition'

(Villarroel, V et al. 2018)

Authentic assessment can act as a powerful tool for assessing students' 21st-century competencies such as **complex problem solving, creativity and innovation, opportunity spotting and critical thinking**. Below are some examples from myself and colleagues of authentic assessment which supports the development of these competencies:

- Primary research for an employer project then producing a business report and presentation pitch with findings
- Designing a video advertisement for a product or service
- Designing an educational event or information pack to inspire or inform schoolchildren
- Writing a tender bid to deliver a solution to a specific problem
- A reflective competency-based interview
- Pitching a textbook or magazine idea to a panel of experts
- Practical field-based work with a business report
- Writing a newspaper or magazine article
- Creating a podcast to influence change on a topic of interest

To find out more, look at [Jon Mueller's Authentic Assessment Toolkit](#)  
Also see this [article](#) from Sarah King on a video created by Sally Brown and Kay Sambell

# Could you build external engagement into your module?



Enterprise Education provides a great opportunity to embed employer-led learning and external engagement into the curriculum

This can be done in lots of creative ways:

- Employers, charities, non-for-profits to provide project briefs/challenges
- Ask alumni if they would like to provide expertise/insights
- Guest speaker slots
- Could a module be fully co-created in partnership with industry?
- Supporting a start-ups with a research project to help them scale up
- Embedding the United Nations Sustainability Development Goals

Being able to co-create modules with industry and embed project briefs into your teaching is a great approach to support students gaining industry experience in addition to the more traditional industrial placement opportunities.

Providing opportunities like this in the curriculum can help support the development of entrepreneurial mindsets, behaviours and skills. It can also increase an individual's self-efficacy, whilst also providing a greater awareness of their economic, social, cultural, environmental, and intellectual impact.

## Case studies

# Contextualised Enterprise within a module



**University of  
Birmingham  
College of Arts & Law  
2nd Year module**

**'Enterprising English'**

**20 credits**

**An example of how we  
embedded a live  
industry project to  
support students to  
develop creative  
problem solving**

**Further details on  
next page**

This was the problem statement provided by West Midlands Police's Positive Action Coordinator:

"How do we re-brand West Midlands Police and our positive action team to make it more appealing to our BAME communities and younger generation, as the current entry routes are most certainly more preferential to the younger applicant? This is to recruit 1000 more BAME officers for the West Midlands"

Students in groups worked on devising a deliverable, simultaneously building up a portfolio of evidence supporting the design, cost and use of that deliverable.

### **Learning outcomes:**

- demonstrate and apply the key business concepts that underpin a consultancy project/plan.
- demonstrate and apply the skills of creative thinking, independent learning, utilising resources and relevant information and seek expert advice as necessary.
- formulate a relevant deliverable and provide evidence to support the strategy, rationale and implementation and cost of it.
- demonstrate an ability to pitch adequately an idea and convince a panel of experts by displaying adequate communication skills and solid entrepreneurial/enterprise thinking.
- demonstrate an ability to act as a reflective practitioner

### **Assessment:**

- A group presentation pitch (15 mins) (25%);
- A group deliverable (poster, social media campaign, etc.) and 3000 word group report on the deliverable (25%);
- An individual reflective essay (2000 words) (50%)

### **Impact:**

'The impact the module has had in the three years since it was formulated is huge: nearly 70% of students who have taken the module have gone on to do placement work in the next stage of their degree studies, and many have landed roles with the organisations they did project work with'. Dr Daniel Moore (Head of Education for English, Drama, American & Canadian Studies)

# **Case studies**

# **Contextualised Enterprise within a module**

**No.8 Chambers is a leading barrister  
based in Birmingham**



**University of Birmingham  
College of Arts & Law:**

**'Professional Research Methods for  
Linguists'  
2nd year module  
10 credits**

**Further details  
on next page**

On this module, students work in teams to execute a linguistic research project which responds to a problem or question posed by an employer

Here is the problem statement from No.8 Chambers:  
The representation of immigration and asylum seekers in the news and social media influences public perception as well as immigration policies. For example, some politicians have described migrants as a 'flood' or 'swarm' from which existing residents need to be shielded. Political figures have also associated migrants with crime and terrorism.

Your task is to analyse the social media representation from politicians, governmental bodies, policy makers and to evaluate how far the linguistic choices from these figures affects public perception of immigrants in the UK. A recent example to consider is the coverage of the so called 'Channel Migrant Crisis' concerning migrants crossing the channel by small boat.

## **Assessment:**

- Digital Presentation (10 minutes) (50%)
- Group Project: Coursework (50%)

## **Impact:**

"The work that the student have done on 'How does the language used in mainstream media affect public perceptions of immigration?' is very important and timely. Their charter of good practice for journalists and their excellent use of infographics will hopefully impact the way media treats immigrants and refugees and help shape the debate. The students' work will have a big impact and leave a legacy."

(Employer evaluation by Mr Adam Pipe)

The infographics created by the students are available to review on the company website: <http://no8chambers.co.uk/news/419-public-perceptions-of-immigration>

# **Case studies**

# **Standalone Enterprise and Entrepreneurship modules**

**University of Birmingham**

**Liberal Arts & Natural Sciences**

**'Learning Entrepreneurial Skills' (20 Credits)**

**'Entrepreneurial Start-up' (20 credits)**

Concept: Students work in group to produce an innovative, digital start-up solutions to problem-statements set by the Head of Digital City and Innovation.



**Further details  
on next page**

On these modules, students work in interdisciplinary groups to learn about the processes and pitfalls of starting a business.

By the end of these modules' students can:

- Demonstrate a systematic understanding of entrepreneurial skills in practice.
- Apply entrepreneurial skills in the production of a business plan.
- Demonstrate the ability to work effectively in collaborative group projects.
- Communicate information, ideas, problems and solutions to an audience.
- Engage reflexively in an independent learning environment.

All stages of the business cycle are covered:

- Ideation - Design Thinking strategies
- Optimization - Business Model Canvas, financial modelling for the first 3 years
- I.P. and Patenting
- Rapid Prototyping - 3D printing and AutoCAD
- Digital marketing - Website design and online advertising
- Pitching - training on pitch deck and formats for Business plans

Assessment for Learning Entrepreneurial Skills module:

Group Business Pitch (30%)

Business Plan : Group Assessment (50%)

Self-reflection Essay (20%)

Assessments for Entrepreneurial Start-Up module:

Group Business Investment Pitch (40%)

Self-reflection interview (20%)

Group Investment Proposal (40%)

# An example of an activity: Design Thinking

'Design thinking is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test. Involving five phases—Empathise, Define, Ideate, Prototype and Test—it is most useful to tackle problems that are ill-defined or unknown'.

[Interaction Design Foundation \(2022\)](#)



**Further details on  
next page**

Here are a few examples of where design thinking could be useful in a module:

- If students are solving projects set by employers and they need to understand the needs of their customers
- On a start-up module where you want students to design products or services for a specific target audience
- On a module where students need to evaluate if a product or service is working for the end users
- On a module where you want students to produce innovative solutions to global challenges
- If you have a module where you'd like to embed a boot camp or a design sprint.

Design thinking provides a collaborative, interactive approach to problem solving which encourages creative thinking. It is also a lot of fun!

To find out more about design thinking and the activities for each phase, head to the following websites:

- IDEOU: [www.ideou.com](http://www.ideou.com)
- IBM Design Thinking: <https://www.ibm.com/design/thinking>

# **Step 3: IMPLEMENTING**

## **Some considerations when implementing Enterprise Education:**

- If using external partners, give yourself time for relationship management – do not underestimate the time it takes for this! Find a strong return on investment for organisations. For example, could the project link to their corporate social responsibility strategy? Is it an organisation who is actively looking to recruit your students?
- Provide a safe space for your students to take risks and not fear failure. Support them to engage with it positively to help them develop resilience
- I often find that when introducing students to experiential learning for the first time, it can be helpful to provide support mechanisms within your module to help keep them on track. This can be weekly check-in points and using seminars to provide additional project management time
- Review useful frameworks available, such as your own QAA subject benchmark statements which will provide a list of skills necessary for your degree programme
- Provide a varied menu of supplementary information and resources for your students. You might wish to include some of the frameworks listed in the References section on page 28
- Include time in your module design for students to reflect on their own learning from their experience on the module/of enterprise activities.
- If your degree has an external professional body, review requirements before embedding employability and enterprise

# Step 4: REVIEWING

I find it a useful exercise to review modules after each iteration. This is so I can learn from key stakeholders what is working well and what can be improved/adapted.

I also find it useful to review if any impact is connected to the module, for example to student satisfaction? Graduate outcomes for students who studied the module(s)?

You may have your own institutional metrics for reviewing your modules and their impact, but below are some approaches I have used:

- Get regular feedback from your students
- Get regular feedback from any industry or alumni partners
- An increase of placements/internships/job offers from employers involved with your modules?
- Module evaluation questionnaires
- Any year-on-year increase of student numbers taking the modules? (if an optional module)
- Pre/post module evaluations to measure self-efficacy
- Any changes to career readiness of your students?
- Any impact being seen on graduate outcomes and/or NSS?
- Number of employers involved with co-design/co-delivery

# Step 5: FUTURE PROOFING

Some ideas to support future proofing your modules:

- The recent pandemic meant moving a lot of content online, including the way we shared the industry projects. We embedded digital talking heads for the project briefs which worked well
- Ensure your content is inclusive and accessible for all learners. Here is a useful resource to read from the QAA website called '[The Inclusive Education Framework](#)'
- Maintain your professional networks, particularly industry partners involved in module teaching. Find a good return on investment to help maintain the relationship
- In addition to external partnerships providing project briefs for your modules, explore internal partnerships with departments across your institution
- Make time for your own professional development, explore opportunities provided by [Enterprise Educators UK](#)
- Keep reviewing the literature for new insights. There is a great resource titled '[Employability: a review of the literature 2016-2021](#)', available from the AdvanceHE website which provides a wealth of information and a section dedicated to Enterprise and Entrepreneurship Education
- For additional resources for other useful materials to help you, I have listed some of my favorites on the next page



Lots of useful EntEd resources available

The list below provides a useful place to start when reviewing the literature and frameworks:

- [AdvanceHE: Employability, Enterprise and Entrepreneurship in Higher Education](#)
- [AdvanceHE: Employability: a review of the literature 2016-2021](#)
- [AdvanceHE The 3 Es for Wicked Problems: Employability, Enterprise, and Entrepreneurship: Solving Wicked Problems](#)
- [EntreComp: The Entrepreneurship Competence Framework](#)
- [ETC Toolkit by Enterprise Educators UK](#)
- [GreenComp: the European Sustainability Competence Framework](#)
- [QAA Enterprise & Entrepreneurship Education](#)
- [QAA Education for Sustainable Development](#)
- [QAA Subject Benchmark Statements](#)
- [The Entrepreneurial Employee Report](#)

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- Utica University. Bloom's Taxonomy of Measurable Verbs
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**ANY QUESTIONS?**

Please feel free to contact me:

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