



In collaboration with:



وزارة التعليم العالي والبحث العلمي

Ministry of Higher Education
& Scientific Research

Professional Development Training Programme

for Early Career Academics
in Jordanian Universities

April 2021

www.britishcouncil.org



“This is an excellent programme; I highly recommend it. I have already put some of what I learnt into practice and will keep using the material to enrich my teaching and research. I’ve taken a lot of training courses and can genuinely say that this programme is one of the very best. I’m eagerly awaiting what you’ll come up with next!”

Dr Hamzeh Aljawawdeh (Zarqa University)

Introduction



The Importance of Focusing Upon Jordan's Higher Education Sector

Education is at the core of the work of the British Council in promoting sustainable human development. In Jordan, we connect our local partners in higher education with expertise and the best practice from the UK and around the world. The Jordan Higher Education Innovation and Leadership programme supports the Jordanian higher education sector, and its stakeholders, to respond to the changing context and dynamics of higher education. The ongoing programme began in 2015 with the introduction of the Entrepreneurial University Framework to HEIs in

Jordan. This is in alignment with the global movement to support the transformation of traditional research universities into entrepreneurial universities. If universities do not become agents of innovation, i. e. entrepreneurial universities, they will hamper regional and national development as well as international competitiveness. To be effective agents of innovation however, relies on the preparedness of the faculty operating within the universities, as well as the career development support mechanisms available to them.

According to the Jordanian Ministry of Higher Education & Scientific Research, in 2019 there were 10 public and 19 private universities in Jordan, employing 10,812 faculty members between them and enrolling an average of 342,000 students (282,403 home students, 54% of whom are women, and 42,000 international students from 105 countries). Yet, Jordan's higher education sector continues to face significant challenges with Kuwait and Qatar reducing the number of recognised Jordanian universities from 20 to 5¹ and serious concerns being raised about the quality and validity of the research conducted in Jordanian universities². Concerns about the credibility of Jordan's higher education sector are also raised by students, with 24% of them preferring to study outside Jordan³, and 73% claiming that their higher education experience does not prepare them for the future marketplace⁴.

1 <https://www.al-fanarmedia.org/2019/07/kuwait-and-qatar-slash-the-number-of-jordanian-universities-they-will-recognize/>

2 <https://www.al-fanarmedia.org/2019/07/kuwait-and-qatar-slash-the-number-of-jordanian-universities-they-will-recognize/>

3 <http://www.arabyouthsurvey.com/findings.html>

4 <http://www.arabyouthsurvey.com/findings.html>



Key Objective of the Training Toolkit

To improve the performance of Jordan's higher education sector and the education and employability of its graduates, it is crucial to adopt contemporary continuous professional development of the faculty. To this extent, and in partnership between the British Council and the Jordanian Ministry of Higher Education and Scientific Research, a professional development programme for early career STEMM (science, technology, engineering, maths and medicine) academics was designed and delivered face-to-face in Jordan in 2019-20, to early career academics representing 24 of Jordan's 29 universities.

This training toolkit emerged from the professional development face-to-face training programme for STEMM early career academics implemented in 2019-20 and facilitates the professional development of early career academics operating in Jordan's universities. The training toolkit can be used by early career academics independently to guide their own academic career development and/or as a training resource for trainers offering professional development career training for early career academics.

The key objective of this toolkit is to enhance fit-for-purpose teaching and research excellence of early career academics, as well as their engaged scholarship, leadership and management skills.

Contents of this Training Toolkit

Given the key objective of this toolkit, it is organised into the following four sessions:

**Higher Education
Learning Strategies in
the 21st Century**

**Navigating Research
Excellence**

**Navigating Impact
and Engagement**

**Leadership and
Management**

Within each session, a selection of informative presentations, exercises and resources are given. The four sessions may be completed independently or in sequence. From our experience, to fully complete each one will require a time commitment of two full working days.

Once you complete the four sessions of the Toolkit, we strongly recommend that you complete the 'Forward Thinking – Forward Planning' Tool to plan, monitor and evaluate your career progression. This can be found on slide 34 of the 'Leadership And Management' session.



The Target Audience

Early career academics employed at a Jordanian university. Early career academics are defined by Jordan's Ministry of Higher Education and Scientific Research as "PhD holders working at a Jordanian University as an Assistant Professor or Lecturer for 5 years or less (since completing their PhD)".

“The guidance given throughout the training programme was thorough, and the information and content are suitable for early career academics to improve their performance and achieve high standards. I believe that the training programme increased our confidence and improved our ability to attract funding by writing better quality proposals. These are invaluable skills for successful researchers”.

Dr Noor Al-Mortadi (Jordan University of Science and Technology)

Higher Education Learning Strategies in the 21st Century

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5. Inspiring Learning Opportunities	54
6. Flexible Learning and Digital Literacy	59
7. Continuous And Enhanced Assessment Strategies	76

Resources from the University of Plymouth 7 Steps Series:

1. 7 Steps to: Linking research and teaching: https://www.plymouth.ac.uk/uploads/production/document/path/13/13904/RFJ35895_7_Steps_Linking_Research_and_Teaching.pdf
2. 7 Steps to: a Flipped Classroom: https://www.plymouth.ac.uk/uploads/production/document/path/2/2399/7_Steps_to_a_Flipped_Classroom.pdf
3. 7 Steps to: Delivering an Effective Immersive Module: https://www.plymouth.ac.uk/uploads/production/document/path/5/5988/7_steps_to_Delivering_an_Effective_Immersive_Module.pdf
4. 7 Steps to: Engaging Students with Personal Development Planning: https://www.plymouth.ac.uk/uploads/production/document/path/8/8552/7_Steps_to_Engaging_Students_with_their_PDP_online_TM.pdf
5. 7 Steps to: Inclusive Teaching and Learning: https://www.plymouth.ac.uk/uploads/production/document/path/6/6792/RFJ21944_7_steps_to-Inclusive_Teaching_and_learning_616_LH_web.pdf
6. 7 Steps to: Internationalising Teaching and Learning: https://www.plymouth.ac.uk/uploads/production/document/path/3/3914/7_steps_to_Internationalisation_2012.pdf
7. 7 Steps to: Using group work in your teaching: https://www.plymouth.ac.uk/uploads/production/document/path/2/2398/7_steps_to_using_group_work_in_your_teaching_March_2013_1_.pdf
8. 7 Steps to: Giving effective feedback , 'feed-in' and 'feed-forward: https://www.plymouth.ac.uk/uploads/production/document/path/2/2394/7_steps_effective_feed-back_2011_3_.pdf
9. 7 Steps to: Peer and Self Assessment: https://www.plymouth.ac.uk/uploads/production/document/path/2/2404/7_steps_to_Peer_and_Self_Assessment.pdf

Navigating Research Excellence

Contents

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1. Developing and Enhancing the Researcher Profile	86
2. What does it take to publish in a good journal?	93
3. Researcher Types	96
4. Writing a Winning Funding Proposal	98
5. Research Planning	102

Resources:

1. UK Career Research and Advisory Centre: www.vitae.ac.uk
2. UK Research and Innovation (UKRI): <https://www.ukri.org/apply-for-funding/>
3. UK Research Councils guidance:
 - a. [Arts and Humanities Research Council](#)
 - b. [Biotechnology and Biological Sciences Research Council](#)
 - c. [Economic and Social Research Council](#)
 - d. [Engineering and Physical Sciences Research Council](#)
 - e. [Innovate UK](#)
 - f. [Medical Research Council](#)
 - g. [Natural Environment Research Council](#)
 - h. [Science and Technology Facilities Council](#)

Navigating Impact and Engagement

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Resources:

1. Becker Medical Library: <https://becker.wustl.edu/impact-assessment>
2. Knowledge Translation tool (Melanie Barwick): http://www.melaniebarwick.com/KTTemplate_dl.php
3. ESRC Impact Toolkit: <http://www.esrc.ac.uk/research/impact-toolkit/>
4. Fast Track Impact: <http://www.fasttrackimpact.com/>
5. Employability in the Curriculum: <https://www.plymouth.ac.uk/about-us/teaching-and-learning/employability-in-the-curriculum-and-beyond>
6. Defining and developing your approach to employability: https://www.heacademy.ac.uk/sites/default/files/resources/Employability_framework.pdf

Leadership and Management

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1. Leadership and Management in Early Academic Careers: A UK Perspective	155
2. Leadership and Management Skills Development	159
3. Emotional Intelligence	168
4. Unconscious Bias	173
5. Forward Thinking – Forward Planning Tool	182

Resources:

1. Hersey and Blanchard's Situational Leadership Model: <https://www.investopedia.com/terms/h/hersey-and-blanchard-model.asp>
2. Daniel Goleman, Emotional Intelligence (Bloomsbury, 1995): <https://asantelim.files.wordpress.com/2018/05/daniel-goleman-emotional-intelligence.pdf>
3. Emotional intelligence: <https://app.goodpractice.net/#/plymouth-uni/search/?keywords=Animated%20Video&type=category>
4. Unconscious Bias Training: <https://www.equalityhumanrights.com/sites/default/files/research-report-113-unconscious-bias-training-an-assessment-of-the-evidence-for-effectiveness-pdf.pdf>
5. Ted Talk by Yassmin Abdel-Majid in Australia: https://www.ted.com/talks/yassmin_abdel_magied_what_does_my_headscarf_mean_to_you#t-829881
6. The Harvard Implicit Bias Test at: <https://implicit.harvard.edu/implicit/>

Training Toolkit

This programme was supported by the British Council in Jordan in partnership with Jordan's Ministry of Higher Education and Scientific Research.

Training Toolkit Design and Development Team

British Council Team

May Abuhamdia is the Deputy Director of the British Council in Jordan, responsible for the strategic planning, implementation and business development for the programs and partnerships work as well as marketing and communications.

British Council Higher Education team: Nour Al Jumaili Partnerships Manager, Abeer Ahmad Project Officer and Bayan Abdullah Project Assistant, responsible for reviewing, editing and guidance for the toolkit development and design.


Content Experts

Professor Haya Al-Dajani is a Professor in Entrepreneurship at the Mohammad Bin Salman College for Business and Entrepreneurship (MBSC). During her academic career in the UK, Haya designed and led numerous professional development training programmes within the higher education sector and especially for early career academics.

Professor Nikolaos Tzokas is Professor of Marketing at the Mohammad Bin Salman College for Business and Entrepreneurship (MBSC). He previously served as Executive Dean of the Faculty of Business at the University of Plymouth and Dean of the Norwich Business School at the University of East Anglia, UK.

“I learnt and acquired new skills in leadership, management and research. I was also exposed to a great variety of thought-provoking tasks that I can use and apply in my academic career. This programme was a golden opportunity for me. I learnt that my teaching should be useful to the community at large and that I should pay special attention to the employability of my students so they do not face problems in the labour market. Emotional Intelligence was new to me, and I am trying to apply it in my work. Moreover, networking: I won the friendship of many academics in fields of specialization that are different from mine”.

Dr Mohammed Muharram- Philadelphia University



Higher Education Learning Strategies in the 21st Century

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The HE Landscape: Opportunities and Challenges in the 21st Century

A view from the UK



Universities generate jobs for
750,000 People



Universities contribute
£73 billion a year
to the UK economy

Jordan's GDP2016: 38.7 billion USD

The HE landscape: a UK perspective

Overview of current UK landscape

- **BREXIT** = uncertainty [UKVI/UKBA]
- Economic austerity still in place and declining govt spending
- Fees of **£9,250** paid by students but receiving it as a loan from the government
- Structural changes in governance to reduce costs (from QAA & HEFCE to OFS and the RCUK)

National & International Market Changes

- Students as Customers (Competition Authority)
- A HE degree is a “product” and its value can be defined and ranked through national and international assessments
- Accreditations from Professional Associations expected but no evidence that they drive choice
- Triple, quadruple and quintuple crowns required?
- One dimensional competition: league tables
- Pluri-demands create a pluri-signified product



HEFCE requirements

- Employability statements (from August 2010)
 - “HEFCE has asked all higher education institutions and HEFCE- funded further education colleges to publish employability statements on the help they provide to students to improve their employability and transition into work.”
- Key information sets (from September 2012)
 - “Under new arrangements published jointly... by HEFCE, Universities UK and GuildHE, universities and colleges in England will be required to publish a KIS for each undergraduate course they offer. The KIS is an online summary of information about: student satisfaction; learning and assessment; financial costs and support; employment outcomes; and professional body recognition.”

Key Information Set

<http://unistats.direct.gov.uk/>

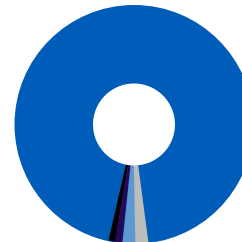
69% Student Satisfaction

99% Go on employment or study

£21K Average Graduate salary

£21K Average annual salary after 6 months
(interquartile range: £20,000 - £24,000)
Average for all health studies courses in England & Northern Ireland:
£20,500 after 6 months (interquartile range: £20,000 - £24,000)
£25,000 after 40 months (interquartile range: £24,0027 - £26,074)

97% go on to work and / or study



Destinations from this course 6 months after graduating 92% of those who work are in graduate level jobs

- 94% Working only
- 1% Unemployed
- 1% Studying only
- 2% Not Available for work
- 2% Working and studying

Other ranking/evaluation websites...

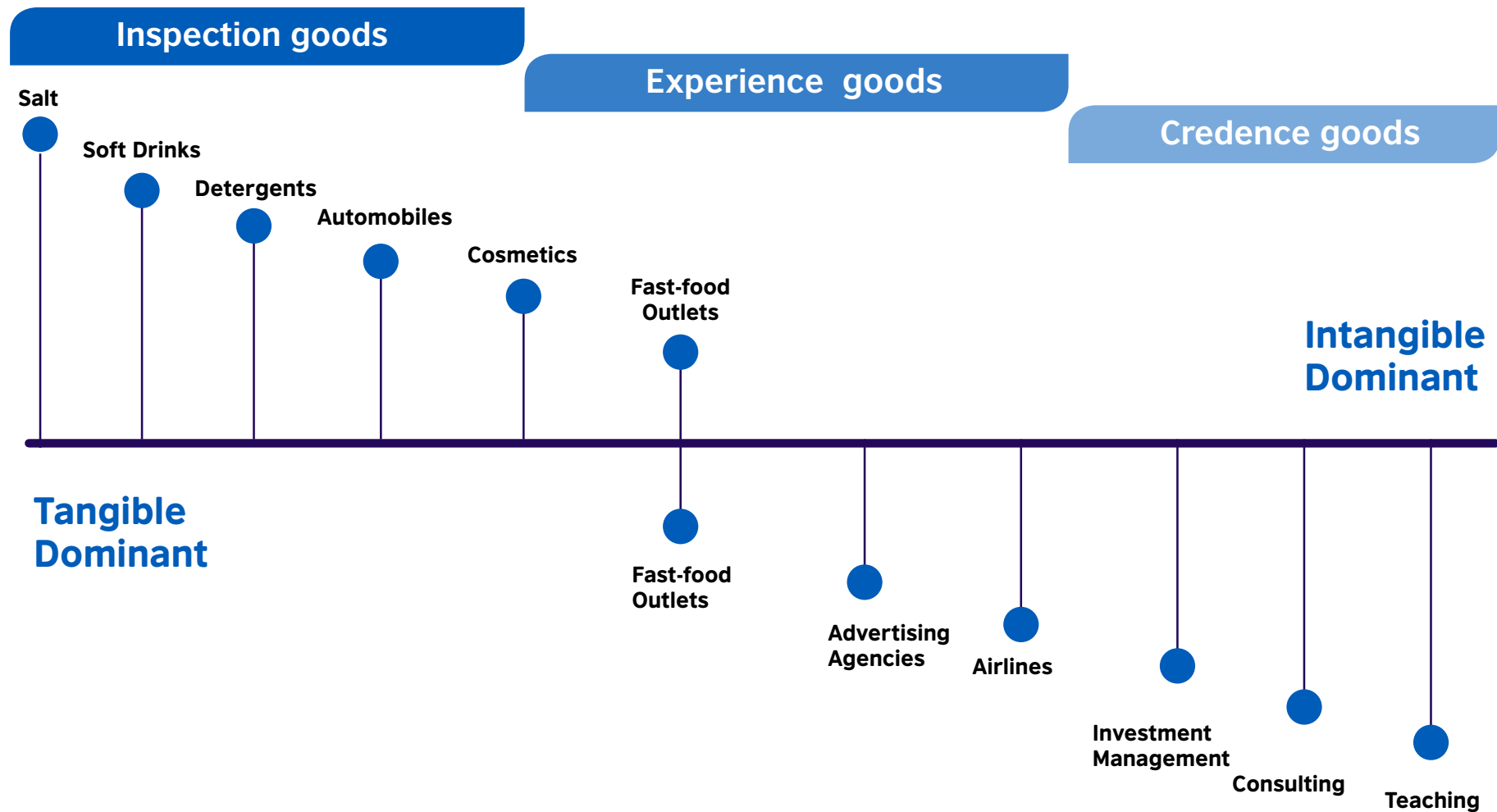
<https://www.studyportals.com>

<https://umultirank.org>

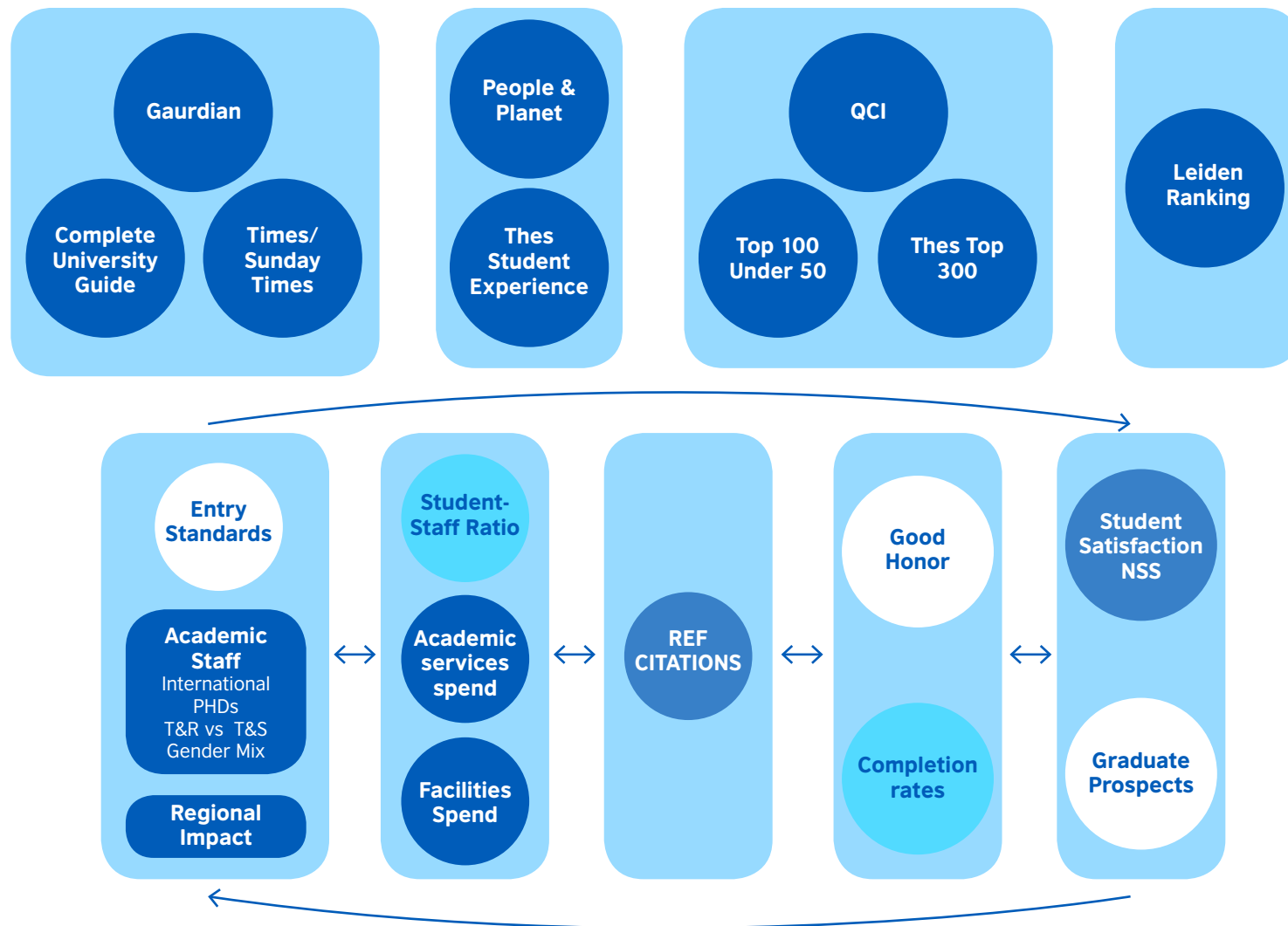
<https://www.theguardian.com/education/ng-interactive/2017/may/16/university-league-tables-2018>



Types Of Goods / Services

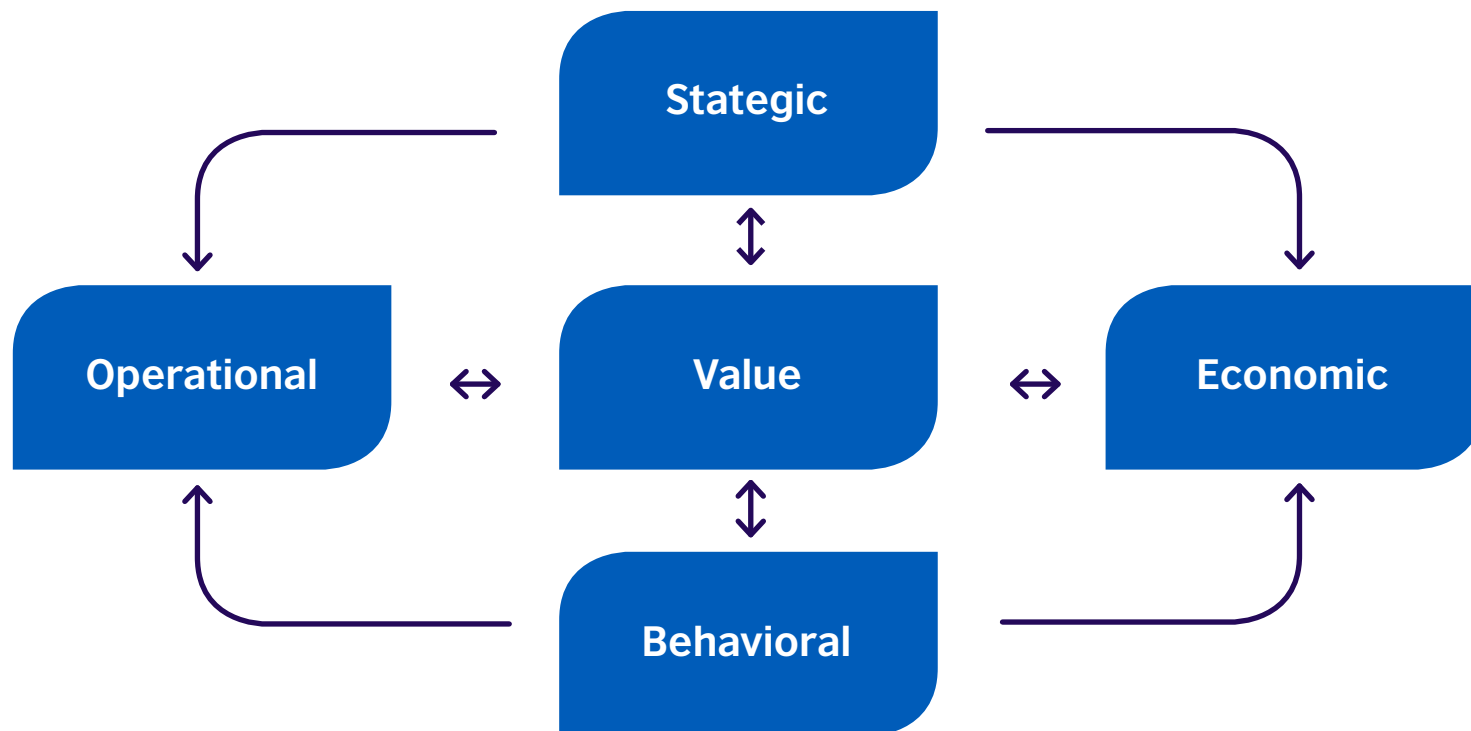


League Tables And Their Input/Output Measures



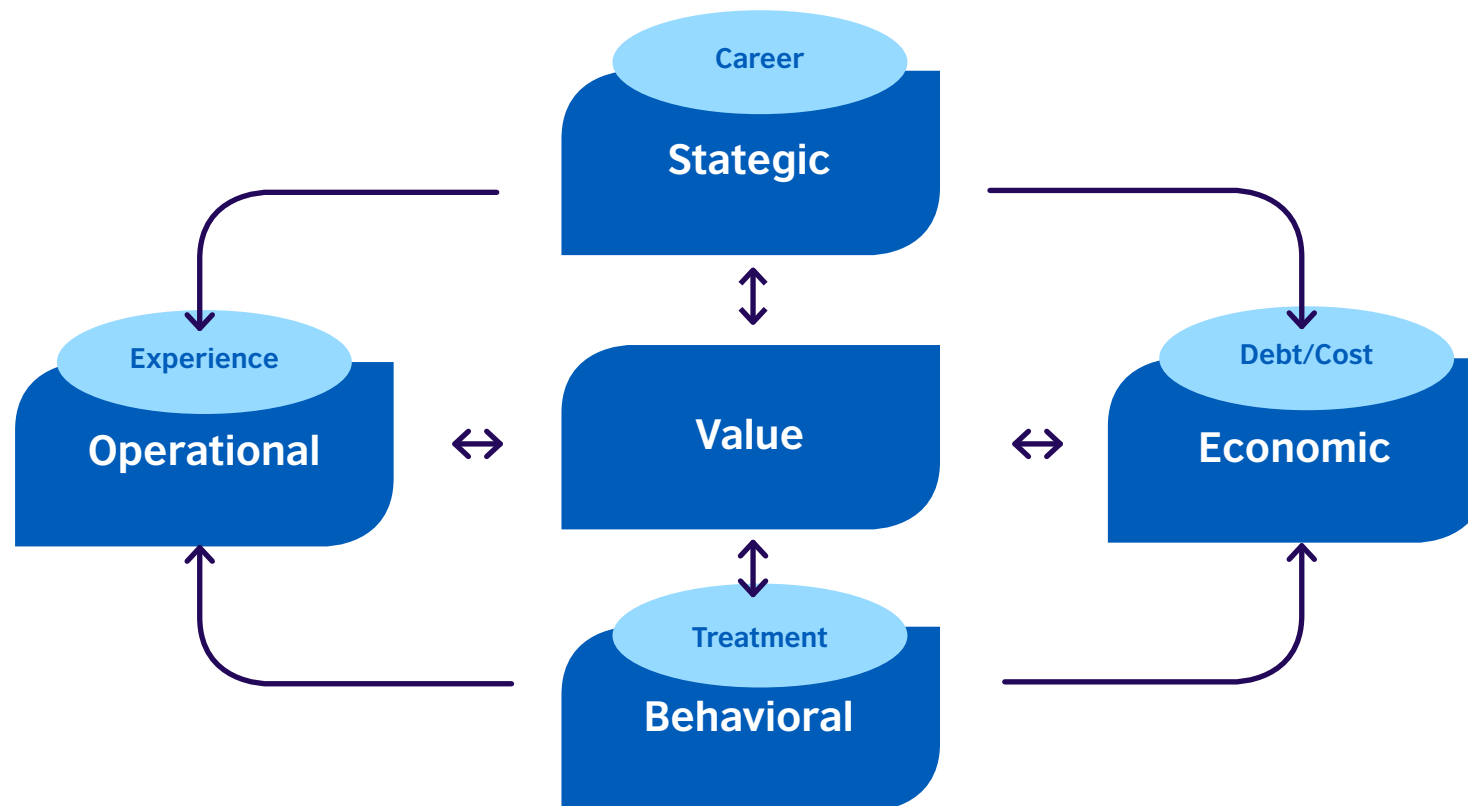
The Pluri-signified Value of Higher Education

“Today’s students have high expectations. They want suitably qualified teachers who are effective communicators, to be supported in their studies, to enjoy their experience, to complete their courses successfully and then to get a good job”.
(HEFCE, Strategic plan 06/11, p.8)



The Pluri-signified Value of Higher Education

“Today’s students have high expectations. They want suitably qualified teachers who are effective communicators, to be supported in their studies, to enjoy their experience, to complete their courses successfully and then to get a good job”.
(HEFCE, Strategic plan 06/11, p.8) HEIs compete for students (Competition Authority)





The Competition

- HEIs compete for students (Competition Authority)
- New private players in the market with the expectation of relaxed barriers to entry
- Intense competition/hyper-competition but also inter-industry competition
- New competitive threats/opportunities: web-based learning, MOOCs, international players.
- China moved from copy & reverse engineering to innovation and inventions in HE
- “British Higher Education” the Brand challenged
- Greater concentration of larger grants to fewer HEIs and consortia to allow for local/regional impact (e.g. Northern Powerhouse, G4, ARC...)

Students as Digital Natives



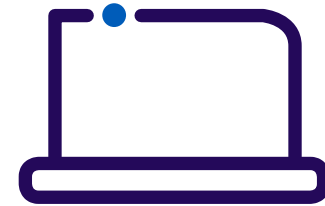
Visual Learners



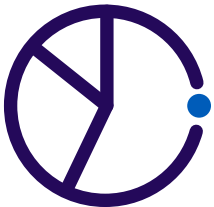
Multi-taskers



Short attention spans



Use technology to express



Information analysts



Content producers



**Real-time learners
instant messages,
text messages**



Student - driven inquiry

So What?



“Wealth in the new regime flows directly from innovation, not optimization; that is, wealth is not gained by perfecting the known, but by imperfectly seizing the unknown.”

~Kevin Kelly, “New Rules for the New Economy”

“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow”

*- John Dewey (1859 - 1952)
an American philosopher,
psychologist and educational reformer*

Forward Looking-Forward Thinking

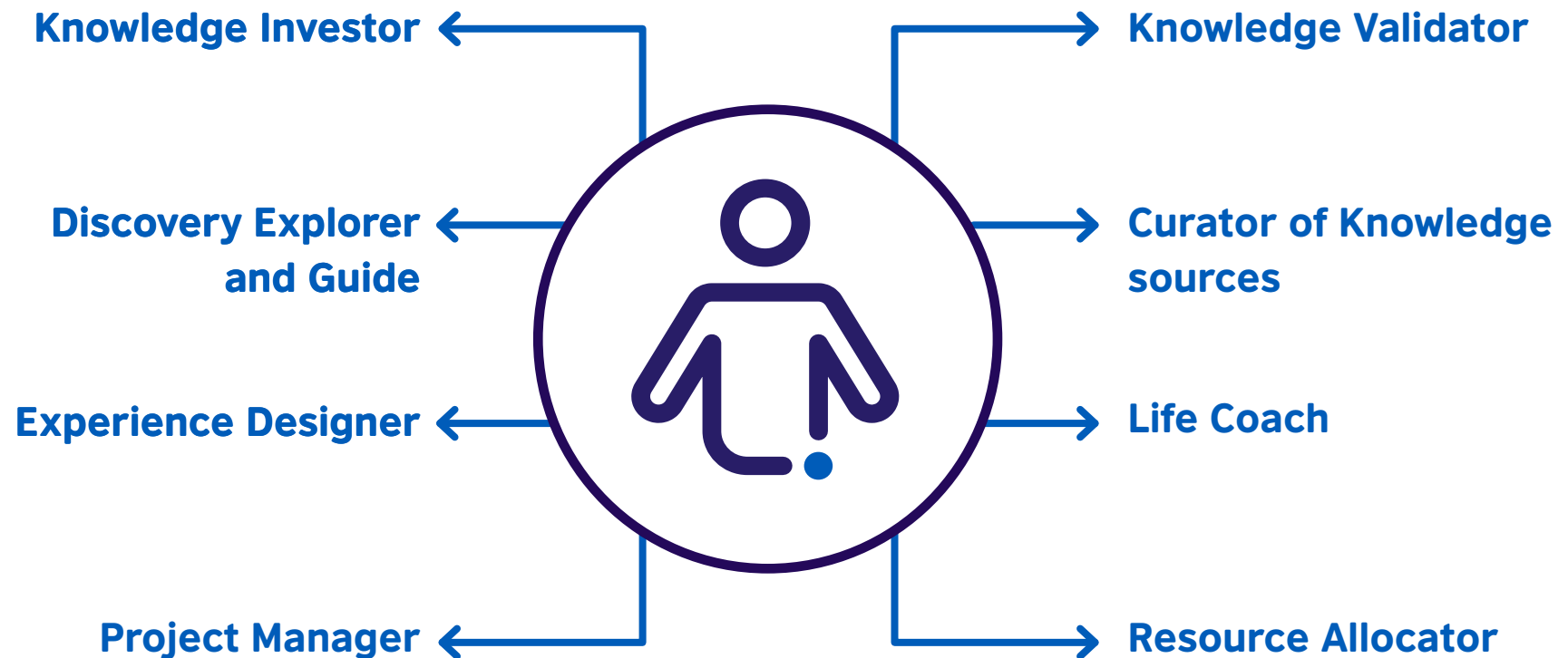
- Be different but not dissimilar
- Distinct while conventional
- Familiar but not commonplace
- Distinctiveness with Distinction



**Accelerating
Change**



The NEW Professor





A Shift In Focus For The Educator

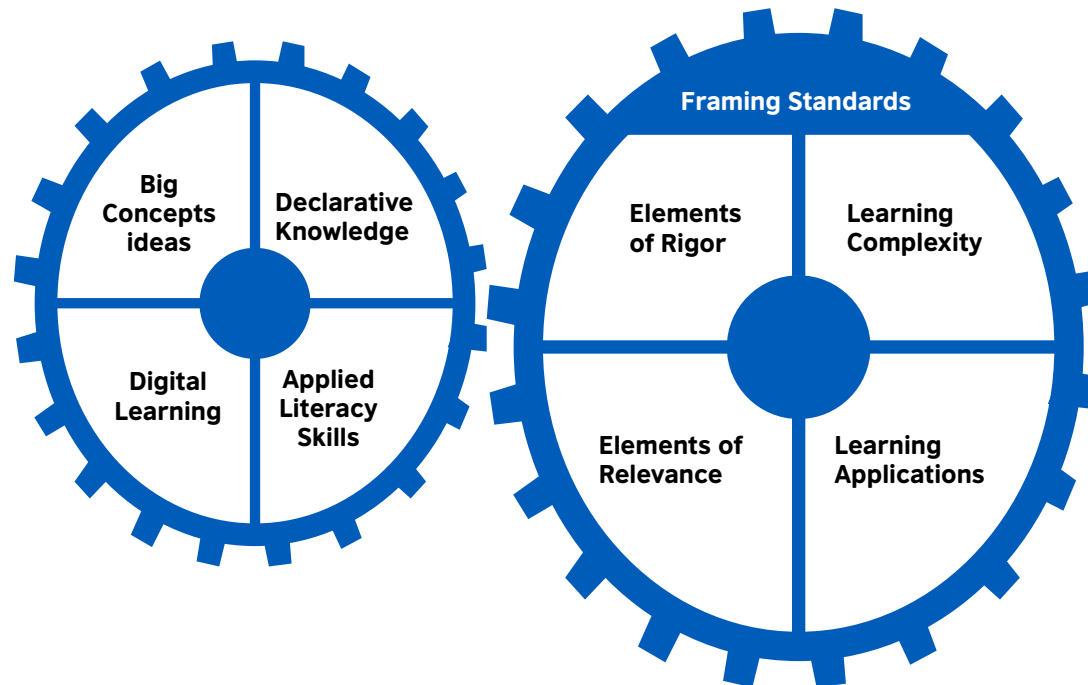
- from case studies to emerging situations
- from passive learning to active learning
- from text-heavy communication to multimedia communication
- from formal activities to authentic activities
- from dependency to self-reliance and resilience.
- from abstract problems to innovation
- from objective analysis to subjective experience
- from neutrality to personal perspectives
- from fearing failure to learning from failure

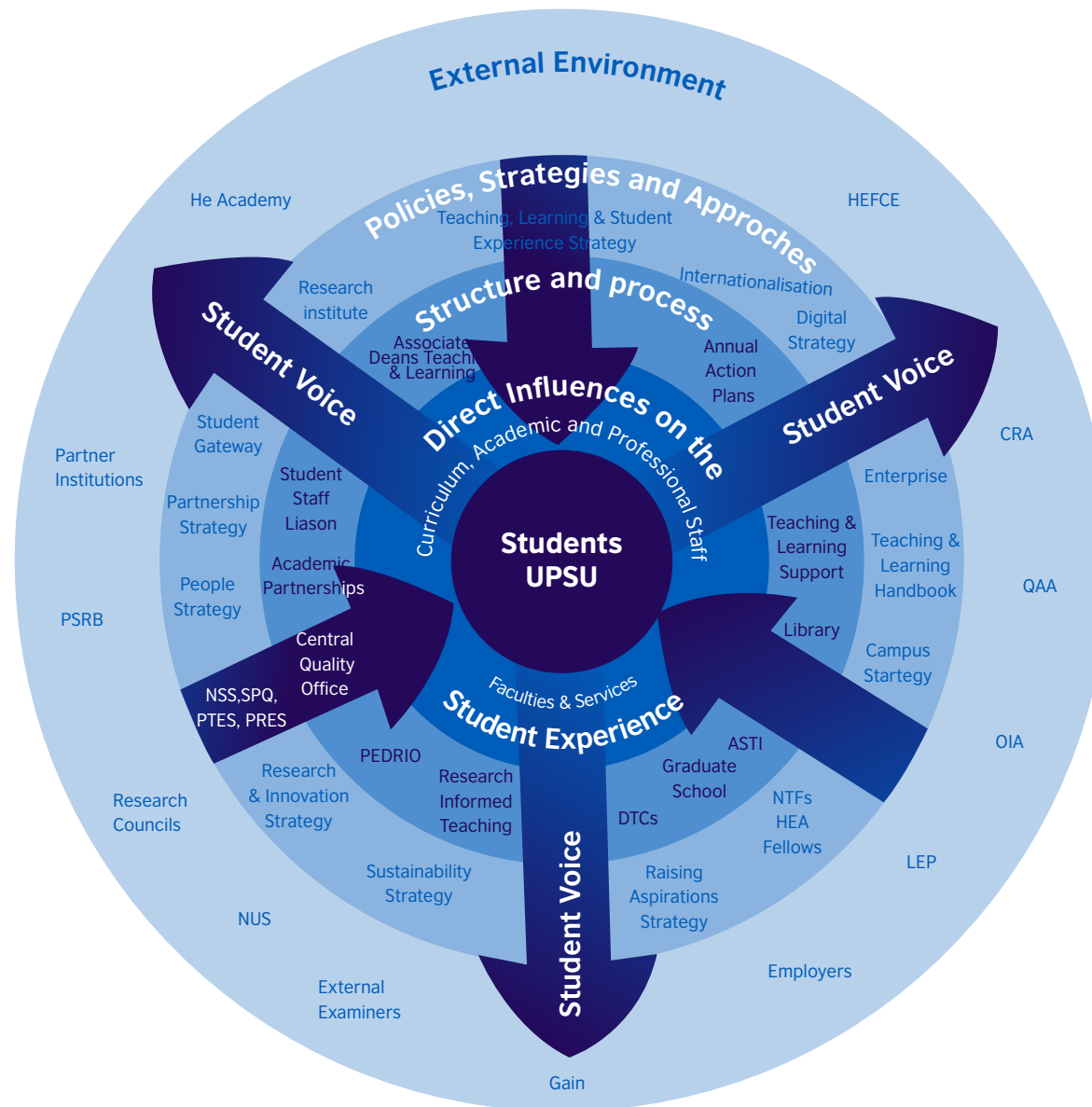
***Source: Enterprise and entrepreneurship education, QAA 2013**

Teachers as designers of learning

Learning Design

To be a designer of learning, the teacher must be able to establish the level of rigor and relevance that will be assigned to each standard selected for a unit of learning





Invest in People: Engaged Scholarship

The relationships between:



are fundamental to the field of **Engaged Scholarship**

Engaged Scholars in HE

Research your subject area (basic & applied)
Experience your subject area (through real applications)
Appreciate what motivates your students
Learn the tools of your profession (pedagogy)
Innovate in the curriculum
Technology use to reach digital natives
You make the difference (self-confidence)

A Community of Engaged Scholars

- Attention to the individual and the group
- From knowing everything to knowing where to find anything
- From being an expert of everything to being part of a constellation of experts of few things
- From a discipline orientation to a practice & research driven orientation & inter-disciplinarity
- No single value in the right answer but multiple value in the process of problem or project based learning
- It is not the module that matters but the programme
- Knowing what others do is as important as their own
- Understanding & supporting own careers whilst linking them to the development of the group
- Critical mass – as a constellation of knowledge

Key Issues To Consider

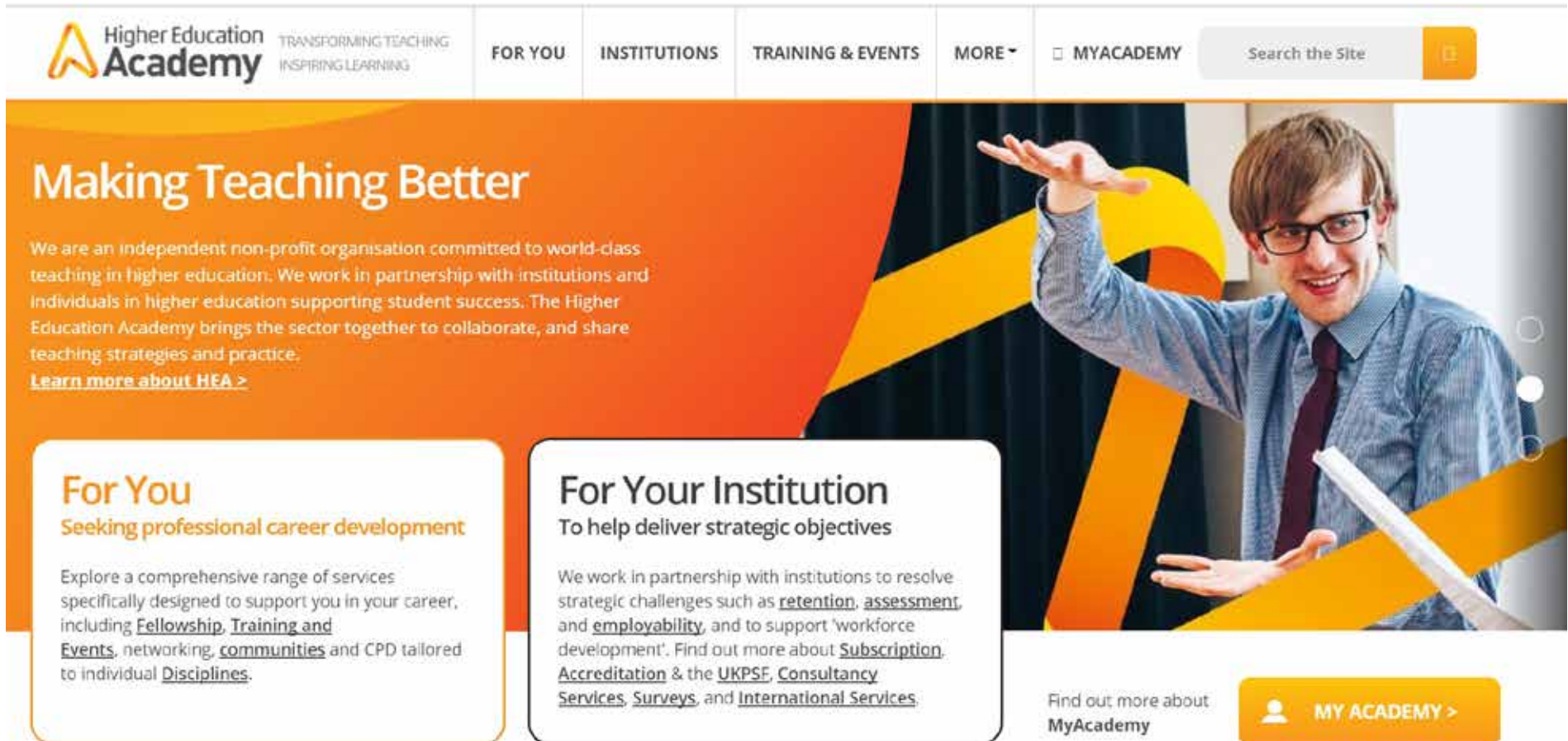
Attention to Teaching as much as in Research

Easy to say...hard to practice

- How do you measure teaching quality?
- Do you promote/reward good teaching?
- Do you have continuous support for teaching?
- Is the career of an engaged scholar any different?

Overall how do you make the case for Engaged Scholarship to the whole Institution/Country

Higher Education Academy



The screenshot shows the homepage of the Higher Education Academy (HEA). The header features the HEA logo with the tagline 'TRANSFORMING TEACHING INSPIRING LEARNING', followed by navigation links: 'FOR YOU', 'INSTITUTIONS', 'TRAINING & EVENTS', 'MORE', and 'MYACADEMY'. A search bar is also present. The main content area has a large orange and yellow graphic with a man in a blue shirt and glasses gesturing. The headline reads 'Making Teaching Better'. Below this, a paragraph describes the HEA as an independent non-profit organization committed to world-class teaching in higher education. A link 'Learn more about HEA >' is provided. Two white boxes with orange borders contain information for different audiences: 'For You' (Seeking professional career development) and 'For Your Institution' (To help deliver strategic objectives). Both boxes describe the range of services offered, including Fellowship, Training and Events, networking, communities, and CPD. A 'MY ACADEMY >' button is located at the bottom right.

Higher Education Academy TRANSFORMING TEACHING
INSPIRING LEARNING

FOR YOU INSTITUTIONS TRAINING & EVENTS MORE ▾ MYACADEMY

Search the Site

Making Teaching Better

We are an independent non-profit organisation committed to world-class teaching in higher education. We work in partnership with institutions and individuals in higher education supporting student success. The Higher Education Academy brings the sector together to collaborate, and share teaching strategies and practice.

[Learn more about HEA >](#)

For You

Seeking professional career development


Explore a comprehensive range of services specifically designed to support you in your career, including [Fellowship](#), [Training and Events](#), networking, [communities](#) and CPD tailored to individual [Disciplines](#).

For Your Institution

To help deliver strategic objectives

We work in partnership with institutions to resolve strategic challenges such as [retention](#), [assessment](#), and [employability](#), and to support 'workforce development'. Find out more about [Subscription](#), [Accreditation](#) & the [UKPSF](#), [Consultancy Services](#), [Surveys](#), and [International Services](#).

Find out more about MyAcademy

 **MY ACADEMY >**

<https://www.heacademy.ac.uk/>



Learnhigher

Free teaching & learning resources
for staff in UK higher education

<http://www.learnhigher.ac.uk/>

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ALD_{in}HE

Association for Learning Development in Higher Education

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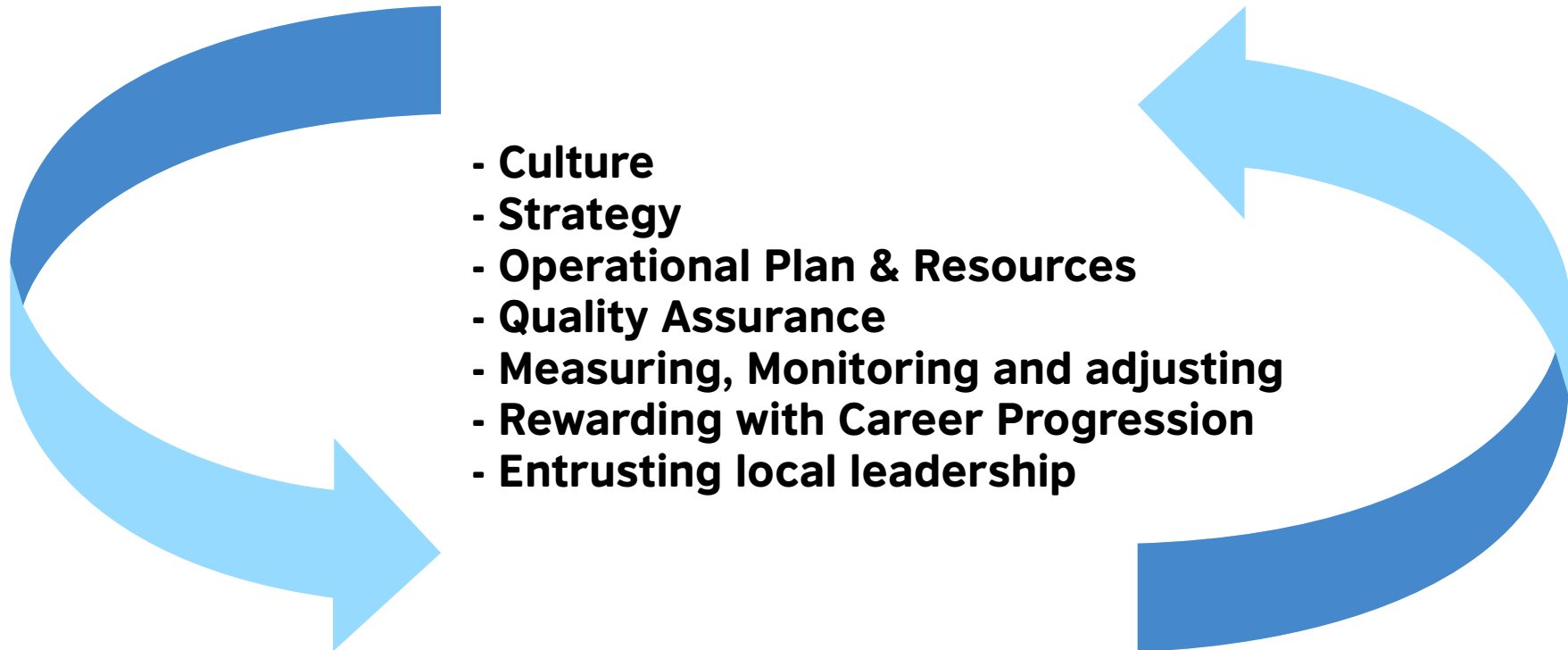
A View From The Top...

- Integrate engaged scholarship in your corporate strategy
- ...as a strategy statement
- ...as permeating the whole organisation and its policies e.g. rewards, promotions...
- ...with due professional diligence (using this as a benchmark to everything you do)

A T&L Strategy To Get To The Top...

- To provide university courses which conform to the very highest standards within the sector.
- To provide a carefully-structured transition into higher education.
- To intensify student academic engagement in support of our high academic standards.
- To maximise the value of contact time.
- To encourage strong staff-student relationships.
- To promote international citizenship.
- To Provide opportunities to enhance employability.
- To involve students in the enhancement of learning and teaching.
- To provide high quality feedback on students' work

Instead of Epilogue...



Introducing Yourself as an Academic

Pitch Prep for Networking

- 1** Using the template on the next slide, draft a 60 second pitch introducing yourself and highlighting your 'gives' to your colleagues.
- 2** Once you have your finalized pitch, practice this a few times until you are confident in saying it casually without any notes.
- 3** Practice with your colleagues and friends and ask for their honest feedback about your delivery, confidence, attitude when pitching. Remember, practice makes perfect!
- 4** Once you have your perfect pitch, start tailoring it for different audiences. For example, introducing yourself at a conference, to your students, to new faculty members in your department etc.

Pitch Template

Name:

University

My Name is

I am in academia / higher education because

Where and when i was awarded my PhD

How long i have been in academia

I am currently employed at

My current role and responsibilities

My goal for the coming 3 years

Challenges i am facing currently

I can support my colleagues in my department by(1-3 offerings):



The Student Profile

Preparing the student profile

Given that our teaching is intended to enhance the students' learning, we need to know who our students are. This exercise will focus on defining our students' persona'. Once you complete this individually, do discuss your findings with your colleagues within your department and further afield as well as with your students. Deeper insights will help you to design your teaching in ways that will be well received by the students.

The Student Profile Page 1:

Key subject area you teach:

Choose a course/module you teach to use in this worksheet:

What is the subject area of this course/module:

What level/year is the course/module (pls circle):

Y1 Y2 Y3 Y4 Masters

How many years have you been teaching this course/ module:

The Student Profile Page 2: Your current students' skills and competencies **WHEN THEY JOIN YOUR COURSE**

The Critical & Creative Learner

Specialist subject knowledge

1 2 3 4 5 6 7 8 9 10

Critical Thinking

1 2 3 4 5 6 7 8 9 10

Creativity and enterprise

1 2 3 4 5 6 7 8 9 10

Research skills and information literacy

1 2 3 4 5 6 7 8 9 10

Learning and study skills

1 2 3 4 5 6 7 8 9 10

Sustainable & Global Citizen

Sustainability awareness

1 2 3 4 5 6 7 8 9 10

Systems Thinking

1 2 3 4 5 6 7 8 9 10

Openness to cultural encounters

1 2 3 4 5 6 7 8 9 10

Responsibility

1 2 3 4 5 6 7 8 9 10

Change leadership

1 2 3 4 5 6 7 8 9 10

The Competent & Confident Professional

Self-organisation & management

1 2 3 4 5 6 7 8 9 10

Team-work & collaboration

1 2 3 4 5 6 7 8 9 10

Professional & ethical manner

1 2 3 4 5 6 7 8 9 10

Negotiation & persuasion

1 2 3 4 5 6 7 8 9 10

Effective verbal & written communication

1 2 3 4 5 6 7 8 9 10

Resilient & Thriving Individual

Connected with others

1 2 3 4 5 6 7 8 9 10

Is active

1 2 3 4 5 6 7 8 9 10

Is empowered-feels can make a difference

1 2 3 4 5 6 7 8 9 10

Does not give up learning

1 2 3 4 5 6 7 8 9 10

Gives back to social and community life

1 2 3 4 5 6 7 8 9 10

The Student Profile Page 3: Your current students' skills and competencies **WHEN THEY COMPLETE YOUR COURSE**

The Critical & Creative Learner

Specialist subject knowledge

1 2 3 4 5 6 7 8 9 10

Critical Thinking

1 2 3 4 5 6 7 8 9 10

Creativity and enterprise

1 2 3 4 5 6 7 8 9 10

Research skills and information literacy

1 2 3 4 5 6 7 8 9 10

Learning and study skills

1 2 3 4 5 6 7 8 9 10

Sustainable & Global Citizen

Sustainability awareness

1 2 3 4 5 6 7 8 9 10

Systems Thinking

1 2 3 4 5 6 7 8 9 10

Openness to cultural encounters

1 2 3 4 5 6 7 8 9 10

Responsibility

1 2 3 4 5 6 7 8 9 10

Change leadership

1 2 3 4 5 6 7 8 9 10

The Competent & Confident Professional

Self-organisation & management

1 2 3 4 5 6 7 8 9 10

Team-work & collaboration

1 2 3 4 5 6 7 8 9 10

Professional & ethical manner

1 2 3 4 5 6 7 8 9 10

Negotiation & persuasion

1 2 3 4 5 6 7 8 9 10

Effective verbal & written communication

1 2 3 4 5 6 7 8 9 10

Resilient & Thriving Individual

Connected with others

1 2 3 4 5 6 7 8 9 10

Is active

1 2 3 4 5 6 7 8 9 10

Is empowered-feels can make a difference

1 2 3 4 5 6 7 8 9 10

Does not give up learning

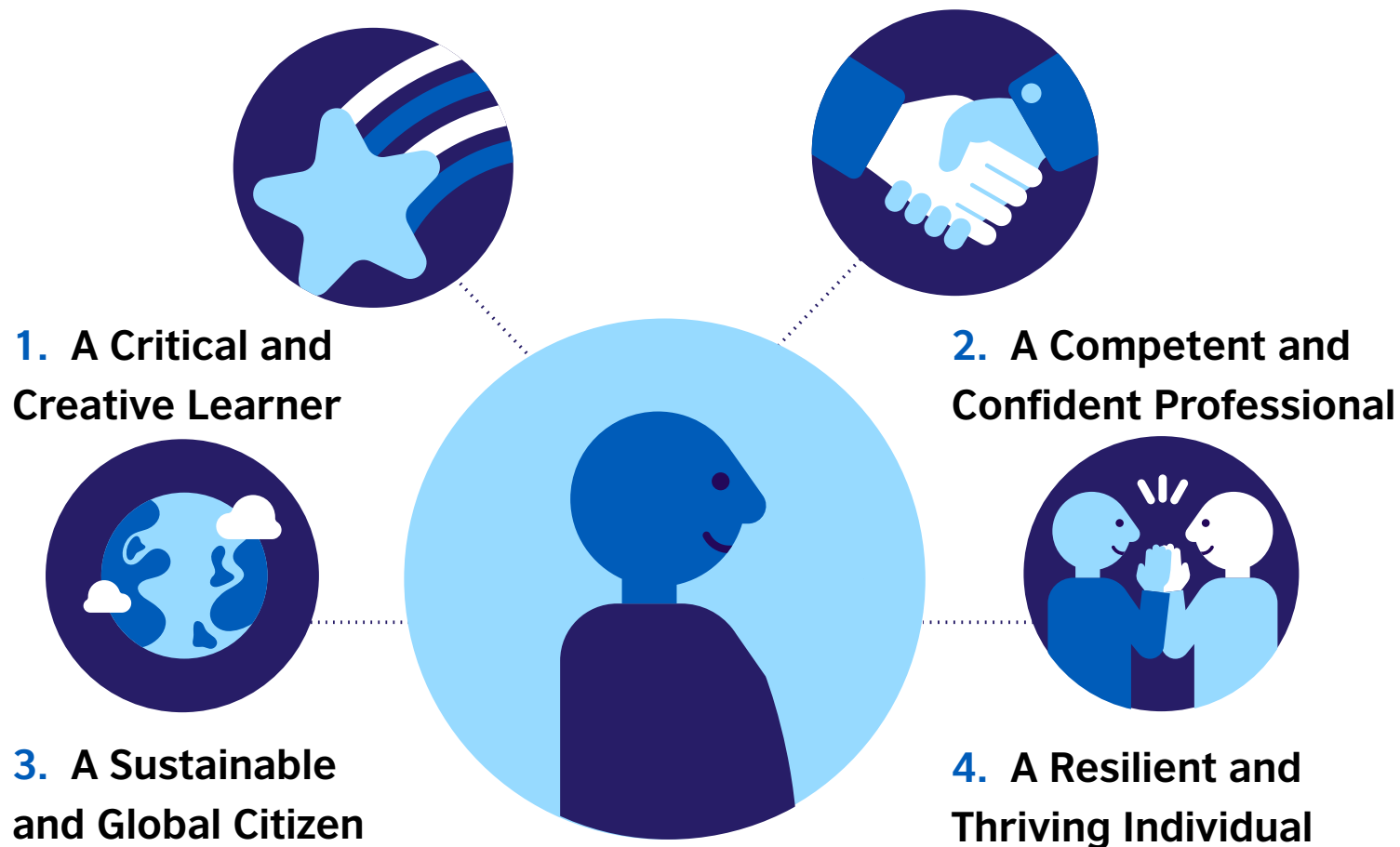
1 2 3 4 5 6 7 8 9 10

Gives back to social and community life

1 2 3 4 5 6 7 8 9 10

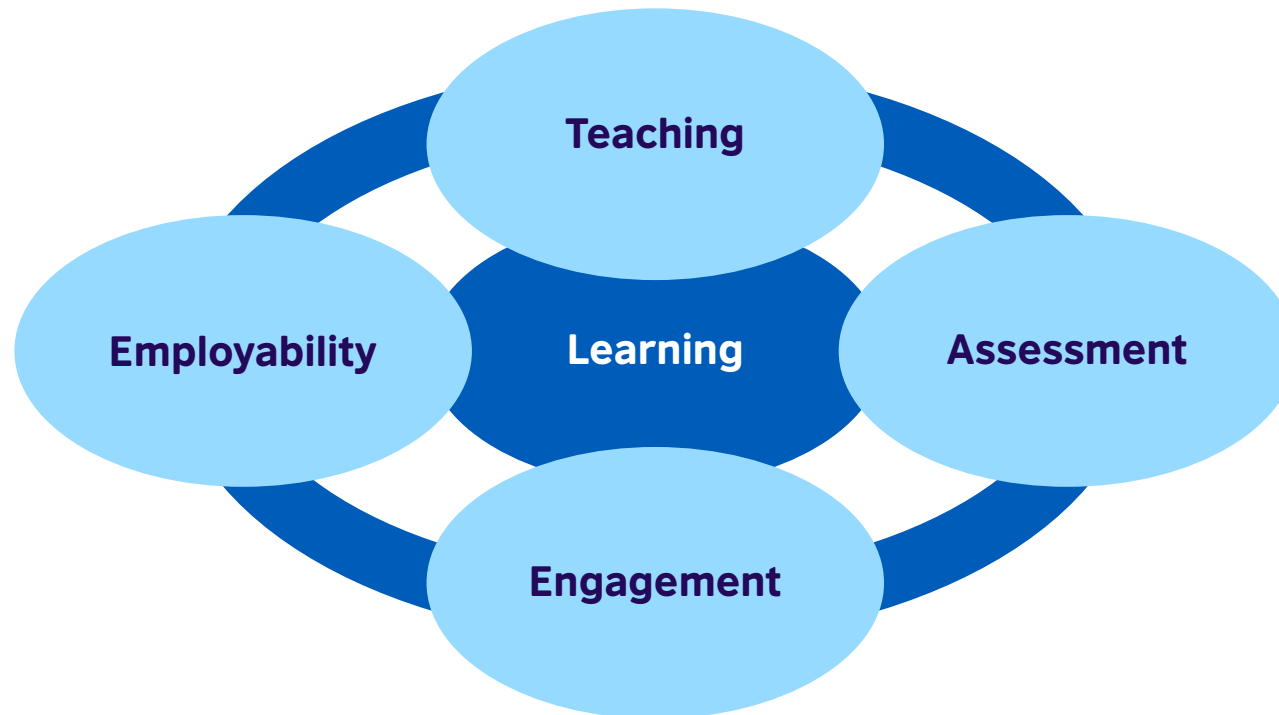
The Student Profile Page 4:

NOTES: What can I do to support my students to develop their skills and competencies to become:



High Quality Learning and Curricula Methods

Integrated High Quality Learning



- Now that you know who your students are through the student persona exercise, you can focus on the teaching and learning methods through which their learning can be effectively enhanced, and the skills and competencies can be achieved.
- On the next slide, you will find resources for 6 teaching and learning methods. Read and review the short articles for these methods and then answer the following questions for each method:

What is it?

How does it work?

How can I use it in my teaching?

Am I likely to adopt this method? Why?

1. Engaging Students with their Personal Development Planning:

https://www.plymouth.ac.uk/uploads/production/document/path/8/8552/7_Steps_to_Engaging_Students_with_their_PDP_online_TM.pdf

2. Flipped Classroom:

https://www.plymouth.ac.uk/uploads/production/document/path/2/2399/7_Steps_to_a_Flipped_Classroom.pdf

3. Immersive Modules:

https://www.plymouth.ac.uk/uploads/production/document/path/5/5988/7_steps_to_Delivering_an_Effective_Immersive_Module.pdf

4. Internationalised Teaching:

https://www.plymouth.ac.uk/uploads/production/document/path/3/3914/7_steps_to_Internationalisation_2012.pdf

5. Research Informed Teaching:

https://www.plymouth.ac.uk/uploads/production/document/path/13/13904/RFJ35895_7_Steps_Linking_Research_and_Teaching.pdf

6. Using Group Work:

https://www.plymouth.ac.uk/uploads/production/document/path/2/2398/7_steps_to_using_group_work_in_your_teaching_March_2013_1_.pdf

Course / Module Design

Learning & Curricula models	Learning & Curricula models			
	Teaching	Assessment	Engagement	Employability
Engaging students with their professional development planning	<p>Examples of the methods used here.</p> <p>How are they being used currently? Give examples</p> <p>How does this model enhance learning?</p> <p>What are there advantages and disadvantages to the learner, academic, institution, employer?</p> <p>How can they be used in the future?</p> <p>What resources are needed to adopt them and use them?</p>		<p>Examples of 'engagement' activities within this model</p> <p>In what ways does this enhance learner engagement?</p> <p>How will this engagement enhance the student's learning?</p>	<p>Examples of 'employability' activities within this model</p> <p>In what ways does this model enhance learner employability?</p> <p>How will this employability enhance the student's learning?</p>
Flipped classroom				
Fostering Critical Thinking				
Immersive modules				
International Teaching				
Research informed teaching				
Using Group Work				
Other				



Inspiring Learning Opportunities

Case Study Example 1

Business Plan Competition: UEA and Hotel Chocolat

1st prize: One week internship, all expenses paid at the Rabot Estate in St Lucia – Caribbean.

In-kind business support from Barclays Bank, Lovewell Blake, The Click and Mills and Reeve to the value of £4,000

The University of East Anglia (UEA) joined forces with Hotel Chocolat to look for creativity and innovation through its EU-REKA business plan competition, with a top prize of an all expenses paid internship at Hotel Chocolat's Rabot Estate in St Lucia. Undergraduate and postgraduate students were invited to submit their ideas - from developing scientific research, to not-for-profit social enterprises, eco-friendly inventions, lifestyle businesses or simply new ways of doing old business.

Winners:

- PhD Plant Biologists trying to develop low cost and environmentally friendly technologies for agriculture.
- Mr Lloyd said "This has been a fantastic opportunity to learn the practical skills needed to make our business prospect a reality. It has provided a new outlook on how to commercialise academic research to achieve real benefit to the wider world, and given us the skills and confidence needed to establish and develop our own business."

2nd prize: a week's expenses paid summer internship at Hotel Chocolat's Huntingdon headquarters in Cambridge won by first year undergraduate international relations and politics student

3rd prize: a two-day expenses paid summer internship at Hotel Chocolat's Huntingdon headquarters in Cambridge won by second year economics student

Case Study Example 2

Plymouth Law Clinic

Our clinics and projects



<https://www.plymouth.ac.uk/courses/undergraduate/llb-law/plymouth-law-clinic>

Case Study Example 3

World first education provider to incorporate a clinical entity into a social enterprise.

<http://peninsuladental.org.uk/>

Peninsula Dental Social
Enterprise is committed to
improving dental health in
the South West through
treatment, education,
community and training



Inspiring Learning Opportunities For Your Courses

	Inspiring Learning Opportunities			
	1	2	3	4
Description of the Inspiring Learning Opportunity				
How will this inspire the students' learning?				
How will this enhance the students' employability?				
How will this be inclusive of a wide range of students?				
How will this benefit the staff involved?				
How will this benefit the university?				
What resources are needed to make this happen?				
What are the challenges and how can they be overcome?				

SWOT Analysis For Each Of The Four Identified Inspiring Learning Opportunity

SWOT Analysis	
Benefits	Challenges
Strengths	Weaknesses
Opportunities	Threats



Flexible Learning and Digital Literacy

Getting into the unknown....

For the first time in education and university times, we are preparing students for a future we cannot clearly describe.

We need diversity of thought in the world to face new challenges.

Society 3.0

Meaning is...	Socially constructed and contextually reinvented
Technology is	Everywhere: (ambient, digital universe)
Teaching is done...	Teacher to student, student to teacher, student to student, people-technology-people (co-constructivism)
Schools are located...	Everywhere: (thouroughly infused into society)
Parents view schools as	A place for them to learn, too.
Teachers are...	Everybody, everywhere
Industry views graduates as...	Co-workers or entrepreneurs



Characteristics of Education 3.0

- The role of students in making choices of a different kind than are available today
 - Choosing from a menu of objects
 - Designing their own programs of study rather than just participating in exclusive programs
 - Social influence on choices

- **Digital natives** entering higher education
- Growing abundance of **free and open educational resources**
 - Reusable content and software
 - Open access scholarly publishing



Today's students are digital natives



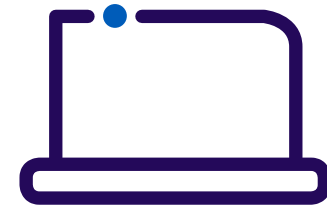
Visual Learners



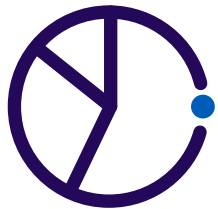
Multi-taskers



**Short attention
spans**



**Use technology to
express**



**Information
analysts**



**Content
producers**



**Real-time learners
instant messages,
text messages**



**Student - driven
inquiry**

 **OPEN ACCESS**
USING DIGITAL MEDIA

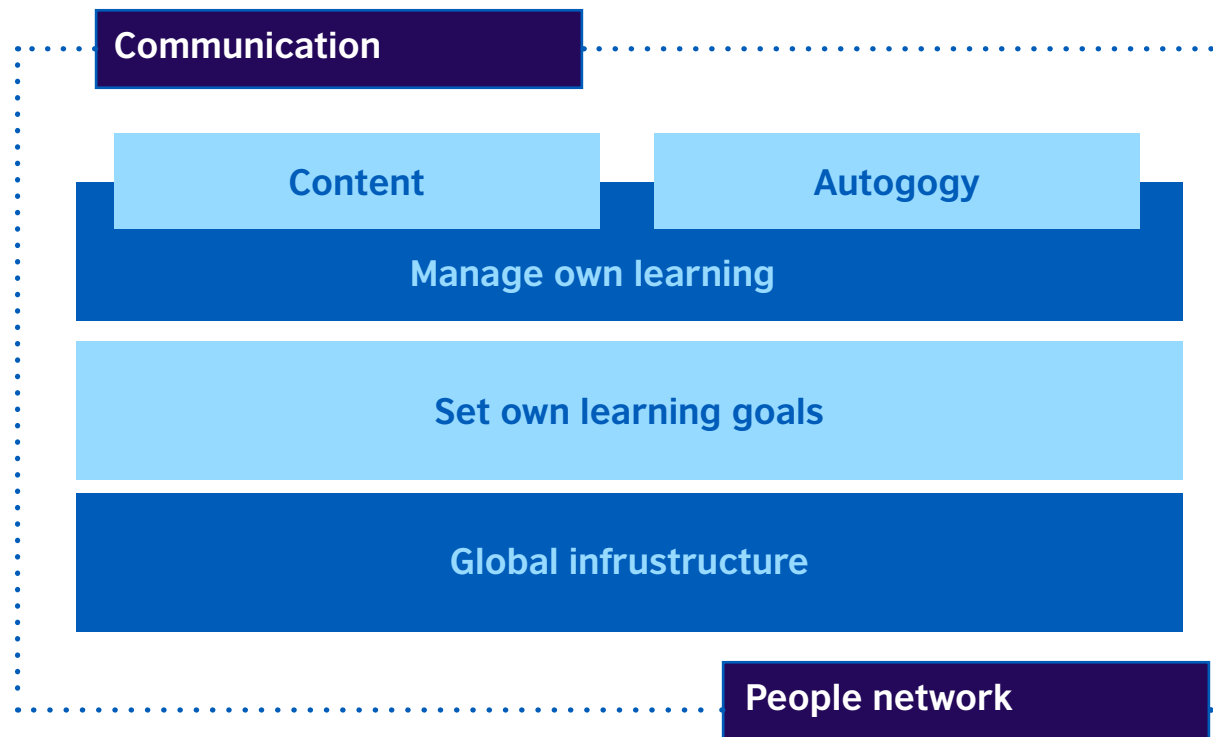
 **MEDIA LITERACY**

MOOC LEARNING
asset communities
built around shared experiences

Selecting tools for **Content delivery,**
discussion, & the integration of **shared**
learning experiences.

Personal Learning Environments (PLE)

- Learners take control and manage their own learning
- **Autogogy** the way a learner self-learns



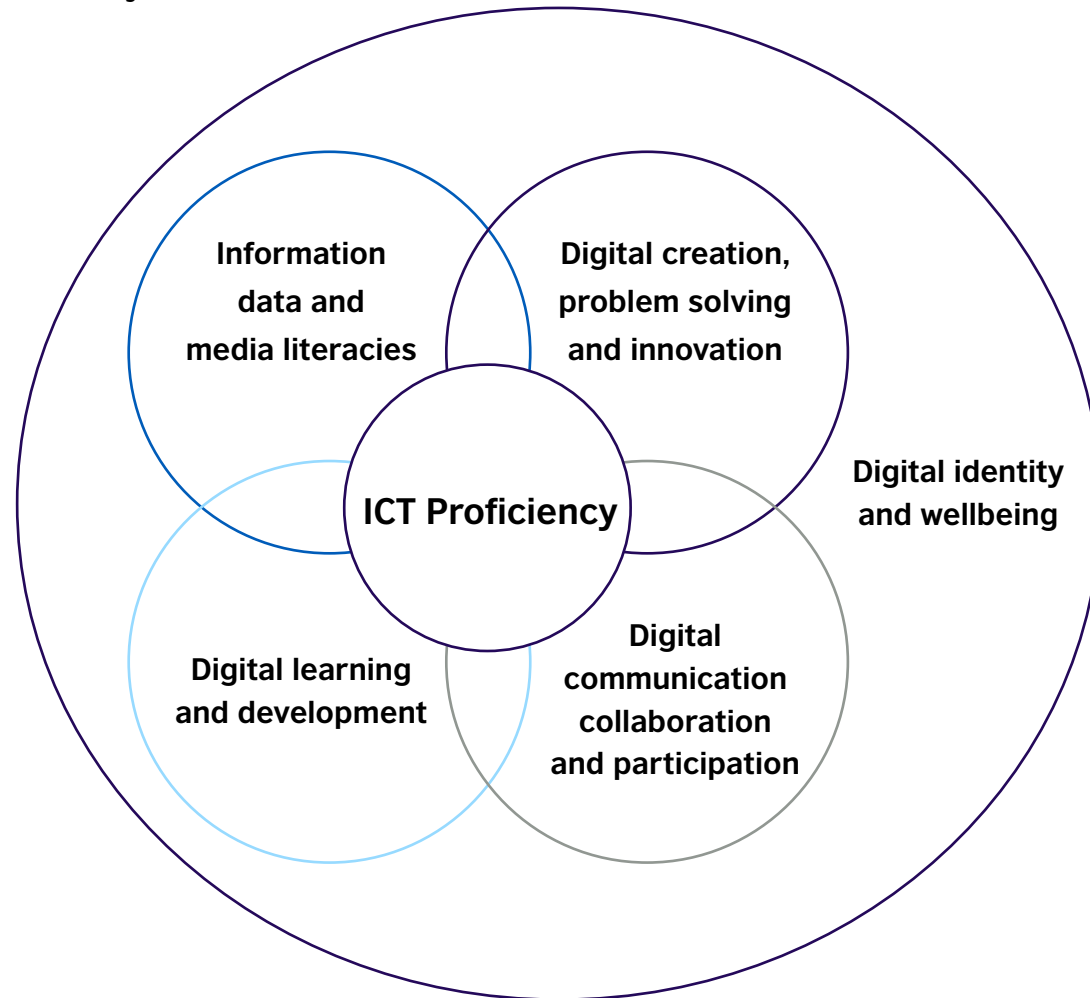
- A way of learning, not a particular technology

Teaching and learning have changed

- Instant gratification required.
- Rules of “engagement” have increased.
- Differentiation of instruction expected through differentiated task entry points to meet individual needs.
- Local home / classroom - virtual libraries that are media and informationrich readily available.
- Multi-“text” approach to learning.
- Increased student collaboration - in new paradigms.
- Instant feedback and remediation.
- Learning takes place in real-world contexts.
- Learning takes place in places other than the classroom through asynchronous learning opportunities.

Developing students' digital literacy

<https://www.jisc.ac.uk/> <https://www.jisc.ac.uk/>



The Universities we need....

- Nurture knowledge - producing graduates, not automatons.
- Share, remix and capitalize on new ideas.
- Enhance accelerating change rather than fighting it.
- Are not based on hardware, based on software.
- They are built on MINDWARE.
- Unis should not use new technologies to teach the same old... same!
- We all co-invent the future.

CURATION

extracting

WEB FOUND KNOWLEDGE

bringing value

& order

to the learning process

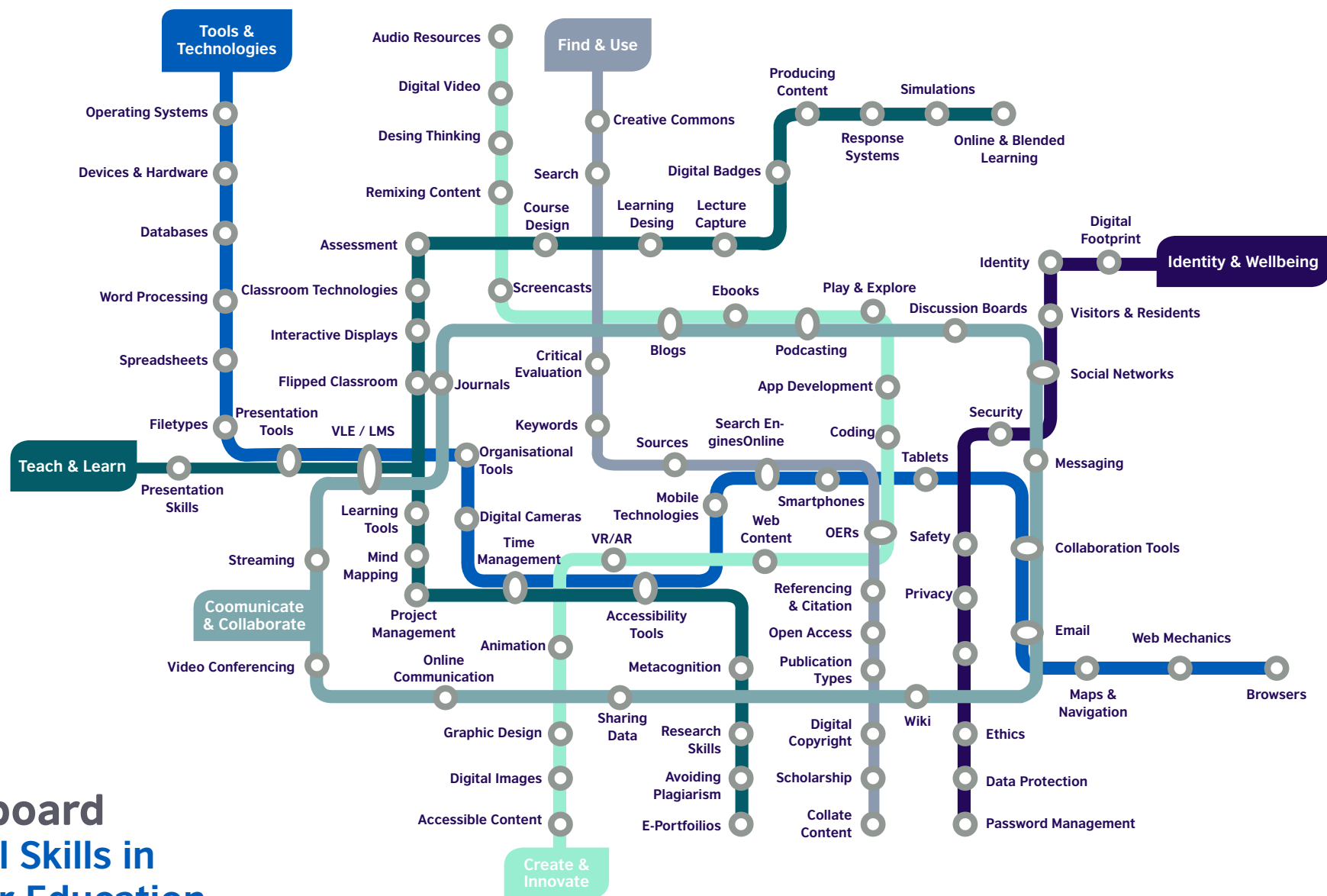


Handheld Learning



Performance Support

- The future of learning isn't the mobile phone
- It's in the *integrated* performance support system



All Aboard Digital Skills in Higher Education

Integrating Digital Technology In The Curriculum

Digital Experiences Students Should Have

1. Capture learning events for reflection: Example: <https://www.clemson.edu/otei/documents/Reflection%20Activities%20r.pdf>

2. Social referencing: Example: [Prezi on using diigo](#)

3. Present academic ideas using digital media: Example: [Advice to students on using prezi](#)

4. Design and administer an online questionnaire

Examples: Survey Monkey has a few [tips on getting started and examples of 'student surveys'](#) (surveys of rather than by students but a reasonable place to start)

5. Create and share tags (keywords) in a topic area: Examples: www.semrush.com

6. Virtual peer review or workshop/crit: Example: https://owl.purdue.edu/owl/teacher_and_tutor_resources/teaching_resources/remote_teaching_resources/remote_peer_review_strategies.htmlce

7. Data visualisation and communication: Example: [Sue Beckingham's Edshelf tools for Data Visualisation](#)

8. Use a simulation to support real-world practice:

Examples: <https://asiasociety.org/education/simulations-real-world-practice#:~:text=Simulations%20help%20students%20develop%20the,many%20aspects%20of%20global%20competence>. <https://www.classvr.com/virtual-reality-in-education/virtual-augmented-reality-for-vocational-courses/>

9. Nurture a professional online identity:

Examples: [CluedUp from London Met](#); <https://studenthub.city.ac.uk/student-administration/student-social-media-guide-lines>

10. Write or edit a public wiki page: Example: [wikipedia training for student editors; case study from Havering College](#)

11. (Campus) mapping: Examples: [Sheffield College Green Trail](#); [University of Exeter biodiversity mapping](#)

12. Hand over the tools! Example: [Digital cameras in use at Greenwich](#)

13. Collaborative authoring

Examples: [case study from JISC RSC Scotland using googledocs](#)

14. Design learning materials for other students

Examples: [Chemtube](#), built by undergraduates for undergraduates: [Opal project at Reading](#)

15. Back to basics (digital deconstruction)

Examples: [using lego to model ideas \(Lego Serious Play\)](#)

16. Digital critique

Example: [New VirtuaMedia Literacy: a blog post by Lynsay Grant](#)

17. Online orientation (pre-arrival or in transition between stages of study)

Examples: [eLanguages at Southampton](#); [Use of facebook as a transition tool](#)

18. Help to develop the digital environment

Example: [Institutional ideas elevator](#) leading to local challenges and (student-led) initiatives

19. Use gamification to support a threshold concept or challenging practice

Example: [a mixed reality game used in academic development](#)

20. Work with open data

Example: <https://www.qs.com/why-are-international-collaborations-so-important-for-universities/>

21. Work with students from another institution/culture

Example: <https://www.qs.com/why-are-international-collaborations-so-important-for-universities/>

22. Engage in a lecture/seminar via interactive technologies

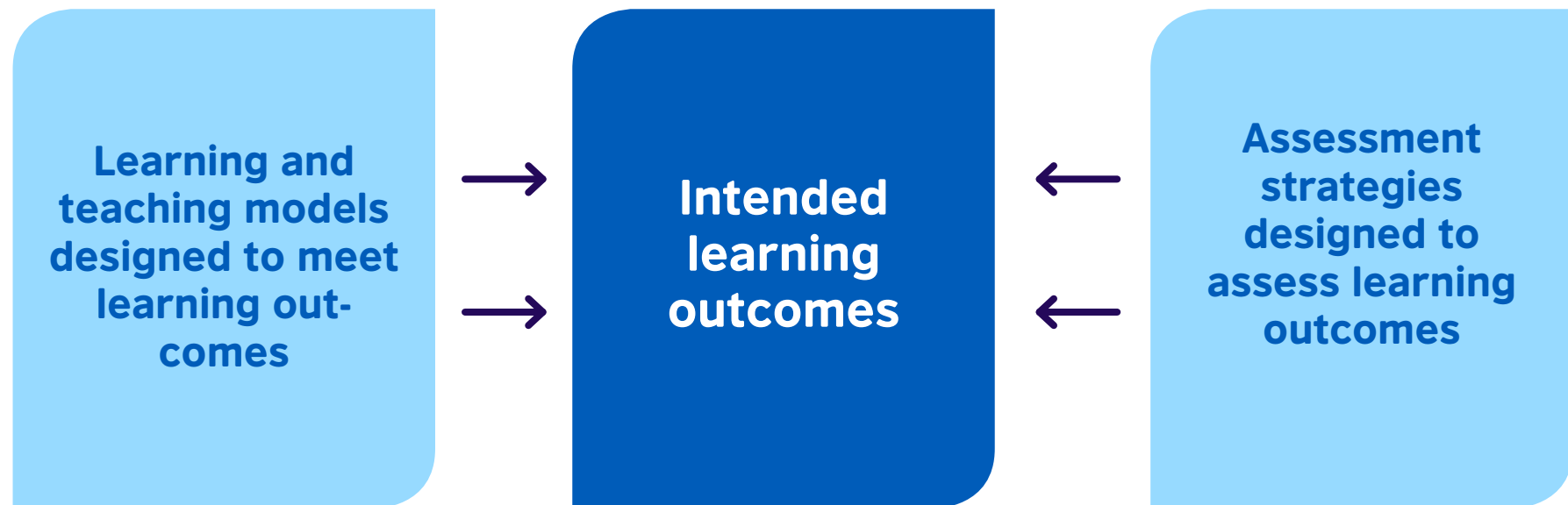
Example: [Case studies in 'enhancing lectures' from Jisc](#), including one on the use of electronic response systems at the University of Hertfordshire.

The Digitally Literate Professor's Challenges

- Time to think...without upsetting the students
- Keep up with pace of change...
- Technology doesn't always work...
- Quality assurance ... still catching up
- TREES but no FOREST without a learning strategy, pedagogic framework and proper planning.
- Everyone needs a bit of [help](#)....

Continuous And Enhanced Assessment Strategies

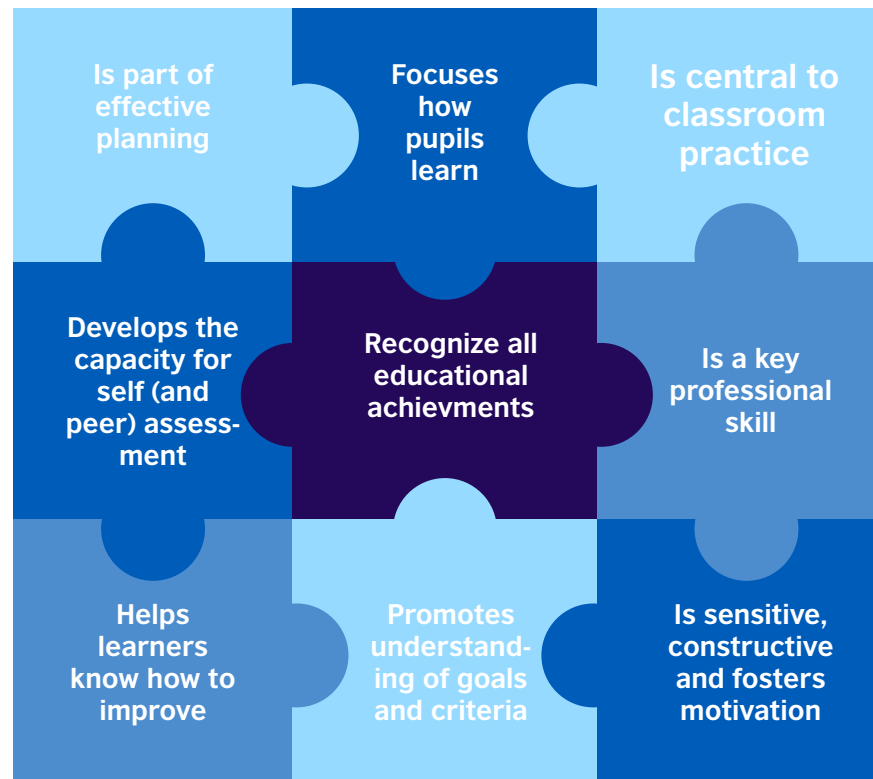
Assessment and Learning



Types of Assessment and their Purposes

For more information, please visit:

<https://www.utc.edu/academic-affairs/walker-center-for-teaching-and-learning/faculty-support-and-resources/pedagogical-strategies-and-techniques/classroom-assessment-strategies#student-assessment>



Why Reform Assessment Methods?

- Improved potential for student learning
- Increased student satisfaction
- Improved value for money: maximising resources for learning
- Assessment that is better able to assess the outcomes of a 21st-century education
- A dependable and fairer representation of student achievement
- Industry / sector readiness of graduates (enhanced employability)

Assessment and Feedback Benchmarking

To download your copy of this tool, please visit:

https://www.qaa.ac.uk/docs/qaas/focus-on/nus-assessment-and-feedback-benchmarking-tool.pdf?sfvrsn=f37cf481_14

**Assessment and feedback
benchmarking tool**



Peer and Self Assessment (PSA)

- Conduct student induction and training sessions
- Manage confidentiality in peer assessment
- Address the issue of reliability
- Consider how to distribute work for peer assessment
- Promote the generation of good quality feedback
- Think about whether to use PSA summatively or formatively
- Occasional technique or curriculum-wide?

Giving Effective Feedforward / Feedback

- 1. Create dialogue as an integral part of your course**
- 2. Heed the power of language**
- 3. Use 'feed-in' in terms of assignment briefs**
- 4. Provide 'feed-forward' (formative feedback)**
- 5. Give meaningful and timely 'feedback' (summative)**
- 6. Think creatively about feedback processes and media**
- 7. Make the most of face to face feedback**

If you have such a planning tool already, start analysing its data, look at where changes can be made, how and why. If you don't have such a planning tool, think about populating it now and share it with your department colleagues to complete. Doing so will give you and your department an idea of the extent of use of various assessment methods.

Assessment Planner											
Stage / Year	September	October	November	December	January	February	March	April	May	June	July
Module 1											
Module 2											
Module 3											
Module 4											
Module 5											
Module 6											

Stage / Year	September	October	November	December	January	February	March	April	May	June	July
Module 1											
Module 2											
Module 3											
Module 4											
Module 5											
Module 6											

Stage / Year	September	October	November	December	January	February	March	April	May	June	July
Module 1											
Module 2											
Module 3											
Module 4											
Module 5											
Module 6											

Key	(Examples)
CW	Coursework
MCQ	
SATest	Short Answer Test
E.Exam	Essay Exam
Rep	Report
IndPr	Individual Presentation
GpPr	Group Presentation
IndPost	Individual Poster
GpPost	Group Poster
OCSE	
ISCE	
Pr	Practical
IndViva	Individual Viva
Perf	Performance
AP	Action Plan
W	WebsiteWiki
Cal	Calculations
Port	Portfolio
Obs	Observation
Deb	Debate
RJ	Reflective Journal
Exhb	Exhibition
E-J	E-Journal
BI	Blog
LitR	Literature Review

Useful Resources from the University of Plymouth 7 Steps Series:

- 7 Steps to: Linking research and teaching: https://www.plymouth.ac.uk/uploads/production/document/path/13/13904/RFJ35895_7_Steps_Linking_Research_and_Teaching.pdf
- 7 Steps to: a Flipped Classroom: https://www.plymouth.ac.uk/uploads/production/document/path/2/2399/7_Steps_to_a_Flipped_Classroom.pdf
- 7 Steps to: Delivering an Effective Immersive Module: https://www.plymouth.ac.uk/uploads/production/document/path/5/5988/7_steps_to_Delivering_an_Effective_Immersive_Module.pdf
- 7 Steps to: Engaging Students with Personal Development Planning: https://www.plymouth.ac.uk/uploads/production/document/path/8/8552/7_Steps_to_Engaging_Students_with_their_PDP_online_TM.pdf
- 7 Steps to: Inclusive Teaching and Learning: https://www.plymouth.ac.uk/uploads/production/document/path/6/6792/RFJ21944_7_steps_to-Inclusive_Teaching_and_learning_616_LH_web.pdf
- 7 Steps to: Internationalising Teaching and Learning: https://www.plymouth.ac.uk/uploads/production/document/path/3/3914/7_steps_to_Internationalisation_2012.pdf
- 7 Steps to: Using group work in your teaching: https://www.plymouth.ac.uk/uploads/production/document/path/2/2398/7_steps_to_using_group_work_in_your_teaching_March_2013__1_.pdf
- 7 Steps to: Giving effective feedback , 'feed-in' and 'feed-forward: https://www.plymouth.ac.uk/uploads/production/document/path/2/2394/7_steps_effective_feedback_2011__3_.pdf
- 7 Steps to: Peer and Self Assessment: https://www.plymouth.ac.uk/uploads/production/document/path/2/2404/7_steps_to_Peer_and_Self_Assessment.pdf



Navigating Research Excellence

Contents		Page
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3	Researcher Types	96
4	Writing a Winning Funding Proposal	98
5	Research Planning	102

Developing and Enhancing the Researcher Profile

Research Profile

for each of the following questions, write down your answers and include the actions you can take to make improvements.

1. Provide Clarity Could someone on your department (not your supervisor or a close friend) describe your research in simple accurate terms? why yes or no?

2. Become Recognizable Would a key researcher in your field who has attended the same meetings as you in the past be able to identify you by sight? why yes or no?

3. Build your visibility Does your name or work come up in a web search for your research topic? why yes or no?

4. Identity Ambassadors Do the right people know you are interested in collaboration and would they feel comfortable approaching you? Has your supervisor / mentor / PI introduced or recommended you to someone?

5. Be reliable Could your colleagues recommend you as a potential collaborator based on your current performance? Why yes or no?

1. Tune in What do you think the main research questions will be in your field in five years' time?

2. Translate Have you described your research in interesting and relevant terms to someone from a different faculty in the last six months? Give examples.

3. Be Interested Do you make a habit of talking to other researchers about their work and do you find them interesting? Give examples.

4. Remain Relevant & Current Are your skills or knowledge in short supply? Why? What are the implications of this?

5. Achieve Status When people discuss your work, do they identify you as the architect / leader of the research?

6. Turn on your Radar Do you know who could fund your future research interests? List them here

7. Create Opportunities Can you think of three possible applications for your expertise outside your current role?

Researcher Profile Advice Wall

The below suggestions / recommendations emerged from the early career academics collaborative round table discussions during a training session in Jordan in November 2019. **Items appearing in bold were identified by the participants as difficult / challenging to implement**

Provide Clarity: What can you do so that others in your department can describe your research in simple accurate terms:

1. Collaborate with department members
2. Regular / monthly research seminar for to present work in progress and published papers,
3. Present research progress within the internal review document / process
4. Open research discussions between different departments
5. Conduct workshops for specialized research interest area
6. Ensure e-profile is up to date
7. Create journal clubs
8. Two annual meetings with undergrads, postgrads and faculty to present, share and discuss ongoing research

Become Recognisable: What can you do so that a key researcher in your field who has attended the same meetings as you in the past is able to identify you by sight?

1. Propose interesting ideas

2. Focus on hot research topics in your field
- 3. Cite each others' work and increase your own citations**
- 4. discuss similar research in groups**
- 5. Quality rather than quantity**
6. Work on up to date topics
7. Promote your research on different platforms like social media. For example, ResearchGate, Twitter
8. Increase participation in different workshops and conferences
9. Have a high value research with direct applications
10. Affective participation in workshops and conferences
11. Present a good contribution at conferences
12. Network and especially during the breaks at conferences and events
13. Participate in other institutions as adjunct faculty
- 14. Offer collaboration**
- 15. Invite guest speakers**

Build your Visibility: What can you do so that your name or work comes up in a web search for research topic

1. Online presence

2. Social media profiles on Linked In, GitHub, Open Access

3. Interviews

4. Share your research

5. Publish, especially in top journals in your field

6. Focus on a specific field and work on hot interesting topics
7. Engage in **funded projects and patents**
8. Increase number of citations
9. Collaborate with other specializations on multi-disciplinary, innovative ideas and research.
10. Choose the titles of your publications wisely
11. Choose your keywords strategically
12. Choose your publication outlets (journals and others) wisely
13. Accept speaker invites and adjunct faculty positions
14. Develop communities of practice in area of specialization

Identify Ambassadors: What can you do so the right people know you are interested in collaboration and would feel comfortable approaching you?

1. Participating in high impact conferences

2. Networking
3. Strategic sequence of research co-authors on publications

4. Improve communication

5. Work collaboratively in teams, be accessible and always ready to help
6. Utilize your supervisor, department members, colleagues and networks.
7. Create a personal website
8. Participate in workshops like this one!

Be Reliable: What can you do so that your colleagues recommend you as a potential collaborator based on your current performance?

1. Knowledge sharing with established research colleagues

2. Demonstrate trust and commitment

3. Identify your research identity, be focused and don't distract yourself by working on so many topics,
4. Present your research findings simply and clearly

5. Active and effective team player

6. Work hard
7. Ask the colleagues you want to collaborate with
8. Invite others to collaborate with you
9. Network
10. Participate in conferences

Be Interested What are the best venues / events for talking to other researchers about their work

1. Conferences

- 2. Workshops
- 3. Seminars

Remain Relevant & Current What can you do to remain relevant and ensure that your skills and knowledge are up to date and needed?

- 1. Reading up to date articles in your area of research
- 2. Keeping focused on your research area
- 3. Engaging in the community

Achieve Status What can you do so that you are identified as an architect / leader in your research field?

1. Show off

- 2. Being senior and hardworker in your team
- 3. Provide applicable solutions for significant problems
- 4. Publish more novelty papers in the area

Turn on your Radar Make a list of all the organisations that can fund your future research interests

1. DFG, Earsmus, HCC

2. International and national organisations like DAAD, Erasmus plus, universities

3. Industry - university - government

- 4. EU, ENI, Internal university funding, higher education fund, Madad, HOP

Create Opportunities Write down as many possible applications as you can think of for your expertise outside your current academic role

- 1. Higher education fund
- 2. Local universities fund
- 3. Working at hospital and other orgs
- 4. Diagnostic medical fields
- 5. Green building
- 6. Smart building and cities
- 7. Consultant-industry sectors**
- 8. Volunteering
- 9. Software developing
- 10. Research centre
- 11. Community service
- 12. Designing research
- 13. Writing proposals
- 14. Academic and scientific writing

This is extracted from the publication - Developing the next generation: guidance and good practice in the leadership development of early career researchers and academics - www.vitae.ac.uk/next-gen-leaders

Building a research profile

For this project...

We interviewed eighteen academics in leadership positions from five UK universities about the things that they wish they had known when they started out. We have used this information to develop guidance and training materials for the development of the next generation.

Advice from academic and research leaders

- Grow your publishing track record
- Engage in the process of getting funding
- Perform horizon scanning and forward planning to build impact

Our leaders came from a variety of academic backgrounds and had different emphases in their current roles on teaching and research. One thing that came across clearly from all of them, however, was the importance of doing the “business” of research in order to progress with their career as research and academic leaders. The following quotes are illustrative of the points that our interviewees made around these topics.

This report was developed with funding from the Leadership Foundation for Higher Education under the Innovation and Transformation scheme

Leadership
Foundation
for Higher Education

ee

Brunel
University
London

vitae
realising
the potential
of research

This is extracted from the publication - Developing the next generation: guidance and good practice in the leadership development of early career researchers and academics - www.vitae.ac.uk/next-gen-leaders

Grow your publishing track record

There was no getting away from this core message from our interviewees — publishing papers was key to progressing in their academic careers and, if anything, they felt that the pressure to publish is more intense now than when they started out.

“If they want to be known for a particular piece of research they need to be the one that’s writing the paper, presenting it and therefore they can’t just give me a big pile of junk and expect me to re-write it, they have to take that responsibility. So encouraging independence is probably the most important thing.”

Not only did the interviews reveal the importance of publishing for career progression, but our leaders also told us that they thought this was a key aspect their early career academics and research staff needed support and development for:

“Well we’ve actually produced some guidelines ... on how to get your papers more cited ... always make your work very clear, give it good titles that have broad appeal, write abstracts that people beyond your immediate field can understand, things of this kind. All of those give you more visibility.”

“Most post docs are three years’ time, which seems like an awful lot of time when you start, but time flies enormously fast in science, so you want to come out with a couple of really good publications by the end of that, so that requires planning by yourself, together with your supervisor and I think it is important to really think about what are the publications likely to be and how do I get there and work hard doing that.”

This is extracted from the publication - **Developing the next generation: guidance and good practice in the leadership development of early career researchers and academics** - www.vitae.ac.uk/next-gen-leaders

Engage in the process of getting funding

The interviews revealed that the other most important part of 'doing the business of research' is that of getting funding through grants.

"So at that point I decided I wanted to stay in academia after I think the first postdoctoral term so I applied for my own funding to be a senior post-doc which I got, then I went through the fellowship. And getting the intermediate fellowship was the turning point because at that point I felt the academic world believed in me that I can be a successful researcher and deliver."

"You have to get the grants. If you don't get the grants you can't do the research. And then you need to get the research completed in order to get papers."

Perform horizon scanning and forward planning to build impact

Our interviewees referred to the importance of not only keeping up to date with changes in priorities from key funders such as the Research Councils but also commented that the most successful researchers that they know, engage in 'horizon scanning' in order to predict what is coming up in the future and then plan accordingly. The process of research can be slow and, as the second quote below shows, a long-term funding plan and sustained effort can be the unseen story behind high impact outcomes and a high profile career.

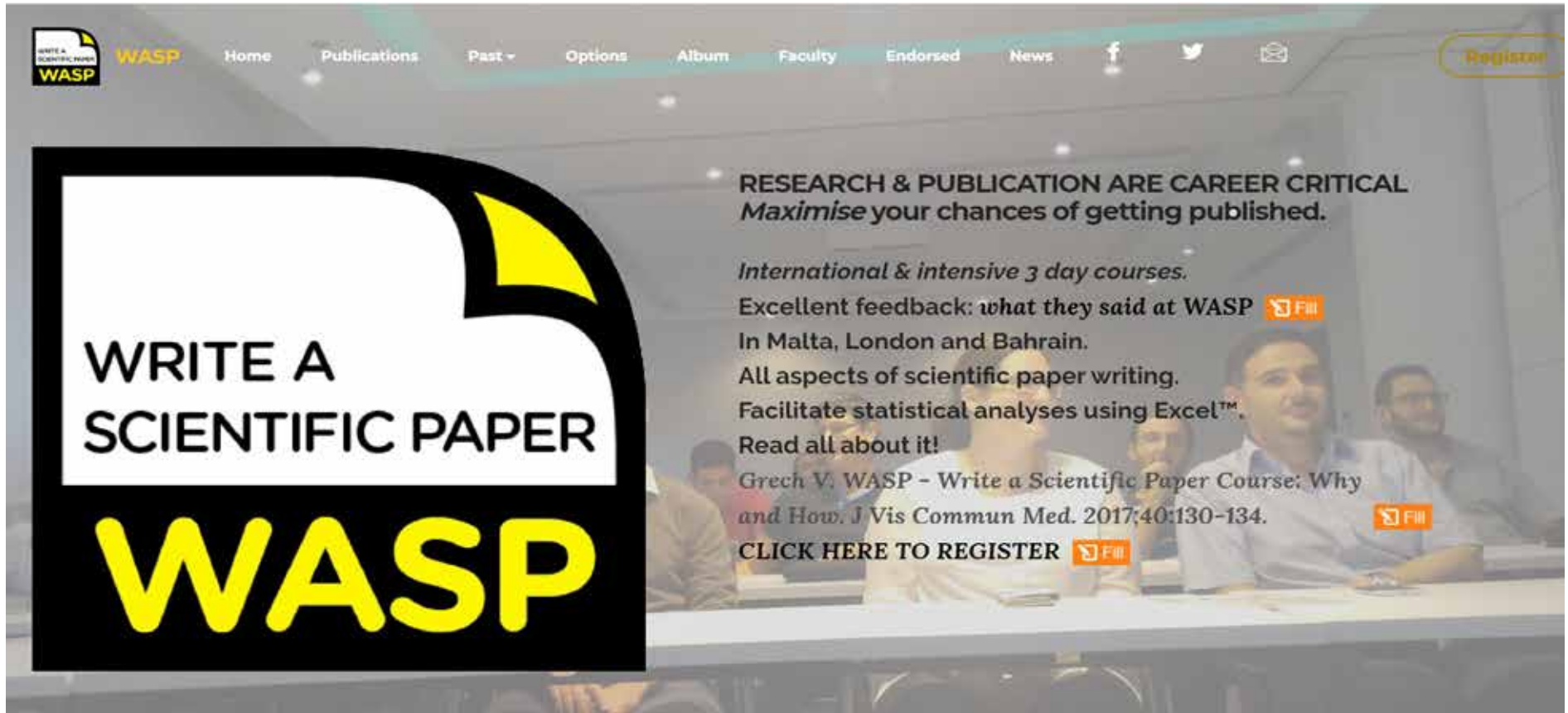
"And in trying also to scan the broader horizon as to how does the funding situation change, are there particular areas that are pushed by the Research Councils, by the government etcetera and how does that fit in to what we are doing here. so really trying to gather all the information and then from there trying to build up a vision of where we would like to be in five years' time"

"I was talking this week to one of our top life science researchers, just got elected to the Academy of Medical Sciences and he was telling me that he and his collaborators have produced what he called 4 papers and I would say they're more than that, they're in Nature and so on, and he told me it was ten years work to produce those papers and they cost two million pounds of cumulative grants. So that's a real example of how forward looking you have to be to get to that point."*

What does it take to publish in a good journal?

Essential Criteria for Publishing in a high-impact journal




- Select the appropriate journal
- Choose an attractive and interesting title
- Prepare a concise abstract
- Brief introduction that positions your paper vs a problem to solve or another paper that builds on or contradicts
- A clear method/methodology (tables help)
- Presentation of your results (the clearer & better the detail the more attractive)
- Discussion (clarity of results, concise, short and simple)
- Conclusion (the aha moment, I can use this!)
- Make sure your references are properly formatted (use Endnote, Mendeley...)



The banner features a large graphic of a document with the text "WRITE A SCIENTIFIC PAPER" and "WASP" in large yellow letters. To the right, there is a navigation bar with links: Home, Publications, Past, Options, Album, Faculty, Endorsed, News, and a Register button. Below the navigation bar, the text reads: "RESEARCH & PUBLICATION ARE CAREER CRITICAL. Maximise your chances of getting published." followed by "International & intensive 3 day courses." and "Excellent feedback: what they said at WASP" with a PDF icon. It then lists locations: "In Malta, London and Bahrain." and "All aspects of scientific paper writing. Facilitate statistical analyses using Excel™. Read all about it!" followed by a citation: "Grech V. WASP - Write a Scientific Paper Course: Why and How. J Vis Commun Med. 2017;40:130-134." and a "CLICK HERE TO REGISTER" link with a PDF icon. The background of the banner shows a group of people sitting at a table in a classroom setting.

**WRITE A
SCIENTIFIC PAPER
WASP**

RESEARCH & PUBLICATION ARE CAREER CRITICAL
Maximise your chances of getting published.

International & intensive 3 day courses.
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In Malta, London and Bahrain.
All aspects of scientific paper writing.
Facilitate statistical analyses using Excel™.
Read all about it!
Grech V. WASP - Write a Scientific Paper Course: Why and How. *J Vis Commun Med.* 2017;40:130-134. 
CLICK HERE TO REGISTER 

Lectures in WASP are outlined in a series of peer-reviewed papers in *Early Human Development Journal*.
[Click here to list abstracts.](#)

Learn

Researcher Academy provides free access to countless e-learning resources designed to support researchers on every step of their research journey. Browse our extensive module catalogue to uncover a world of knowledge, and earn certificates and rewards as you progress.



Researcher Types



To learn about these 7 researcher types, you need to register on the vitae website:
Members' area — Vitae Website

You can register with any email address, but if you are affiliated with any organisation, we recommend logging or registering using your organisational email address for wider access.

- The balanced researcher
- The enterprising researcher
- The career wise researcher
- The creative researcher
- The informed researcher
- The engaging researcher
- The informed researcher
- The leading researcher

Reflection Questions

Once you have reviewed the 7 types of researcher, answer the following questions:

- What is the main focus of each type of researcher?
- Which type of researcher represents me? Why?
- How does this type of researcher impact upon my research activity / outputs / outcome?
- Which type of researcher would I like to be? Why? What do I need to do to become this type of researcher?

Writing a Winning Funding Proposal

Fundamentals of A Winning Research Funding Proposal 1

- Read the Guidance – call-specific and general.
- Address the aims of the particular call
- Layout the documentation well
- Clearly explain the rationale for the research and the project plan
- Do not be over-ambitious in terms of the work you can undertake for a given amount of resource
- Do not neglect any aspect of the application e.g. Pathway to Impact, Data Management Plan, Justification of Resources. The Case for Support is the core document but if it is not well supported then your application will suffer.
- Include letters of support where appropriate

Fundamentals of A Winning Research Funding Proposal 2

- Build strong inter-disciplinary collaborations
- Build good links with research users including industry/policy makers
- If you can include cash or in-kind support for your research from industry then do so
- Use your research-user links to strengthen your Pathway to Impact
- Explain how your research addresses the Strategic Priorities of the funder
- Include genuine institutional commitment (over and above 20% fEC contribution)

Fundamentals of A Winning Research Funding Proposal 3

- Get designing and writing as practice makes perfect!!!
- Familiarise yourself with the criteria and assess your positioning as a prospective applicant. What do you need to do to meet the criteria?
- Familiarise yourself with the potential funder – their calls, who they're funding, their priority areas, upcoming calls etc.
- Complete the sections of the application form that you can, even before the call comes out. For example, your ESRC CV.
- Allow time for formal and informal peer review.
- As Principal Investigator, be prepared to work against the clock to complete the application and submit it by the deadline.

Research Data Management

1. Plan for good data management
2. Comply with legal and ethical requirements
3. Organise, document and standardise your data
4. Keep your data safe
5. Select valuable data for preservation
6. Gain visibility and impact by publishing your data



Research Planning

The Annual Research Plan Guide

Designed to help you with your research planning, the Individual Research Plan to do. It helps you to keep track of your research activity and can be used as part of the review process as well as the promotion process

Name	
Position	
Department/School	
University	

Provide a brief (1 paragraph or some key words) overview of your area(s) of research

Part 1: Summary review of research activities during the last 12 months (1-2 slides)

a) Summary of publications (including those in peers, or under review)

Accepted and published

Accepted in Press:

In review:

The Annual Research Plan Guide Page 2

b) Grant applications, to include funder and value, indicate the status as successful, unsuccessful or pending

Successful:

Unsuccessful:

Pending:

c) Post-graduate/PhD Supervision (Supervisor's name, year of enrollment, FT or PT, your role in the supervision team)

d) Conference presentation

The Annual Research Plan Guide Page 3

e) Invited research seminars/contributions to other events

--

f) Have you mentored other staff in their research activities? if so, give brief details.

--

g) Other research activities (e.g. Impact Case Study lead/potential impact case study; esteem indicators e.g. journal editor, role on professional committee or advisory body, external collaborations, visiting posts, invited consultancies, awards/prizes)

--

The Annual Research Plan Guide Page 4

Part 2: Summary of planned research activities and targets for the next 12 months.

a) Planned publications (include relevant items from the previous year e.g. if revise and resubmit, and indicate stage expected by end of academic year)

Journal	Impact Factor	Title of the Paper	Author/Co-author	Target submission

b) Research funding applications/bids planned (including consultancy)

c) Other research activity planned (e.g. REF Impact Case Study lead/potential impact case study; new PhD Student(s); Conference organisation and presentation plans; journal or book series editor etc. board or committee membership)

d) A short (1 paragraph) summary indicating the direction you would like to take your research over the next few years (e.g. submit major platform grant on xx, develop new area of research in...)

The Annual Research Plan Guide Page 5

Part 3: Training and Support

List the training and support areas you are interested in, and where you can access these. Below is a list of areas for your consideration

Workshop: How to write a 3* Paper
Workshop: How to develop a funding bid
Workshop: Reviewing papers and proposals
Workshop: Developing and impact case study
Finding research partners/collaborators
Finding research funding opportunities
Developing a research project idea and / or bidding for funding
Improving the quality of your research publications
Carrying out and recording impact activity
PhD supervision

A woman wearing an orange hijab and a dark blue long-sleeved shirt is sitting in a wooden chair, reading an open book. She is positioned in front of a large window with blue frames, looking out at a lush green landscape. The book she is reading has a light blue cover with a decorative pattern. A small table in front of her holds some papers. The scene is brightly lit with natural light from the window.

Navigating Impact and Engagement

Contents		Page
1	Navigating Impact	109
2	Engaging Employers	134
3	Engaging Employability Skills In The Curriculum	135

Navigating Impact

What is Impact?

“Impact is the **GOOD** that researchers can do in the world”

Professor Mark Read, Newcastle University

Impact is an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, that researchers make.

Impact includes an effect, change or benefit on:

- Processes: the activity, attitude, awareness, behaviour, capacity, policy, opportunity, performance, practice, or understanding;
- People: an audience, families, beneficiary, community, constituency, or individuals;
- Places: any organisation or geographic location whether locally, regionally, nationally or internationally

Types of Impact

1. Instrumental:

Research directly changes or impacts upon a policy, behaviour or practice. There is a clear, linear link between the research and the change it has affected and it is often more immediate than conceptual impact.

2. Conceptual:

Research influences or adds to bodies of public or professional knowledge, understanding or attitudes. This type of impact can contribute to changes in practice, behaviour or policy, but often takes time to develop and is harder to demonstrate than instrumental impact.

3. Capacity Building:

skills development, technical expertise

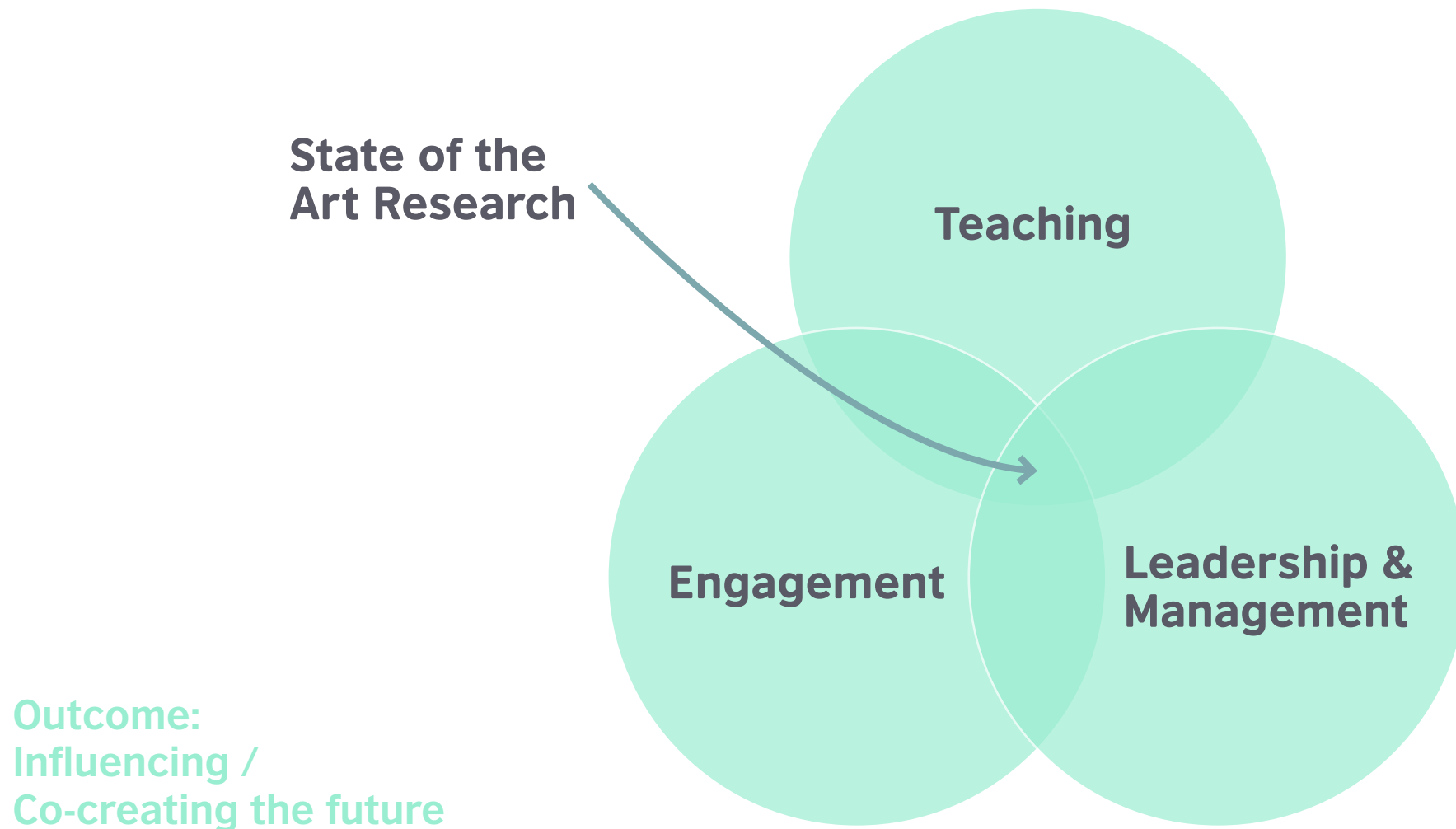
4. Connectivity:

setting up new networks; facilitating collaboration etc

Why is Impact Important?

- Accountability
- Public dialogue and engagement
- Quality of life
- Quality of research
- Relevance & reach
- Collaborators
- Funding

How and Why Do We Create Impact?

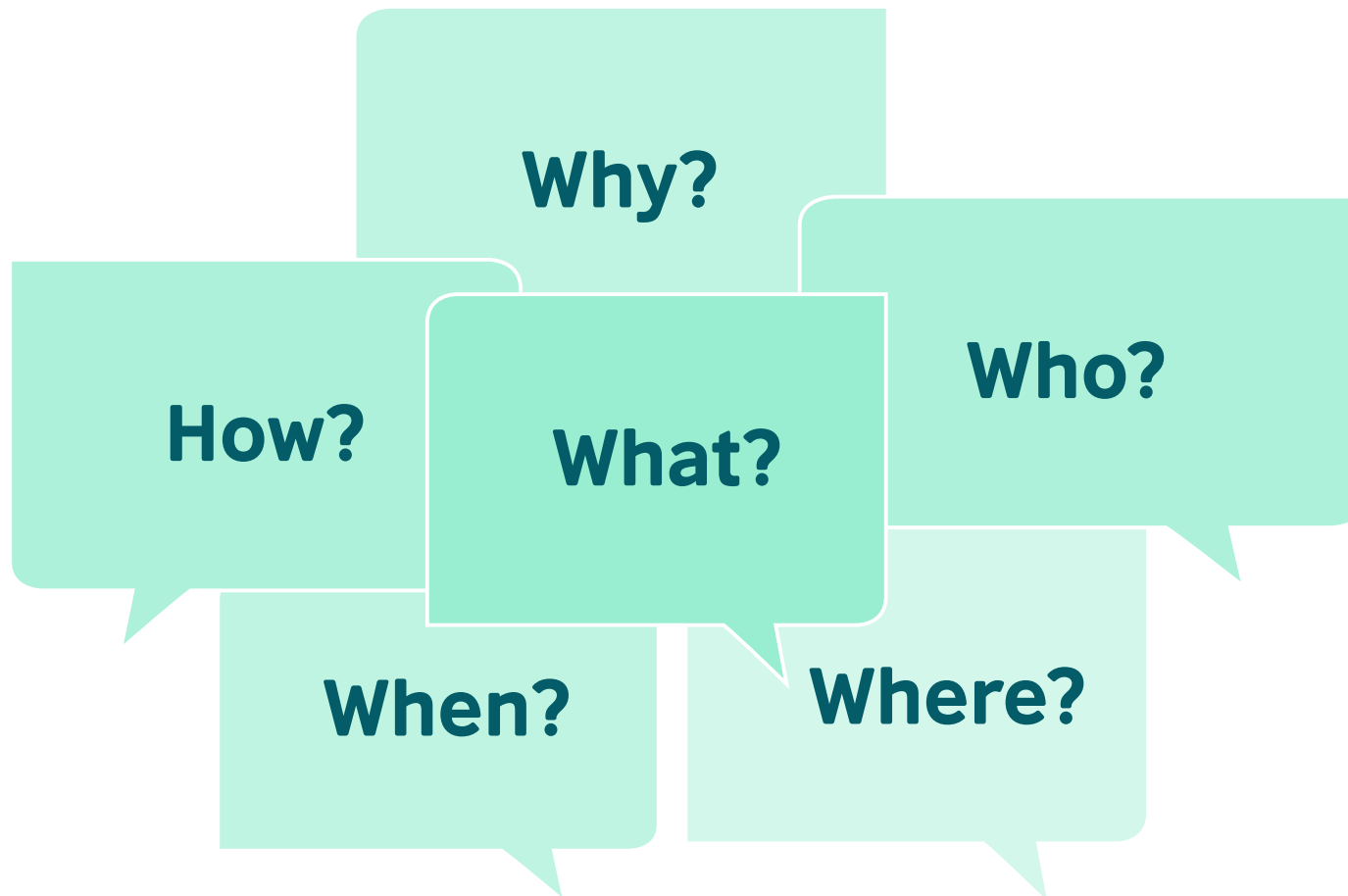


Generating Impact

Impact can be created at any stage of the research process:

- Design and planning
- Building relationships – Partners, Stakeholders & Beneficiaries
- Resources – created and acquired
- Engagement – communicate to generate further impact
- Reflection and sustainability – what approaches work & what to do differently

Planning for Impact

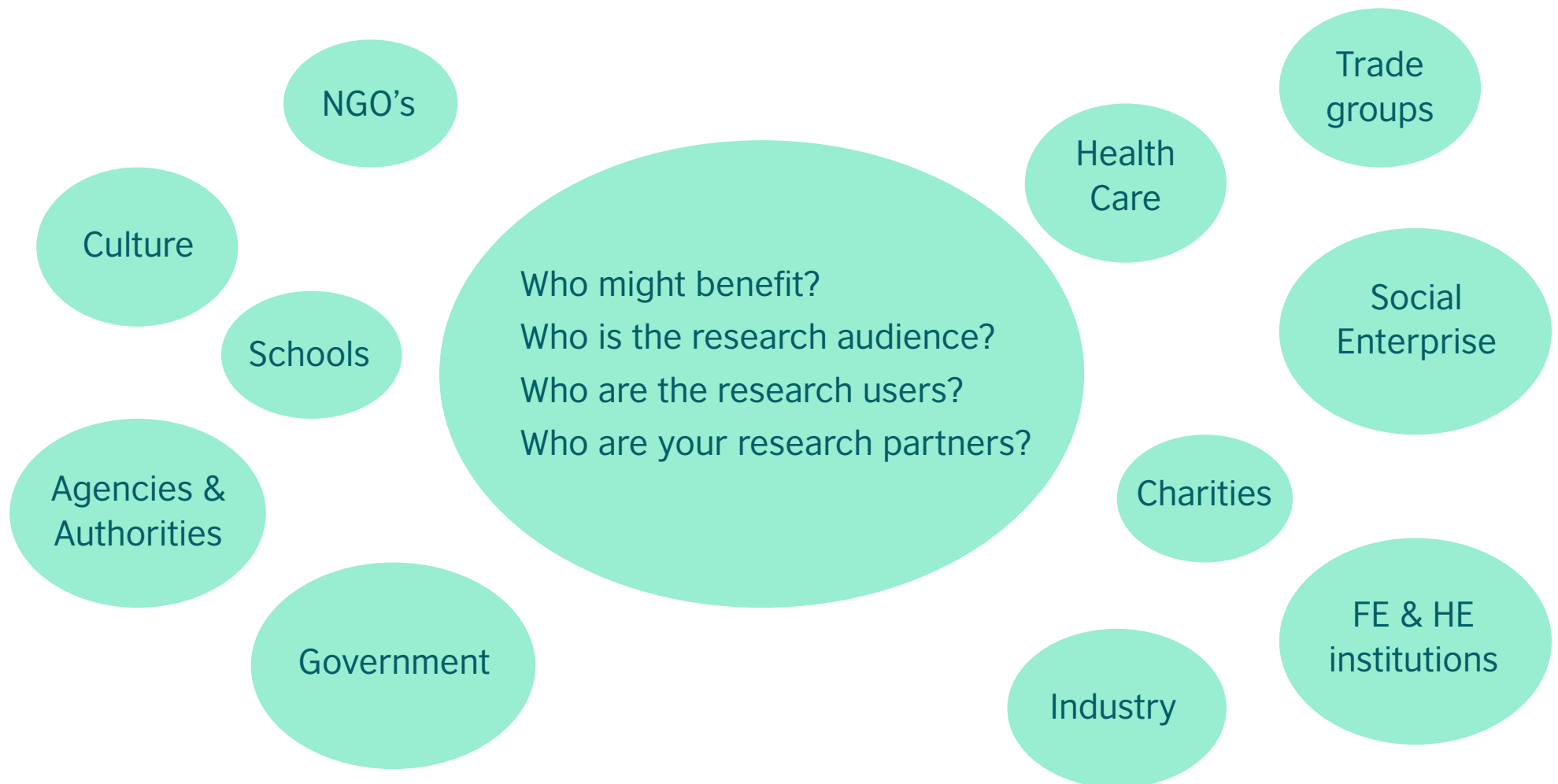


Planning for Impact: The What

WHAT? (Goals/Questions)

- What question/issue do you intend to address?
- What are your research goals?
- What type of impact do you want to have?
- What resources/conditions will your research/goal/impact rely on for success?
- What are the barriers?

Planning for Impact: The Who



Planning for Impact: The Who

		Economic	Societal	Technology	Policy	Health & Wellbeing	Legislative	Environmental	Cultural
Who benefits/ impacted directly	General Public								
	3rd Sector								
	Commercial								
	Policy								
Who benefits/ impacted indirectly	Public Sector								
	General Public								
	3rd Sector								
	Commercial								
Who needs to be targeted to make impact happen?	Policy								
	Public Sector								
	General Public								
	3rd Sector								
Who do I need to work with?	Commercial								
	Policy								
	Public Sector								
	General Public								
Who will be interested?	3rd Sector								
	Commercial								
	Policy								
	Public Sector								
Who will use my research?	General Public								
	3rd Sector								
	Commercial								
	Policy								
	Public Sector								

Planning for Impact: The Why

1. Why will they benefit or be influenced by my research?

Type of impact: Instrumental/Conceptual/ Capacity / Connectivity

2. Why am I engaging with them?

Purpose of engagement:

- To inform
- Consult
- Collaborate
- Share resources

3. Why will my research benefit from this engagement?

Relevance:

- Research
- Stakeholder

Planning for Impact: The Where & When

- When & where will the engagement take place?
- Beginning, middle, end of research work?
- Virtual/real world design?
- Particular locations/events?
- When is the impact expected to happen?
- Short, intermediate, or long-term impact?
- When will you know your impact has been realised?
- Where will your research have impact (reach)?

Planning for Impact: The How

1. How will you engage with your non-academic stakeholders:
 - Research Activities
 - Engagement activities
 - Engagement strategies
2. How will you disseminate/communicate your research outcomes?
3. How will your research outputs and engagement activities lead to impact?
4. How will you measure/assess your engagement and impact?

Communicate:

Public Lectures, exhibition, Social/Traditional media, festival, website, publish, launch event, reports give evidence, systematic reviews

Collaborate:

Workshops, conference, steering groups, outreach, secondments

Exploit:

freeware, open access, consultation, patents, knowledge, open-access data/repositories

Template for Impact Planning

What?			Who?	Why?	When & Where?	How?		
<p>What are the research questions/issues?</p> <p>What are the underlying assumptions?</p> <p>What are the research goals/expected outcomes?</p>	<p>What type of impact do you want to have?</p> <p>Instrumental?</p> <p>Conceptual?</p> <p>Capacity building?</p> <p>What general area are you going to have impact in: Economic social policy & public services</p> <p>Environment</p> <p>Health & Wellbeing</p> <p>Professional services</p> <p>Culture</p> <p>Technology</p>	<p>What resources do you need to reach your goals?</p> <p>What conditions need to be met?</p> <p>What are the barriers?</p>	<p>Who are your: Research audience? Research beneficiaries? Research users? Research partners?</p>	<p>Why will they benefit/be influenced by your research?</p> <p>Why will they be interested in your research?</p> <p>Why is your research important to them?</p> <p>Why are you engaging with them?</p> <p>Why will your research benefit from this engagement?</p>	<p>When & where will the engagement take place?</p> <ul style="list-style-type: none"> Beginning, middle, end? Virtual/real world Particular locations/events <p>When will you expect impact to happen?</p> <ul style="list-style-type: none"> Short-, intermediate-, long-term? <p>When will you know your impact has been realised?</p> <p>Where will your research have impact (reach)?</p>	<p>How will you realise your impact?</p> <p>How will you engage/communicate with your stakeholders/beneficiaries?</p> <p>How will you disseminate your research outcomes?</p> <p>How will research outputs and engagement activities lead to impact?</p>		
						<p>Types of engagement</p> <ul style="list-style-type: none"> Research Activities Engagement activities Communication/Dissemination strategies 	Outcomes	<p>Assessment/Evidence/Documentation</p> <ul style="list-style-type: none"> Qualitative/Quantitative? Baseline/Control? What is being assessed? Retrospective? What stage? Who is involved and who are you reporting to? Research/Significance Priorities?

Template for Impact Planning: Logic Model Planning for Impact: The Who

Goals/ Questions	Inputs	Activities/ Outputs	Short Term Outcomes	Intermediate Outcomes	Long Term Outcomes
Purpose of research. Problem or opportunity research addressing. Context	Resources Financial Equipment People Organisation Raw materials Time	What will you do with your resources? What are your research outputs? What are the outputs of your activities	What are the immediate effects/ results/ impacts of your activities and research outputs	What are the effects/ results/ impacts of your activities and research outputs towards end of project	What are the long-term effects/ results/ impacts of activities and research outputs, beyond life-time of your project

Examples of Impact and Engagement Activities

- Policy papers
- Consultancy
- Knowledge Transfer Partnerships
- Expert reports
- White papers
- Select committees, public inquiries etc.
- Specialist Conferences/ Workshops/seminars
- Public lectures/debates
- Toolkits
- Systematic reviews
- Intellectual Property
- Training
- Traditional & social media, blogging etc.
- Spin-out companies
- Schools events
- Engaging with charities/user-led/patient groups
- Exhibitions/performances/ recordings etc.
- Professional publications and other special interest publications
- Book chapters
- Public awareness/campaigns
- Industry standards
- Trials

Communicating Your Impact

General Communication

social media, press release, project website, outreach

Targeted Communication

specialist conferences, publications, committees

Scheduled Communication

steering groups, visits, reports, special events

Tracking Impact

Tracking reach

- Google
- Altmetrics
- Plum X
- Publish or Perish

Unique ID

- DOI/ISBN
- ORCID
- Researcher ID
- SCOPUS

Peer Networks

- Linked in
- Vivo
- Research Gate
- SSRN
- Medley
- Academia.edu



Assessing Impact

- Focus of the assessment: research, activities etc.
- Tracking forwards/backwards
- Which stakeholders are involved in the assessment and who are you reporting to
- Impact goals/indicators
- Learning/review/judgment
- What stage?
- Priority?
- What do you want to capture?
- Type of data: quantitative/qualitative
- Baseline

Achievable Impact

Realistic Impact goals:

- broad/irrelevant?
- Clear, achievable Milestones
- What are barriers?
- Realistic?

Fully resourced:

- Time
- Cost
- Responsibilities
- Delays/Uncontrolled variables

- Time frames
- Not interested
- Ethics
- Challenging
- Different priorities/ approaches/ language

Policy maker priorities

- Lay language/ clear, concise message
- Hierarchical
- Not necessarily driven by empiricism / caveats etc.
- Time constraints - elections, turnover, short attention span/shelf-life
- political agendas and priorities
- Competing narratives/interests
- Economic cycles
- Values/ethics
- Public opinion/media focus

In Summary

Plan

Monitor

Record

Collaborate

Communicate

**Make a
difference**

Finally, Creating Impact – A Collective Effort



Online Toolkits / Resources

Becker Medical Library

<https://becker.wustl.edu/impact-assessment>

Knowledge Translation tool (Melanie Barwick)

http://www.melaniebarwick.com/KTTemplate_dl.php

ESRC Impact Toolkit

<http://www.esrc.ac.uk/research/impact-toolkit/>

Fast Track Impact

<http://www.fasttrackimpact.com/>

Who, What, Where, When, Why: Use the 5 Ws to draft your research impact communication

So here's how it works. It is such a simple idea that it requires very little explanation.

Who: Who has conducted this research, who will benefit from it and who has funded it?

What: What has happened with this research? What was done to complete it, what processes were involved, what methods and what was the results and conclusion?

Where: Where did this research take place, at which organisation/s and geographical location?

When: When did this take place, when did the project start and when did it finish?

Why: Why did this research happen? Why was there a need for it?

Occasionally some journalists will apply a 'How' question, although this can often be covered by some of the previous questions.



Obtaining Testimonial Evidence

When Requesting a testimonial ensure:

1. Written on the external organisation's headed paper
2. Signed by someone at an appropriate level
3. Ensure they name the researcher/s or research group
4. Ask for reflection on how your research helped the organisation achieve their strategic goals, change policy etc
5. provide additional probing questions, based on the types of impacts you expect might have occurred (economic, social inclusion, health & well-being, behaviour change, change in legislation etc)
6. Then ask for other specific examples of things that changed or had value or meaning.
7. Request specific impacts, quantifying benefits or justifying their significance or reach in other ways
8. Ask for comment on the specific role your research played, if there were multiple factors influencing the impact
9. Ask for revisions to testimonials that are too vague or not sufficiently relevant
10. Ask open but targeted questions, draft testimonials for adapt may look biased
11. You may want to get a concise, quotable summary of the key points made in the testimony. You could propose your own summary based on their testimonials and ask them to amend this, so they are happy with it

Testimonial Writing Rules

Keep your testimonials:

- Real
 - Honest
 - Authentic
 - Specific
 - Positive
- ...and you put your name to it.

Engaging Employers

Engaging Employers Checklist

- Inspiring learning opportunities
- Employer advisory panels
- Work experience/placements
- Acting as mentors
- Hosting workplace visits
- Guest lectures and master classes
- Taking an active role in assessment of student's work
- Inviting students as consultants
- Community development projects with students
- Others?

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- Others?



Employability Skills In The Curriculum

Defining Employability

“A set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy”.

Higher Education Academy, 2012, p.4

However

The HEA definition implies that such ‘achievements’ are quantifiable, yet “the emphasis is on developing critical, reflective abilities, with a view to empowering and enhancing the learner” (Harvey, 2003, p.3).

As such, we define employability as a complex blend of skills, attitude, experience, motivation and interest, underpinned by the ability to learn and to apply that learning to the challenges that work presents.



What drives employability in Higher Education...?

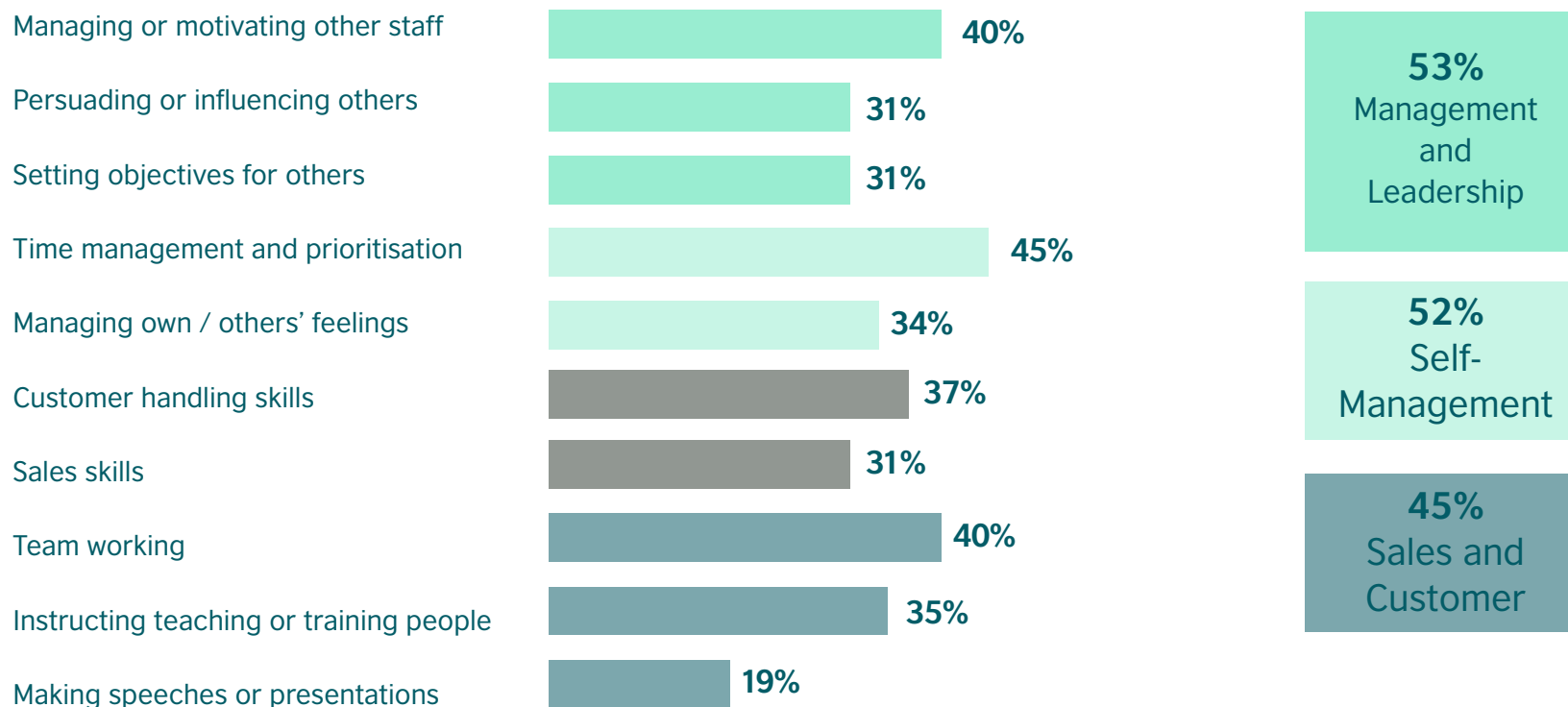
- Contemporary curriculum?
- Productivity/innovation in the country?
- Lower training costs for the employer?
- League tables?
- Competition in the market?
- Better employed graduates higher fees for university education?
- Better careers post graduation?

Employability in the curriculum – creates better students; better learners; engaged citizens;

What Employers Want

UKCES: Employer Skills Survey 2017: UK Results

People and personal skills

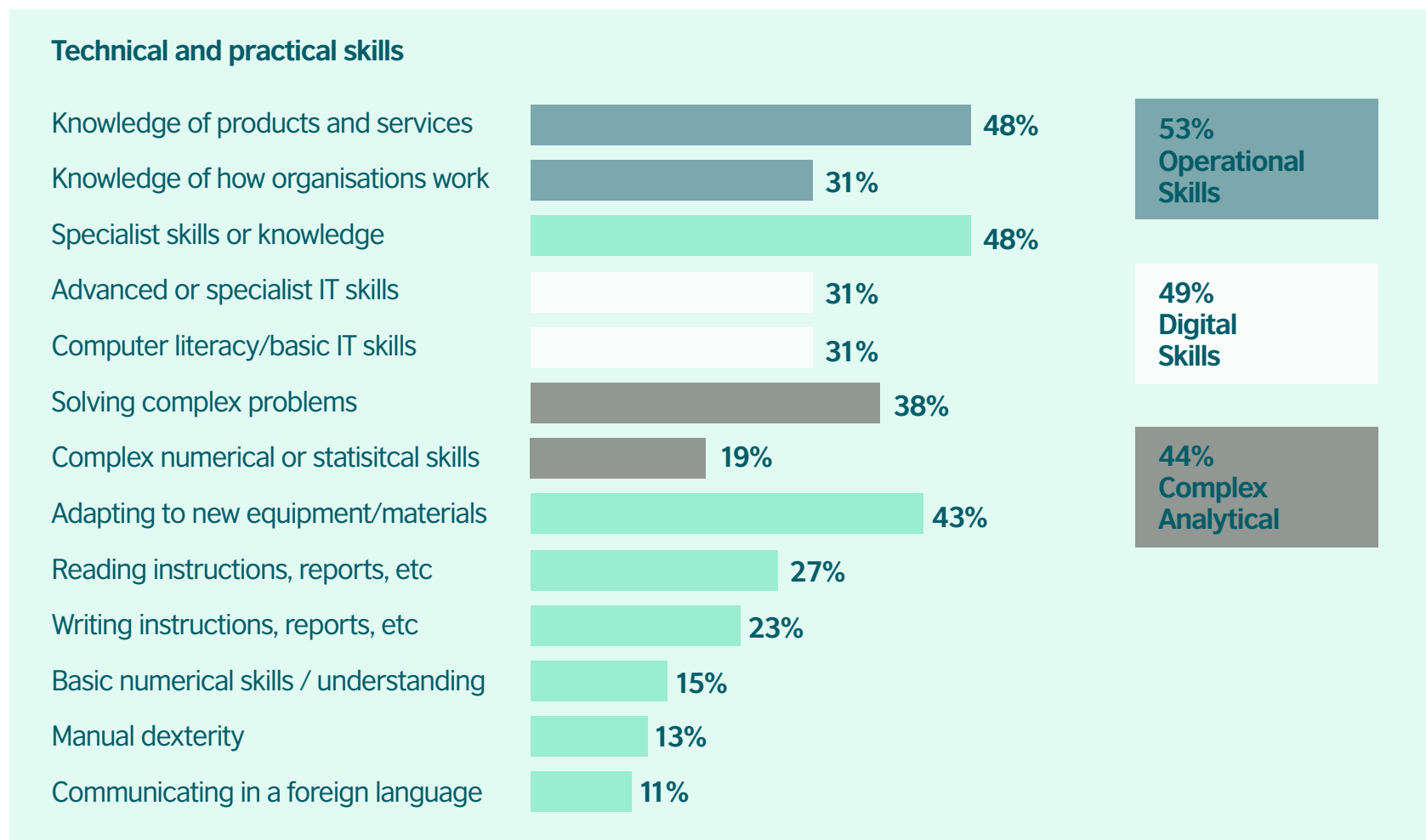


Produced by IFF Research

Base: All requiring upskilling, excluding those that did not identify an occupation more affected by the need for upskilling (26,416)

What Employers Want

UKCES: Employer Skills Survey 2017: UK Results



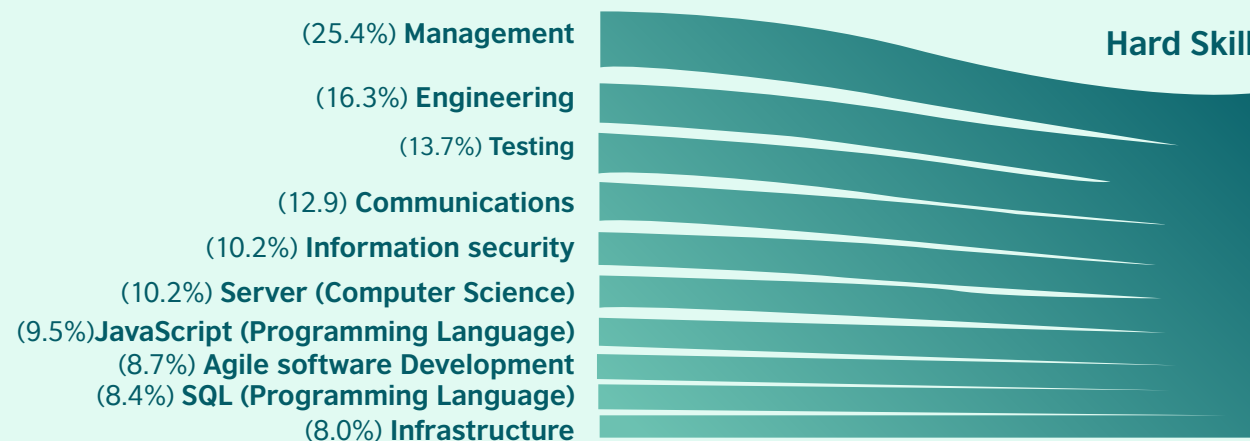
Top 10 Soft and Top 10 Hard Skills in STEM Disciplines in the UK (2018)

The Top 10 soft and hard STEM skills requested by employers across Britain over a 12 month period

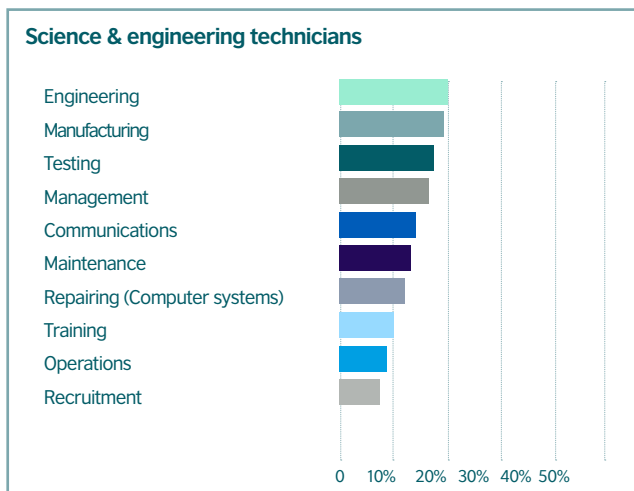
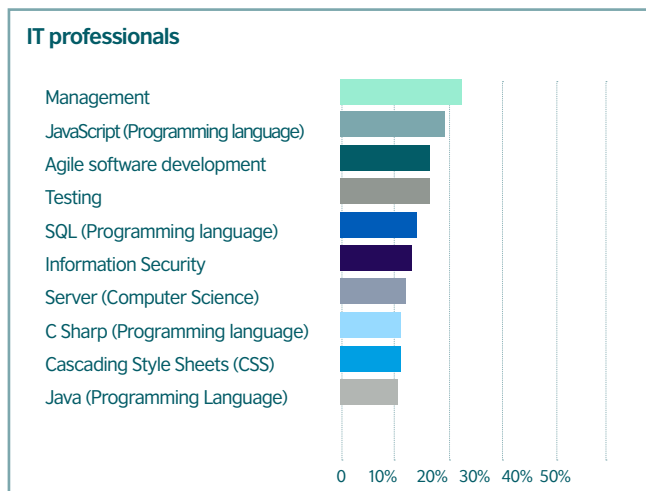
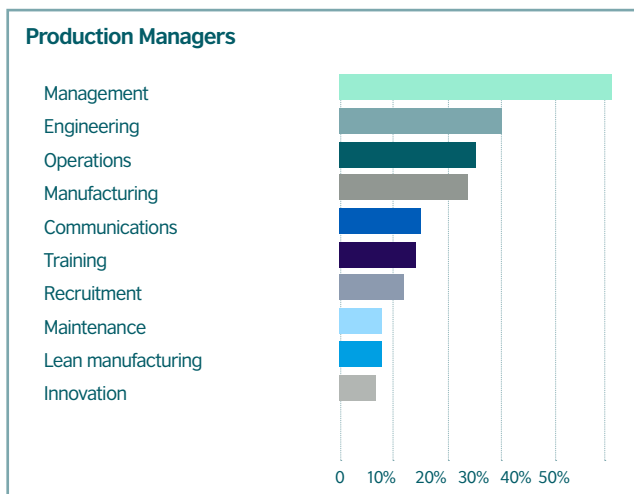
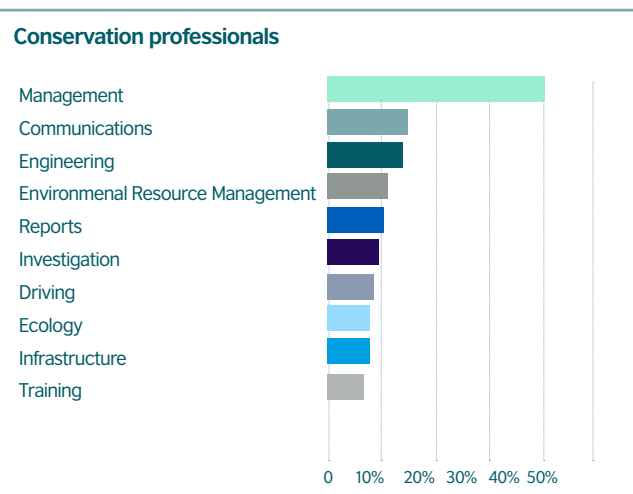
Soft Skills



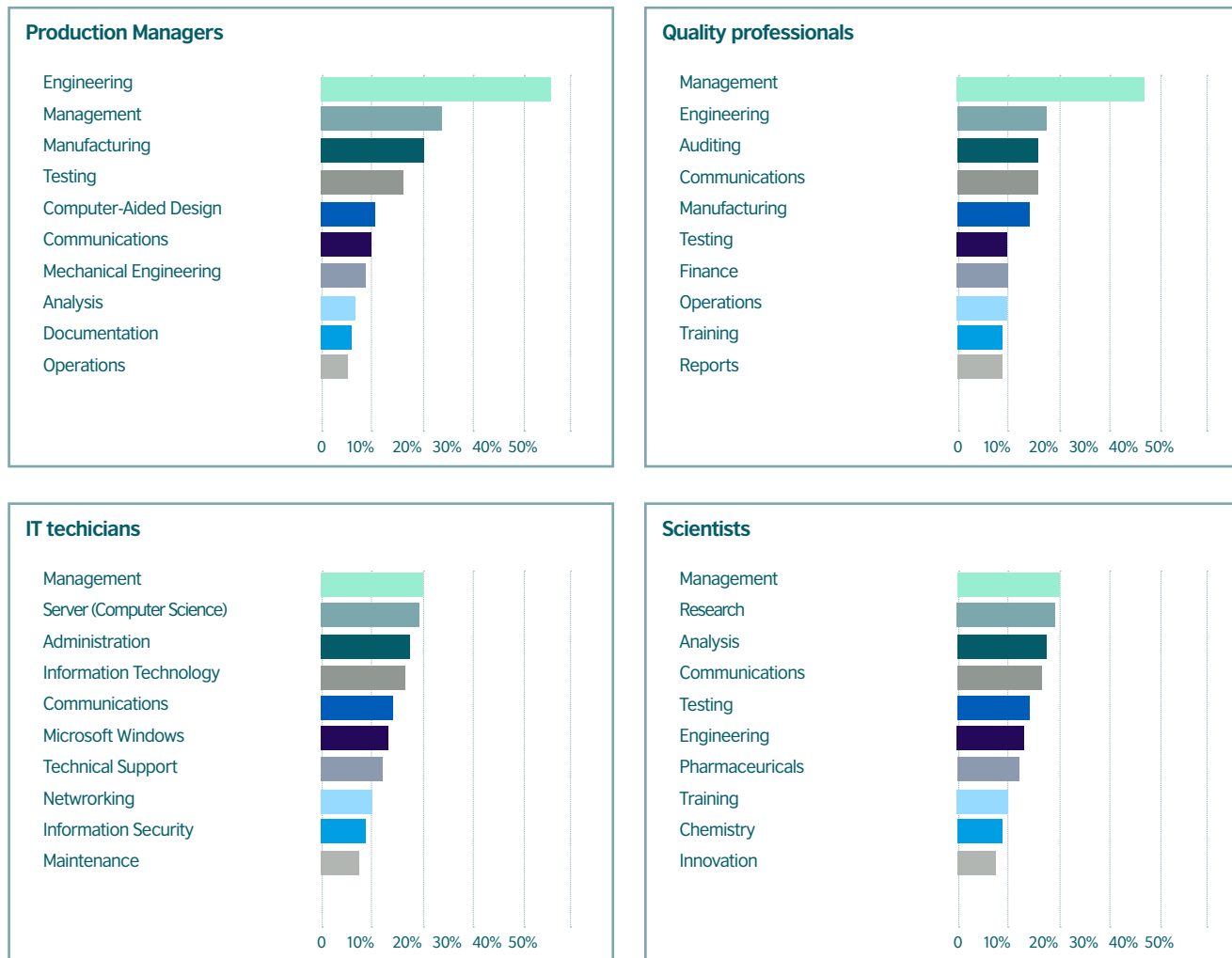
Hard Skills



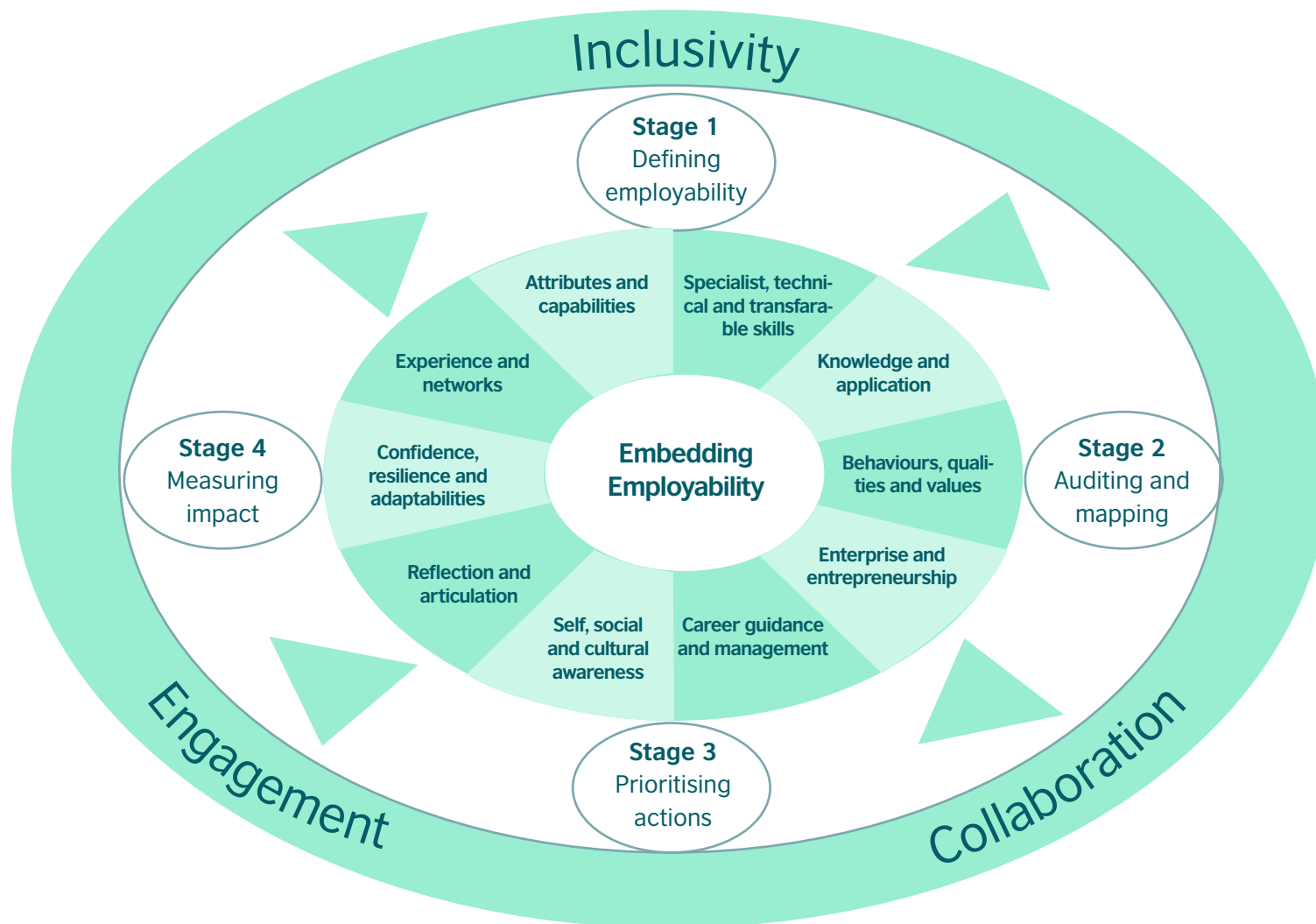
Top 10 Hard Skills for STEM Occupations in the UK (2018)



Top 10 Hard Skills for STEM Occupations in the UK (2018)



The HEA Framework



THE University of Plymouth COMPASS

The Critical and Creative Learner

As a plymouth graduate, you will be able to learn independently, explore new avenues with confidence and think in a critical, creative and enterprising manner, enabling you to function effectively in a complex and ever-changing society. There will be opportunities to develop and practice your:

- 1. Specialist subject knowledge and expertise**
- 2. Critical Thinking**
- 3. Creative and enterprise**
- 4. Research skills and information literacy**
- 5. Learning and study skills.**

The Sustainable and Global Citizen

As a plymouth graduate, you will be able to contribute to a more sustainable future as an informed, responsible and active citizen both locally and globally. There will be opportunities to develop and practice your:

- 1. Sustainability awareness**
- 2. System thinking**
- 3. Openness to cultural encounters**
- 4. Responsibility**
- 5. Change-leadership**

The Competent and Confident Professional

As a plymouth graduate, you will be able to play an active role in shaping a sustainable society and economy, understand the importance of managing your own career and promote a positive work-life balance. There will be opportunities to develop and practice your:

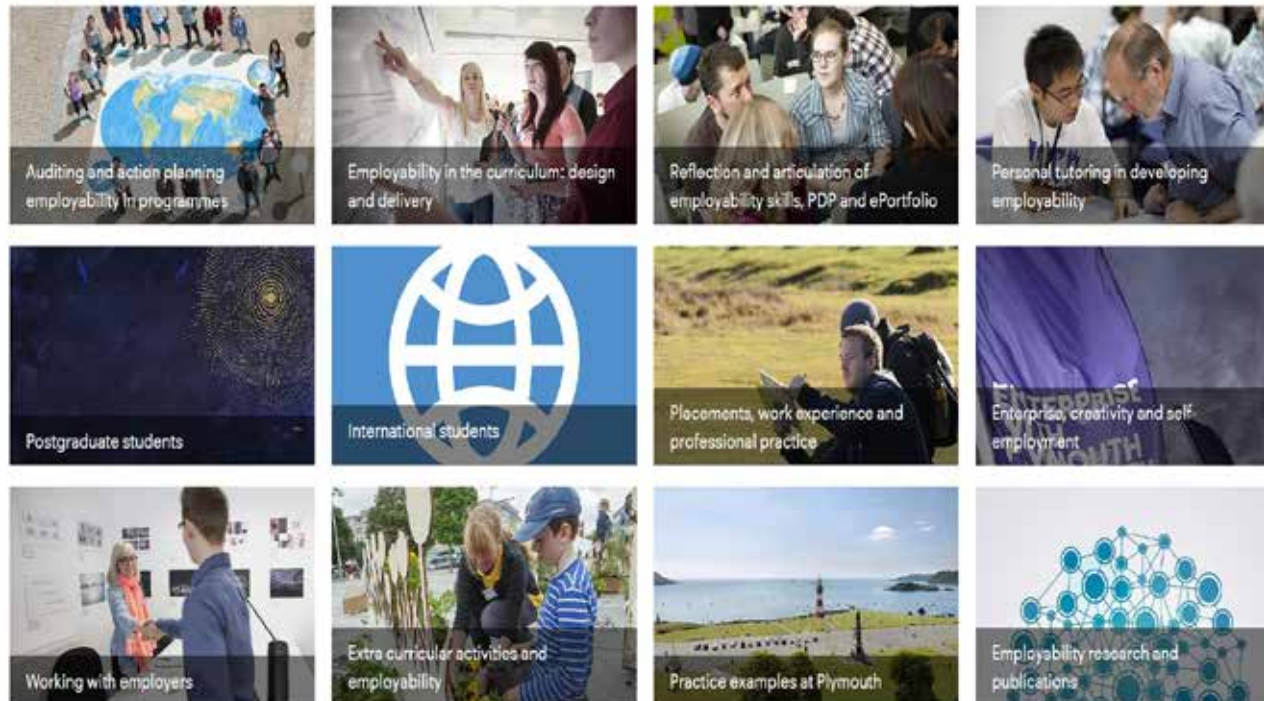
- 1. Self-organisation and management**
- 2. Team work and collaboration**
- 3. Professional and ethical manner**
- 4. Negotiation and persuasion**
- 5. Effective verbal and written communication**

The Resilient and Thriving Individual

As a plymouth graduate, you will Value and develop the wellbeing of yourself and others and appreciate the role of evidence-based ways towards a flourishing life. There will be opportunities for you to:

- 1. Connect with others**
- 2. Be active**
- 3. Be empowered- you can make a difference**
- 4. Keep learning**
- 5. Give back in social and community life**

Employability resources



Also in employability resources

 Careers and Employability

 Working with Alumni

 Plymouth Extra

 Plymouth Compass

University of Plymouth Employability Hub:

<https://www.plymouth.ac.uk/your-university/teaching-and-learning/employability-in-the-curriculum-and-beyond>

Effective Strategies for Engaging Employability:

1. Embedding employability in the curriculum and ensuring that students are able to make a connection between employability outcomes and their discipline.
2. Providing a range of co-curricular and extra-curricular opportunities for students to enhance their employability.
3. Building links with the labour market and encouraging students to do the same. The literature finds value in a wide range of connections between HEIs and employers. In particular, there is evidence of the impact of providing students' with real connections to employers and actual experience of the labour market.
4. Supporting students to increase their confidence, self-belief and self-efficacy through their studies.
5. Encouraging reflection and increasing students capacity to articulate and communicate their learning to employers; encouraging student mobility and fostering a global perspective.
6. Using institutional career guidance services as organising and co-ordinating structures for HEIs employability strategies.

Example of Employability Skills in A Course

Ref: <https://www.exeter.ac.uk/ambassadors/HESTEM/resources/General/STEMNET%20Employability%20skills%20guide.pdf>

Skills that employers want	What that Means	Young people's evidence in lessons	Young people's evidence outside lessons
1 Communication and interpersonal skills	The ability to explain what you mean in a clear and concise way through written and spoken means. To listen and relate to other people and to act upon key information / instructions.	I present the findings of a Science course-work project as a report and PowerPoint presentation to the rest of my science class.	I am part of debating club / society that helps my communication and interpersonal skills greatly.
2 Problem solving skills	The ability to understand a problem by breaking it down into smaller parts and identifying the key issues, implications and identifying solutions. To apply your knowledge from many different areas to solving a task.	I was set a project with Design & Technology to build a component, but it stopped working. My approach was to start at the beginning of the circuit and work through all the connections until I found the part that was not working.	As part of my Duke of Edinburgh Award I had to evaluate the information on a map and the weather forecast to decided which was the best route to a set checkpoint.
3 Using your initiative and being self-motivated	Having new ideas of your own which can be made into a reality. Showing a strong personal drive and not waiting to be told to do things.	For our coursework on electrical circuits I was the only one in class who chose to research how they are used in companies to get a real-life perspective.	At a temping job over the summer, the manager was not around to see me on my first morning, so I introduced myself to the other team members and offered my services until my manager arrived.
4 Working under pressure and to deadlines	Handling stress that comes with deadlines and ensuring that you meet them.	I planned out my exam revision timetable so that I gave myself enough time for each subject.	On a bridge building project in my STEM Club, we ran out of an essential piece of kit 5 minutes before the deadline, but quickly modified the bridge using what was left and finished on time.

Example of Employability Skills in A Course

Ref: <https://www.exeter.ac.uk/ambassadors/HESTEM/resources/General/STEMNET%20Employability%20skills%20guide.pdf>

Skills that employers want	What that Means	Young people's evidence in lessons	Young people's evidence outside lessons
5 Organisation skills	Being organised and methodical. Able to plan work to meet deadlines and targets. Monitoring progress of work to ensure you are on track to meeting a deadline.	I handed my GCSE Science coursework in 3 days before the deadline as I had planned my time well and finished it to the best of my ability	I was part of the School Leavers' Ball organising committee and devised a project plan so that we could keep on track with planning.
6 Team working	Working well with other people from different disciplines, backgrounds and expertise to accomplish a task or goal	In a group project I worked with a team of people with different designated roles. The first job we did was to identify how each of us will have a valuable input to the task in hand	I am part of our after school STEM Club that meets every week. We often do activities as teams and I really enjoy it.
7 Ability to learn and adapt	To be enthusiastic about your work and to identify ways to learn from your mistakes for the benefit of both you and your employer	I always read the comments that my teacher puts onto my coursework as I know that they will help me to improve my marks and learning. I try to use that advice in my next pieces of work	In our STEM Club we had to make rockets fly as high as possible. I couldn't make mine go any higher so asked for help to improve shape - it went 20 cm higher next attempt.
8 Numeracy	The ability to use data and mathematics to support evidence or demonstrate a point	In my Science coursework I used a range of graphs and tables to prove the hypothesis being tested	Our STEM Ambassador guided us through an activity to build a road to help communities in Nigeria. We calculated the road cost per mile and it didn't reach the next town we had to redesign it to fit the budget
9 Valuing diversity and difference	Knowing the value of diversity and what it can bring. Understanding and being considerate to the different needs of different individuals	Working with people who may be able to offer different skills or knowledge and who offer a different perspective to your own for projects / coursework	Getting involved in activities, which involve people that are different from you in terms of age, gender, nationality, race, disability etc.
10 Negotiation skills	To take on board other people's feelings and express your own requirements in an unemotional clear fashion to achieve a win-win outcome	I reached an agreement with a classmate about who would take which role in a class project	I had to present a new invention to a panel of STEM Ambassador in a Dragon's Den day, and negotiate how much of the company they would own

Example of Employability Skills in A Course

The Confident Professional and Employability Skills in this Module			
Skill	Formative Assessment	Summative Assessment 1	Summative Assessment 2
1. Bid/ Proposal Writing			X
2. Oral Presentation		X	X
3. Problem Solving	X	X	X
4. Project Management			X
5. Research Skills	X	X	X
6. Team Work			X
7. Time Management	X	X	X
8. Professional Written Communication	X	X	X



Step 1: Determining the Vision, Mission and Goals for Engaging Employers in your Course/s

1. Vision: the vision for my course and students
2. Mission: why I'm doing this / the purpose
3. Goals: what I want the students to achieve from this

Step 2: Matching The Employability Skills with Learning Models and Assessment Methods

Employability Skills	Learning Models to achieve this employability skill and Assessment Methods to evaluate the skill				
1.					
2.					
3.					
4.					
5.					
6.					

Step 3: The Action Planning Tool



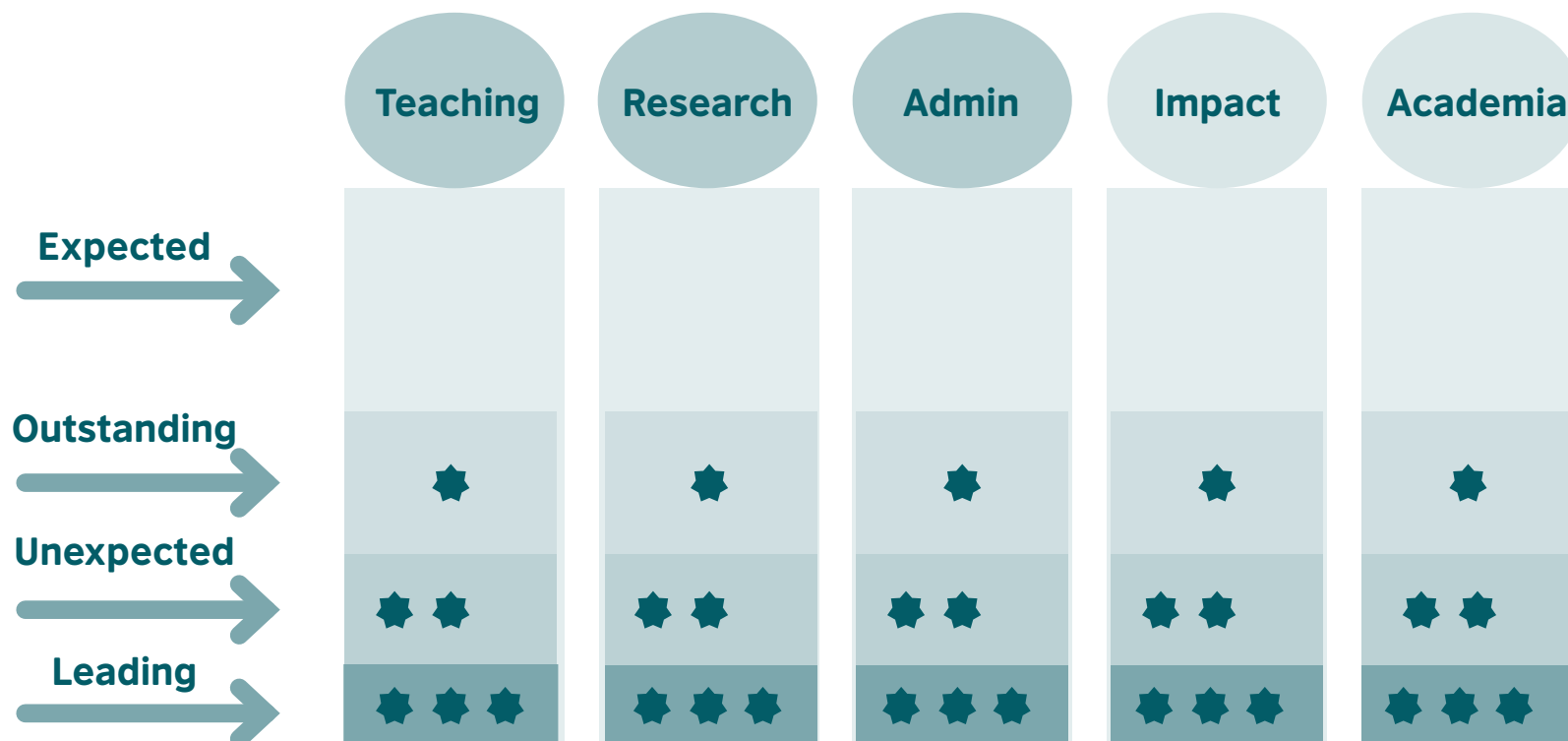


Leadership and Management

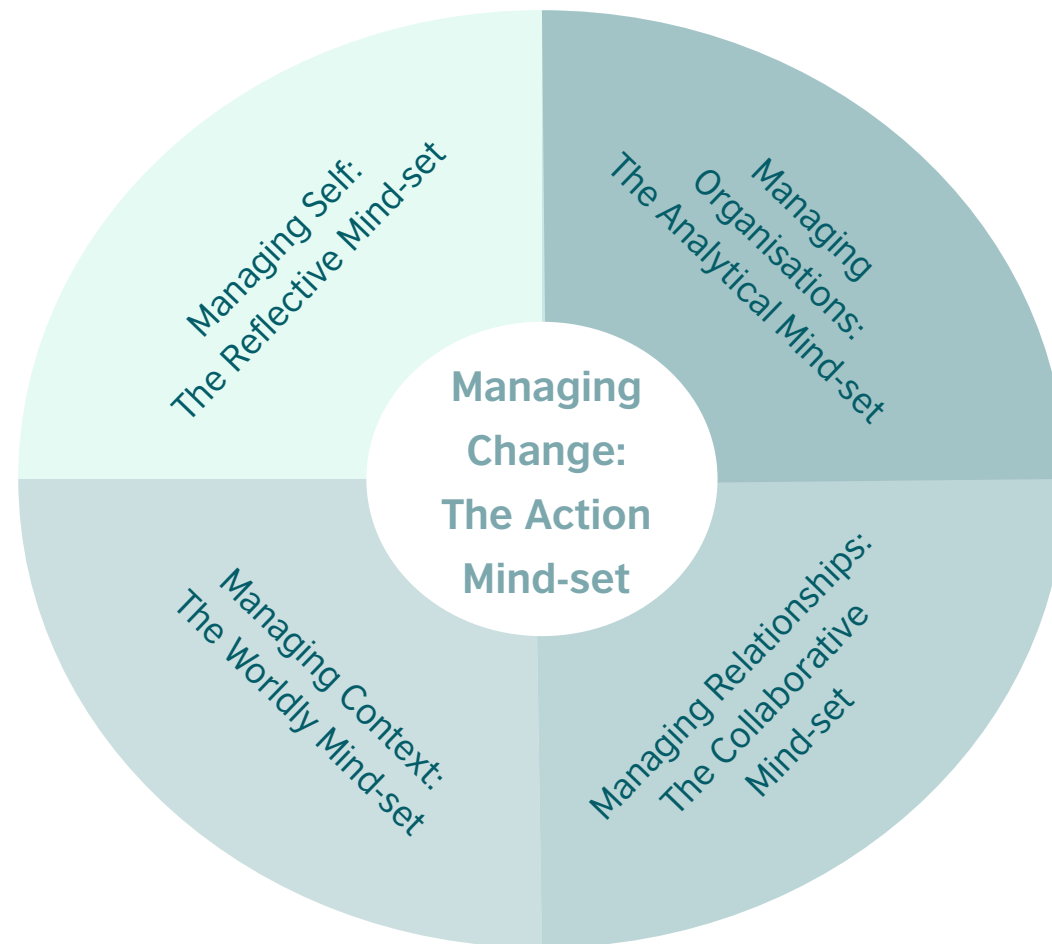
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Leadership and Management in Early Academic Careers: A UK Perspective

The multi-dimensional academic



The multi-dimensional academic





For each item in the table below, insert an x along the 1-5 scale indicating your preferred positioning:

I Prefer:	1	2	3	4	5	
Maintain the organisation						Develop the organisation
Focus on systems and structure						Focus on people
Rely on control						Inspire trust
Have a short-range view						Have a long-range perspective
I ask how and when						I ask what and why
I have my eye always on the bottom line						I have my eye always on the horizon
Prefer to imitate						Prefer to originate / create
I accept the status quo						I change the status quo
I am a classic good soldier / follower						I am my own person / individual
I do things right						I do the right thing

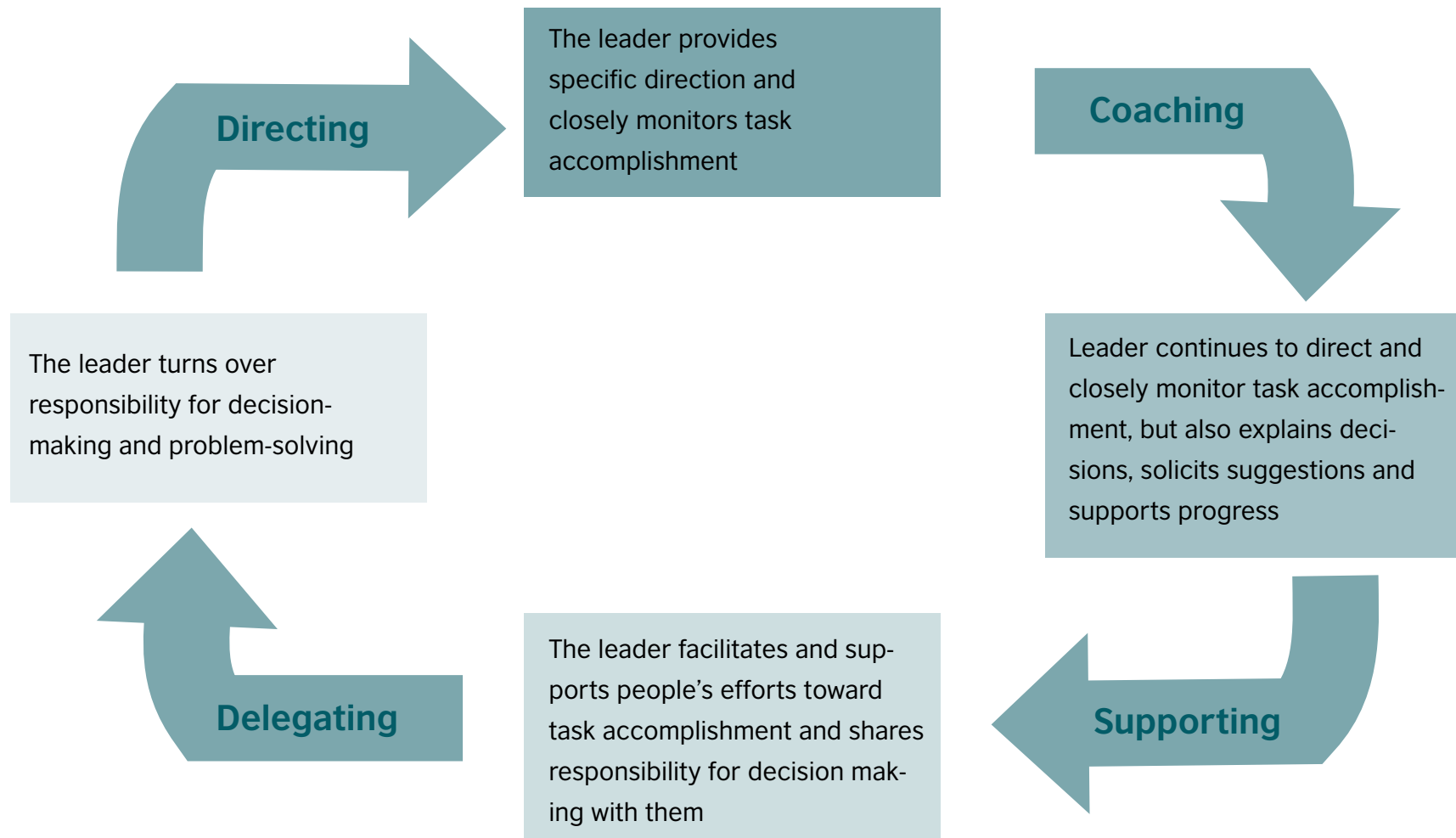
Manager Characteristic	1	2	3	4	5	Leader Characteristic
Maintain the organisation	<p>Peter Drucker: In the modern economy, where value comes increasingly from the knowledge of people and where workers are no longer undifferentiated cogs in an industrial machine, management and leadership are not easily separated. People look to their managers, not just to assign them a task, but to define for them a purpose. and managers must organize workers, not just to maximize efficiency, but to nurture skills, develop talent and inspire results.</p>					Develop the organisation
Focus on systems and structure						Focus on people
Rely on control						Inspire trust
Have a short-range view						Have a long-range perspective
I ask how and when						I ask what and why
I have my eye always on the bottom line						I have my eye always on the horizon
Prefer to imitate						Prefer to originate / create
I accept the status quo						I change the status quo
I am a classic good soldier / follower						I am my own person / individual
I do things right						I do the right thing

Leadership and Management Skills Development

Differences between Managers and Leaders

Leadership / Leader	Management / Manager
Copes with change	Copes with complexity
Challenges status quo	Accepts status quo
Plans long term	Plans short term
Asks what and why	Asks what and when
Aligns people	Organises people
Innovates	Administers
Motivates and inspires	Controls
Focuses on people	Focuses on systems and structure
Develops	Maintains

Four Basic Leadership Styles



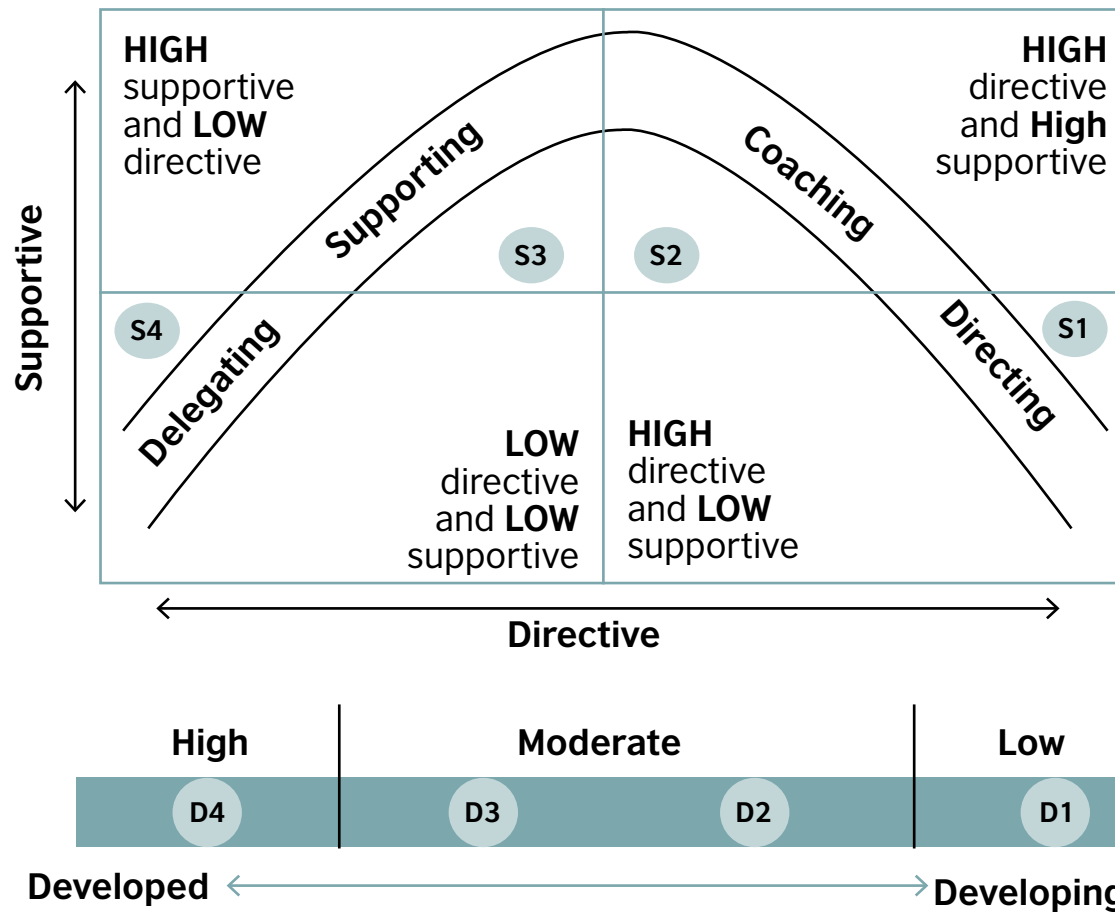


Situational Leadership Model is Dynamic

Step 1: Diagnosis of employee's performance (specific tasks)

Step 2: Determine employee's developmental level (Competence and commitment)

Step 3: Determine leadership style to be used



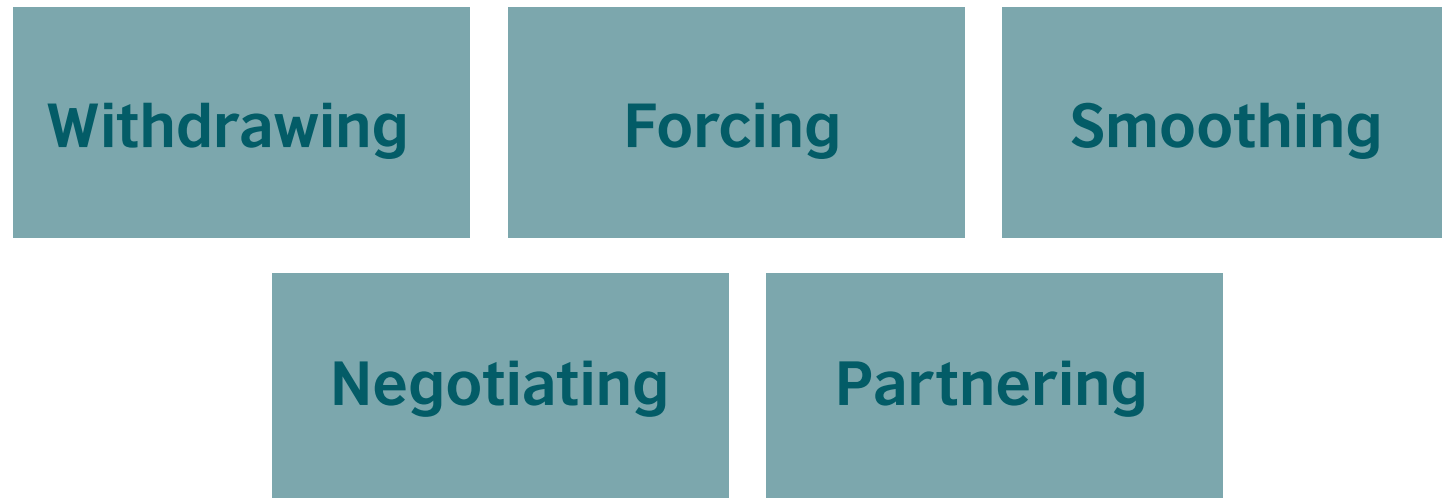
**Leadership
Style**

**Development
Level**

Leadership Styles: Situational Application

Development Level	Suitable style
D1 Low Competence High Commitment	Directing Structure, organize, teach and supervise S1
D2 Moderate to Low Competence Low Commitment	Coaching Direct and support S2
D3 Moderate to High Competence Variable Commitment	Supporting Praise, listen and facilitate S3
D4 High Competence High Commitment	Delegating Assign day-to-day decision making responsibility S4

Handling Difficult Behaviour



Behaviour Management Strategies

Withdrawing

Neither the goal nor the relationship are important. You withdraw from interaction.

Forcing

The goal is important but not the relationship. Use all your energy to get the job done.

Smoothing

The relationship is more important than the goal. You want to be liked and accepted.

Negotiating

Both goal and relationship are important but there is a lack of time. You both gain and lose something.

Partnering

Goal and relationship are equally important. You define the conflict as a problem-solving situation.

Preparing for an Influential Negotiation

My Boss and Me: A Career Management Exercise

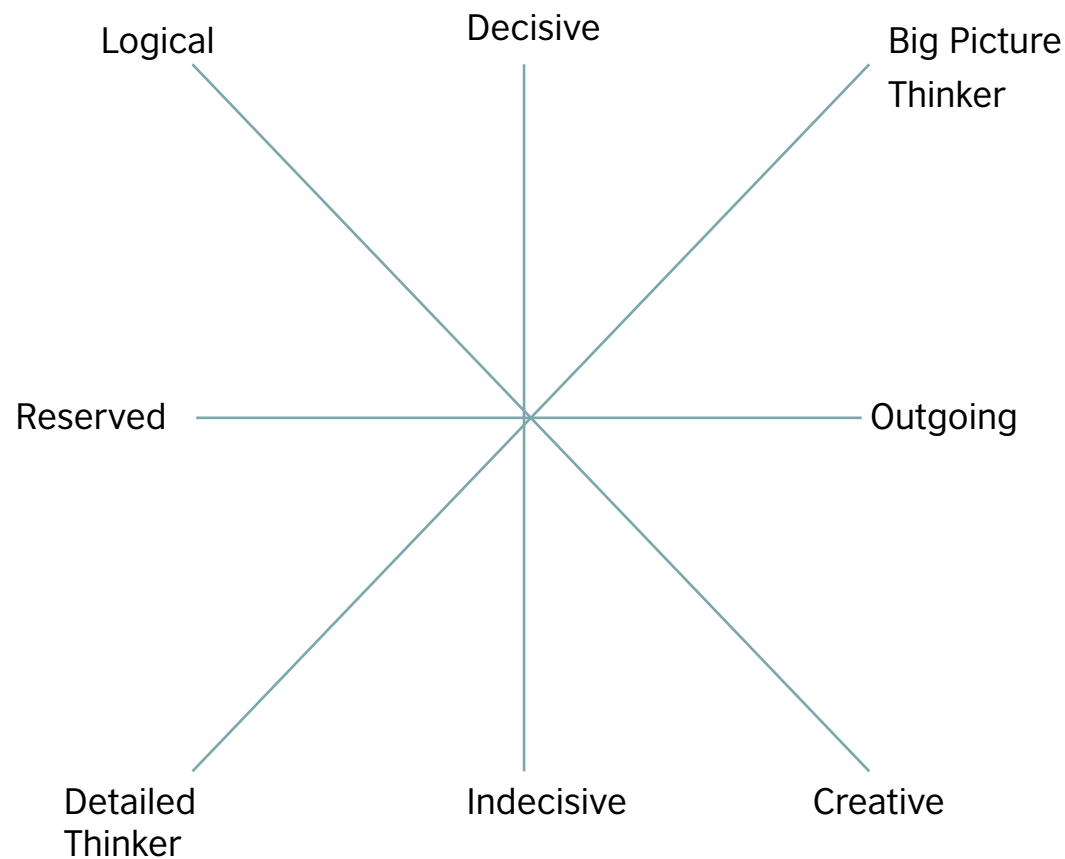
This exercise has been adapted from Jo Owen's **Style Compass**, Jo Owen, **How to Lead** (Pearson Prentice Hall Business, 2005) p 6.

If you are to influence your boss successfully, then it's important to understand their working style and how this relates to your preferred way of doing things. This simple mapping exercise will allow you to do this quickly and easily, thereby suggesting ways in which you and your boss can work productively together.

Task

Thinking about your boss / line manager, plot them in **blue** against the key characteristics shown on the diagram on the next slide. If you feel that there are other more relevant characteristics than the examples given, then feel free to adapt the diagram to reflect this — remember each characteristic must have an opposite, e.g., idealistic — practical, receptive — assertive, sensitive — insensitive, future-focused — past—focused. Once you have plotted your boss's characteristics, plot your own characteristics on the same diagram in **red**.

Preparing for an Influential Negotiation

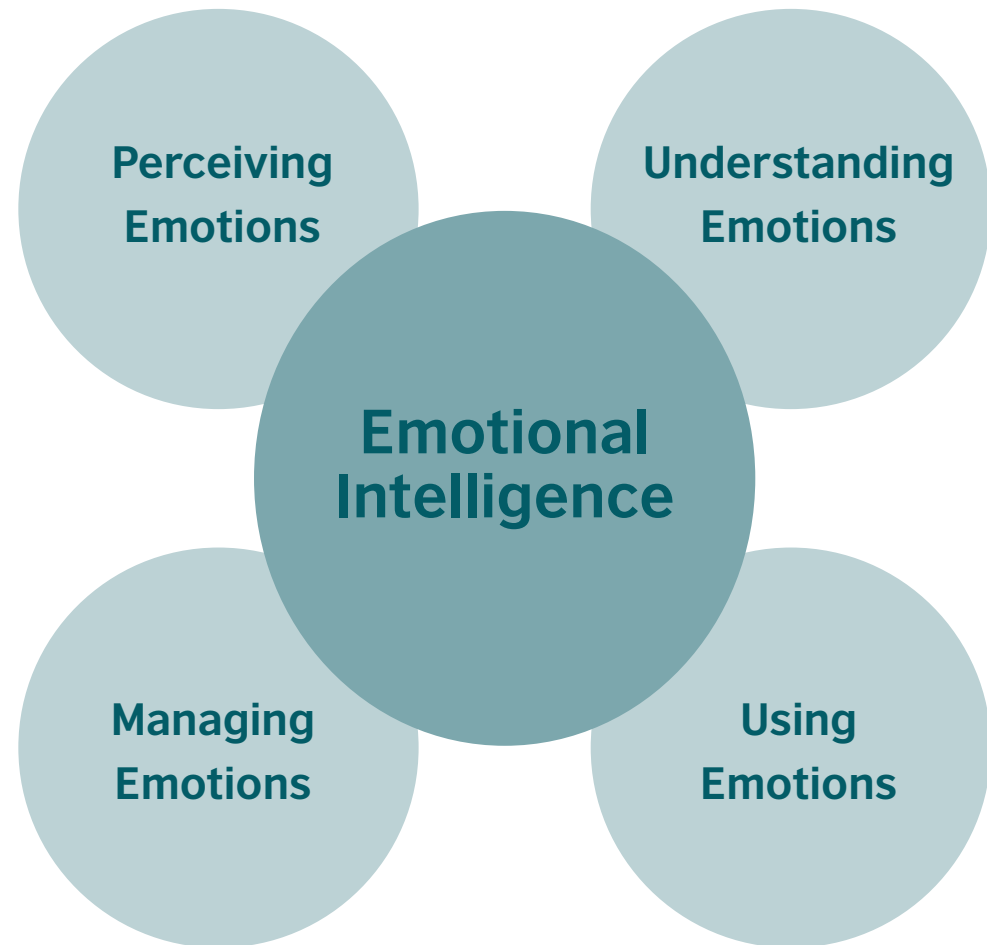


Looking at your completed diagram, how do you and your boss's characteristics compare? Are your characteristics similar or different to those of your boss? Where you share similar characteristics, do you think this is a benefit or hindrance to how well you work together? If you think it is a hindrance, what steps could you take to improve this situation? Where your characteristics are different do you think this is a help or hindrance to your working relationships? If you think it is a hindrance, what could you do on a day-to-day basis to improve this situation?

Red: You **Blue: Boss / Line manager**

Emotional Intelligence

- Emotional intelligence is the ability to understand and manage your own emotions, and those of the people around you.
- People with a high degree of emotional intelligence know what they're feeling, what their emotions mean, and how these emotions can affect other people.
- For leaders, having emotional intelligence is essential for success.





Understanding Leadership

1. Describe the factors that will influence the choice of leadership styles or behaviours in your workplace situations.
2. Explain why these leadership styles or behaviours are likely to have a positive or negative effect on individual and group behaviour.
3. Assess your own leadership behaviours and potential in the context of a particular leadership style and your own organisation's working practice and culture.
4. Describe appropriate actions to enhance your own leadership behaviour in the context of the particular leadership style.

Giving Feedback

What are the different types of feedback you can give?

What factors contribute to making the feedback good?

What are the key elements of feedback you give?

What are the benefits of giving feedback?

Giving Feedback

What are the different types of feedback?

- Positive
- Praise
- Constructive (Participants may say negative but encourage them to think of it as constructive)

What are the key elements?

- Specific
- Supported with evidence
- clear
- Face to face
- In private

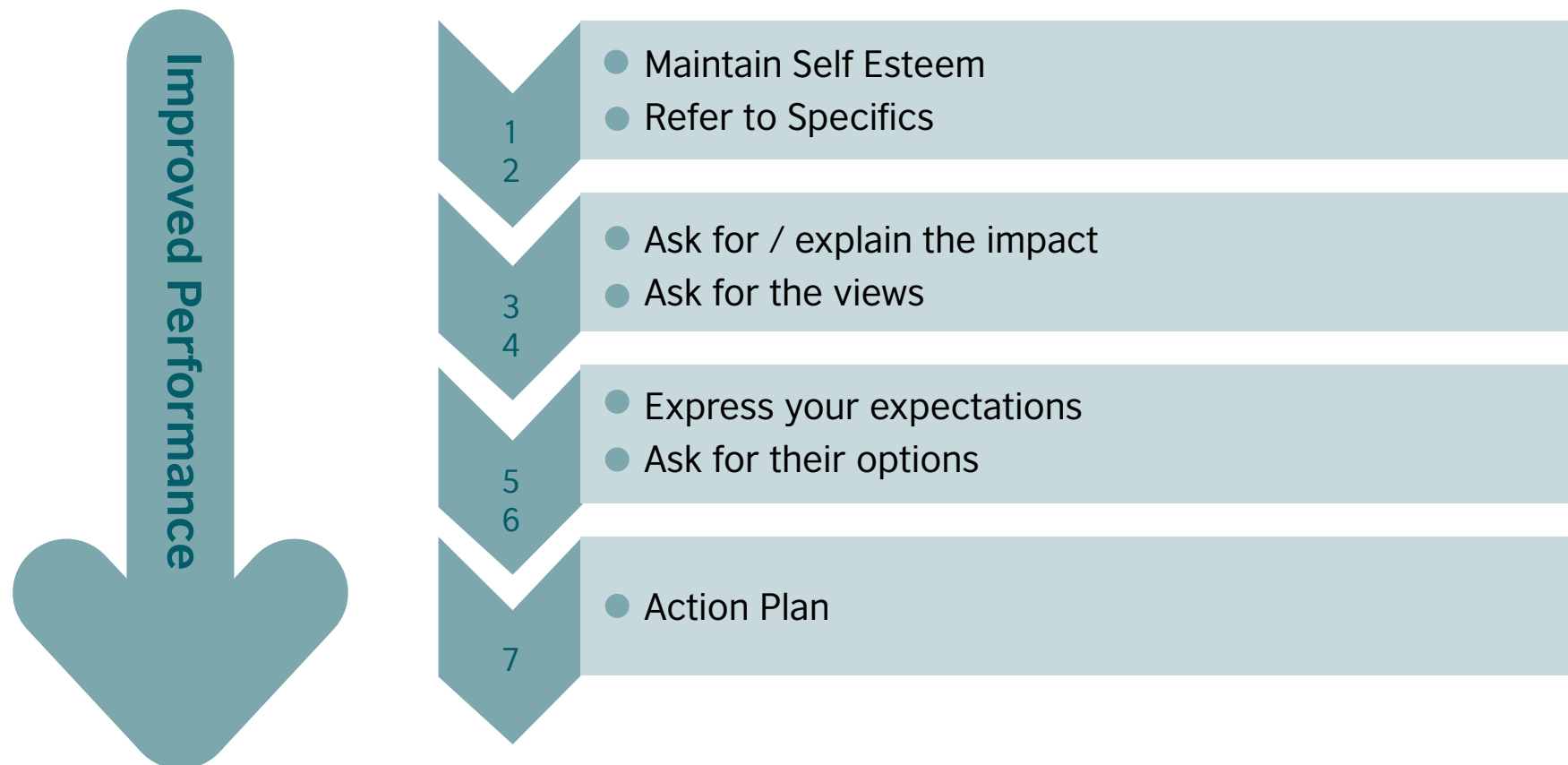
What makes it good?

- When it is timely
- When it is planned and when an action plan is agreed to improve performance

What are the benefits?

- The employee knows where they stand
- They understand how they need to improve
- They are given the opportunity to improve
- They are given support

The Seven Step Feedback Planner



Unconscious Bias

Defining Unconscious Bias

- Refers to a bias that we are unaware of, and which happens outside of our control. It is a bias that happens automatically and is triggered by our brain making quick judgments and assessments of people and situations, influenced by our background, cultural environment and personal experiences.
- A process of 'social categorisation' whereby we routinely and rapidly sort people into groups rather than think of each as unique allowing us to save time and effort when processing information about others.
- According to Schwarz (2000), unconscious bias comes from:
 - information-processing short cuts
 - motivational and emotional factors
 - social influences

<https://www.ecu.ac.uk/wp-content/uploads/2014/07/unconscious-bias-and-higher-education.pdf>

Source: <https://www.eliinc.com/wp-content/uploads/unconscious-bias-infographic-eli.pdf>



This candidate sounds great!

Resumes are a common source of unconscious bias. In one study, managers were given a set of identical resumes where only the names had been changed. Resumes with the Anglo sounding names received substantially more callbacks than those with diverse names.



She's not great with computers.

Assigning a project with a significant technical component? The best choice is a Generation Y-er, not the Baby Boomer, right? This could be an accurate assumption, but it's not always the case. Evaluating competency based on age is a common mistake.



HELP! My video is upside down.

When YouTube launched the video upload feature for their app, 5-10% of videos were uploaded upside down. Google engineers had inadvertently designed the app for right-handed users. They never considered the fact that phones are usually rotated 180 degrees when held in a user's left hand.

We have a longer way to go than we think in tackling unconscious bias ...

- Signs of intolerance are increasing day by day. Many are due to prejudices developed over a period of time and sometimes throughout an entire lifetime.
- We must approach unconscious bias head-on, talk about it, and enhance our awareness, knowledge and understanding of diversity and its positive role within the higher education sector, and the wider society.
- We all need to recognise and acknowledge our biases and find ways to mitigate their impact on our professional and social behaviours and decisions.

Overcoming our own unconscious bias ...

- Recognize your own biases
- Focus on people as much as you focus on processes
- Increase exposure to biases to challenge your 'unconscious' consciously

Seven Steps to Identify and address Unconscious Bias

1. Recognize that you have biases.
2. Identify what those biases are.
3. Dissect your biases
4. Decide which of your biases you will address first
5. Look for common interest groups.
6. Get rid of your biases.
7. Be mindful of bias kick back

Institutional measures to overcome unconscious bias ...

- Look for evidence of where implicit bias may be having an impact
- Create a culture of equality
- Ensure transparency
- Reduce stereotypes
- Compulsory Training for all staff
- Compulsory Training for members of recruitment panels

An expert's summary ...

<https://www.youtube.com/watch?v=2X8gUQtKY88>

We also recommend watching the following videos to learn more about unconscious bias:

https://www.youtube.com/watch?v=8_IPX1CVHlc&feature=youtu.be

Ted Talk by Yassmin Abdel-Majid in Australia:

https://www.ted.com/talks/yassmin_abdel_magied_what_does_my_headscarf_mean_to_you

The Harvard Implicit Bias Test at: <https://implicit.harvard.edu/implicit/>

Institutional Analysis: Existing Practices at my University for overcoming unconscious bias:

	University	School / Dpt
1. Looking for evidence of where implicit bias may be having an impact		
2. Creating a culture of equality		
3. Ensuring transparency		
4. Reducing stereotypes		
5. Compulsory 'Unconscious Bias' Training for all staff		
6. Compulsory 'Unconscious Bias' Training for members of recruitment panels		
7. Other measures:		

Must Read! Unconscious Bias Training:

<https://www.equalityhumanrights.com/sites/default/files/research-report-113-unconscious-bias-training-an-assessment-of-the-evidence-for-effectiveness-pdf.pdf>

Career Planning For Leadership

Advice from academic and research leaders

- Learn about the roles you are interested in and know the criteria for progression
- Take time to plan ahead
- Use appraisals as a tool to discuss and plan your career development
- Factor your personal values into your career planning
- Develop the skills you will need at your next career level before you get there
- Be resilient and learn from failures
- Take time to reflect and consolidate

Forward Thinking – Forward Planning Tool

Once you complete the four sections of the Toolkit, we strongly recommend that you complete this ‘Forward Thinking – Forward Planning’ Tool to plan, monitor and evaluate your career progression.

Forward Thinking - Forward Planning Tool			
	STOP	Stay	Start
	3 Actions to stop doing	3 Actions to keep doing	3 Actions to start doing
Teaching			
Research			
Engage- ment and Impact			
Manage- ment and leadership			