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Transforming Student Aspirations: Embedding 5-year Plans in the Curriculum

**Dr Lindsey J. Munro, Janet Marshall,
Dr Lisa Coulthwaite & Dr Fiona Saunders**

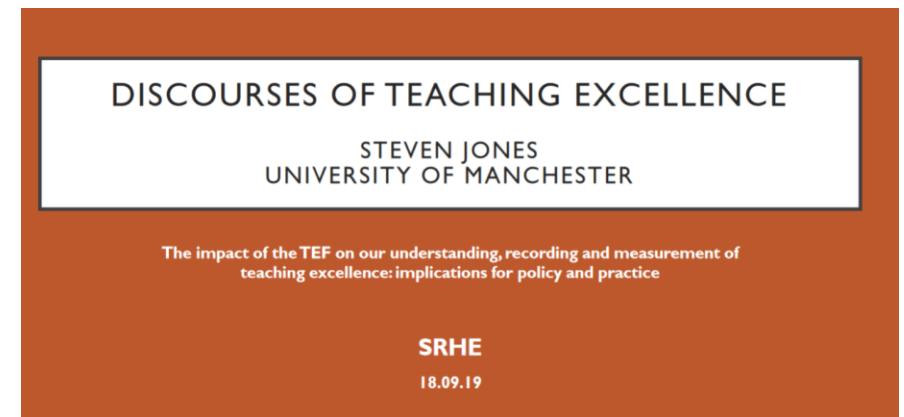
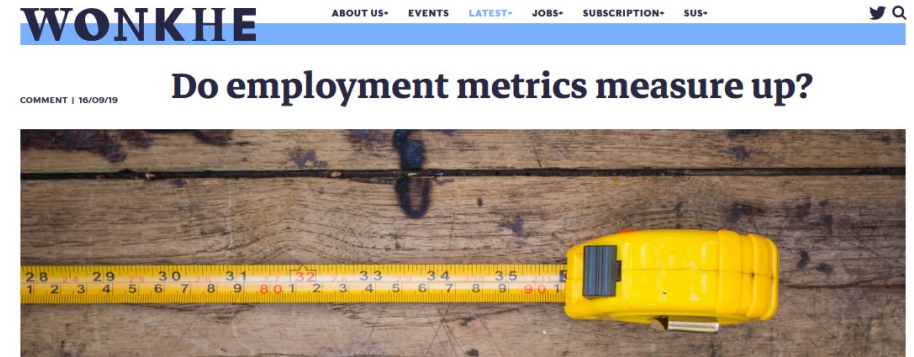
Faculty of Science & Engineering

29 January 2020

Employability Agenda is A Contested Space in HE



VS



TEF Landscape: Graduate Outcomes | LEO

TEF Metrics - Employability:

- **DLHE / Graduate Outcomes (6 / 15 months after graduation):**

- Employment after the course
- Graduate level employment

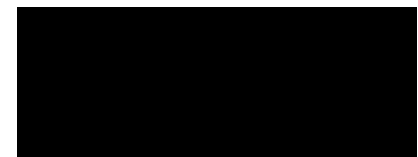


- **LEO:**

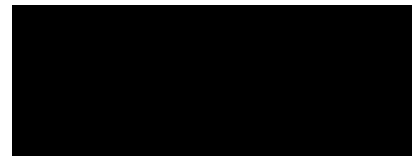
- Sustained Employability
- Above Median Earnings after 3 years

- **TEF Gold:**

- Need excellent graduate outcomes + aspirations for promotions
- All of us our working to improve our students prospects



What are the barriers to getting the graduate careers they are capable of?



Barriers for Students → Graduate Careers

Fear

Not sure of
options

Changed
their mind

Confidence

Hoping their
grades will
improve

Experience

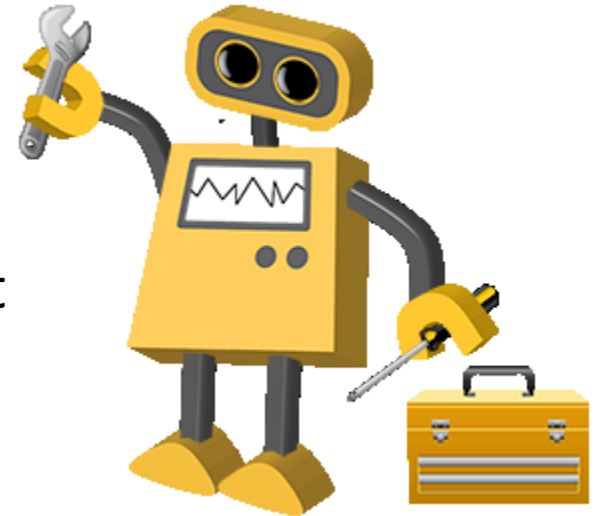
20% of graduates leave Grad Scheme
by the 1st Year

BUT ... The workplace is changing rapidly



“A Graduate Job”: The Robots are Coming

- **Challenges:** Industry 4.0 – automation, digitisation, real-time data
- By 2022, 54% of all employees will require significant re- and upskilling. (WE Forum, 2018)
- 65% of university students today will take up jobs that don't exist
- **“Future proofed” Interdisciplinary Graduates:**
Important to develop a range of skills
Internet of Things Data Creative - Rewilding Strategist
Virtual Habitat Designer – Bio hacker
Independent – Rachael Pellis (2016)



Employers Skills List: The Human Element

- **Specialist Skills:**

Digital Skills

Programming

Business Awareness

- **'Human' skills:**

Creativity

Originality

Initiative

Innovation

Persuasion

Negotiation

Resilience

Flexibility

Problem solving

Critical thinking

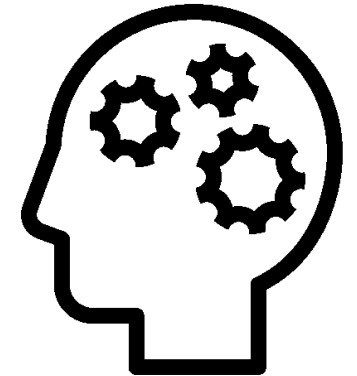
Attention to detail

- **Skills Gap:**

- Only 23% of UK firms believe that a new graduate will arrive fully prepared

- 49% find they lack interpersonal skills, 40% lack problem solving skills

- **Degree: "Licence to Learn"**



What can Universities do to help students get suitable Graduate jobs?






Science & Engineering - Employability

Strong Employability Focus → Improved DLHE

- Courses link to related careers
- Careers Workshops embedded in induction, units & throughout year
- 1-to-1 Support
- Meet the Employers Networking Events
- Careers Events

It's Not Enough → As an extra!

- Works for the students that:
 - Know what they want to do
 - Have families who can advise
 - Engage
 - Apply

Key to charts	
	A – <u>not ready</u> to consider career
	B – <u>decide</u> about career
	C – <u>plan</u> career
	D – <u>compete</u> in jobs market or study
	E – <u>succeed</u> in chosen career

Teaching Employability Skills

Not just about teaching these [employability] skills but also about helping students realise that they have them and importantly can articulate them.

Proctor and Harvey, 2018

Engineering education should take a “Perspective on gradueness that recognises the significance of disciplinary knowledge but that also holds a space for the development of student agency”

Case and Marshall, 2016

Those who had clearer plans were more likely to have reported positive outcomes two and a half years after graduation, with those whose main activity was working in a professional or managerial role or further study more likely to have had clearer career plans at an early stage than those who were in non-professional employment or were unemployed.

Department for Education Research Report, 2017, p17

Need to overcome pedagogical discontinuities within and across disciplines **Bingham *et al.*, 2015**

Nuanced approach to 5 year plans overcomes this

How can 5 Year Plans help students gain graduate jobs?

A journey of a
thousand miles
begins with a
single step.

—
Lao Tzu

#DAILYCALM

Calm



5 Year Plans → Embedding into the Curriculum

- Start early (Year 1) → Focus on graduation by end of October (Year 3 / 4)
- Highlight Employability Milestones → Employers / Moodle
- Embed into curriculum → Unavoidable → Assessed
- Supported by Personal Tutors

**5 Year Plan
+
Action Plan
+
CV**

Year 1:

- **Explore Options**
- **Build Skills**

Year 2:

- **Apply for Work Experience**

Year 3 / 4:

- **Apply for PG / Graduate Jobs**

**Workshops
Online Centre
Employer Events
Placements**

**Sci & Eng
Extracurricular
Award**

5-Year Plan

Manchester Metropolitan
University

Successful career management and your 5 Year Career Plan



Janet Marshall – Careers Consultant
Manchester Metropolitan University



mmu.ac.uk/careers



Acknowledge:

- Career planning may seem daunting

Aim:

Have a strategy to:

- Notice & maximise any potential opportunities
- Develop your employability
- Map out realistic goals

Activities:

- Values & Motivations
- Skills Assessment (SWOT)

- Online Careers Centre:
 - Career Pulse
 - Tailored Programme for Year 1 - 4

Video: Janet Marshall & Dr Lisa Coulthwaite

5-Year Plan

Five Year Career Plan: Develop a long-term professional vision – what do you hope to achieve in 5 years?					
	Year 1	Year 2	Year 3	Year 4	Year 5
Overall goal					
What do I need to do to achieve my goal?					
What support & resources will I need?					
What training & qualifications will I need?					

5-Year Plan → Personal Tutor Support

Five Year Career Plan: Develop a long-term professional vision – what do you hope to achieve in 5 years?					
	Year 1	Year 2	Year 3	Year 4	Year 5
Overall goal	<ul style="list-style-type: none"> • Explore Options • Build Skills 	<ul style="list-style-type: none"> • Gain Work Experience (Summer or Placement Year) 	<ul style="list-style-type: none"> • BSc: Apply for Graduate Job / MSc / PG / PhD • MChem: Gain more Work Experience (Summer) 	<ul style="list-style-type: none"> • BSc: Pass probation year + work out career path • MChem: Apply for Graduate Job / MSc / PG / PhD 	<ul style="list-style-type: none"> • BSc: Promotion / More Experience • MChem: Pass probation year + work out career path

5 year plans in Life Sciences: Link to Third Term Opportunities



5 year career plans in Engineering: Led by Personal Tutors



5 year career plans in Chemistry: Workshops & Personal Tutors



Challenges Faced

- **Engaging Staff**
 - Experience of feedback on careers
- **Engaging Students:**
 - Graduation seems a long way off
- **What will you replace:**
 - Limited space in the curriculum

Lessons Learned

- **Careers Support:**
 - Make it easy → Clear expectations
 - Tailor to each subject & Year group
- **Provide Linked Opportunities:**
 - Sci & Eng Extracurricular Award
 - Work Experience (Visits | International)
- **Adapt & link to Real Experiences**
 - Feel prepared → Mock interviews

Benefits of Curriculum-Based Employability

As a University we have a wide range of excellent support & opportunities
→ Which we need every student to benefit from → Raise aspirations

Embedding 5-year Plans → Applications → Interviews in the curriculum:

- Essential part of their University experience
- Builds up their confidence & readiness
- Increases awareness of opportunities
- Helps with motivation → Progression

Staff Feedback:

“For the 1st time, Year 2 seem to have a really clear idea of what they want to do next.”

Connecting Employability for Students

**Map
Employability
in the
Curriculum**

5 Year Plans

**Career
Preparation
Workshops**

**Coaching to Build
Confidence:**

- Personal Tutors
- PALs
- Toastmasters
- Alumni

Online Resources:

- Careers Centre
- Newsletters

Opportunities:

- Science & Engineering Extracurricular Award
- Volunteering
- Meet the Employers Networking Event
- Extended 3rd Term
- Work Experience

**Work
Experience**

**Graduate
Jobs**

PG Study



SUCCESS

CURIOSITY

AMBITION

PURPOSE

FEARLESS

ADVENTURE

Science & Engineering Employability Team



Careers:

- Janet Marshall
- Marina Matosic
- Kirstin Burke
- Megan Sharifi
- Rebecca Hall
- Sarah Reith

Placement:

- Amy Dutton
- Katie Grantham
- Marie McGarvey
- John White (Business Dev)

Student Enrichment:

- Andrew Lenehan

Science & Engineering:

- Fiona Saunders (Faculty Head of Education)
- **Department Leads:**
 - Lisa Coulthwaite (Life Sciences)
 - Lindsey J. Munro (Natural Sciences)
 - Haydn Insley, Lisa Simmons, Carl Diver (Engineering)
 - Bob Cherry (Computing)
 - Lida Nejad (Mathematics)
 - Ben Ives (Sport & Exercise Science)
- **Placement Tutors:**
 - Scott Pedley (Biology)
 - Ian Ingram (Chemistry)
 - Hannah Matthews (Env Sci | Geography)
 - David Sawtell (Engineering)
 - Paul Marsden (Computing)
 - Killian O'Brien (Mathematics)