QAA Focus On:
Graduate Skills – Shaping Strategy

Professor Sara Carter
University of Strathclyde
Focus on: Graduate Skills

- Economic context and future challenges
- Readiness to meet these challenges – policy ideas
- Role of Enterprise & Skills Strategic Board
- HE Challenges: Graduate jobs, skills utilisation
- How Strathclyde is addressing graduate skills
Economic Context: Labour Market

Year to December 2018

- Employment rate up to 75.6% (UK 76.1%).
- Unemployment fell to 3.3% (UK, 3.9%).
- Economic inactivity rate up to 21.8% (UK, 20.7%).

- Near full employment, but
- An aging population
- Declining in-migration
- Underemployment, gig economy
Scotland is currently ranked 19th out of OECD countries when measured by GDP per hour worked.
The focus is on productivity, but also equality, wellbeing and sustainability

<table>
<thead>
<tr>
<th>Country</th>
<th>BERD</th>
<th>GOVERD</th>
<th>HERD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotland</td>
<td>46%</td>
<td>7%</td>
<td>45.50%</td>
</tr>
<tr>
<td>England</td>
<td>68.70%</td>
<td>6.70%</td>
<td>22.30%</td>
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<tr>
<td>Wales</td>
<td>60.80%</td>
<td>2.10%</td>
<td>37.20%</td>
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<tr>
<td>N Ireland</td>
<td>74.30%</td>
<td>2.20%</td>
<td>23.50%</td>
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<tr>
<td>GBR Average</td>
<td>67.10%</td>
<td>6.60%</td>
<td>24.30%</td>
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Businesses in Scotland: Size, Employment, Turnover

All Scotland Enterprises (365,000) March 2017

- Size Class 0: 70.6% Enterprises, 13.5% Employment, 4.9% Turnover
- Small 1-49: 27.7% Enterprises, 29.1% Employment, 21.8% Turnover
- Medium 50-249: 1% Enterprises, 12.4% Employment, 13.4% Turnover
- Large 250+: 45% Enterprises, 59.9% Employment, 1% Turnover

Universities of Strathclyde, Glasgow
High Growth Expectations - Early Stage Entrepreneurs

Average of 2013 to 2017 prevalence rates

England: Male - 1.66%
Wales: Male - 1.44%
Scotland: Male - 1.00%
N. Ireland: Male - 0.62%

England: Female - 0.32%
Wales: Female - 0.24%
Scotland: Female - 0.20%
N. Ireland: Female - 0.12%

High growth expectations: expect to employ at least 20 people in 5 years’ time
Average of 2013 to 2017 prevalence rates

High Growth Expectations - Benchmark Nations

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<thead>
<tr>
<th>Country</th>
<th>Male</th>
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<tbody>
<tr>
<td>USA</td>
<td>0.5%</td>
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<tr>
<td>Canada</td>
<td>3.0%</td>
<td>3.0%</td>
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<tr>
<td>Australia</td>
<td>2.0%</td>
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<td>UK</td>
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<td>1.0%</td>
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<tr>
<td>Ireland</td>
<td>2.5%</td>
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<tr>
<td>Norway</td>
<td>0.5%</td>
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<tr>
<td>Finland</td>
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<td>Scotland</td>
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Average of 2013 to 2017 prevalence rates
44% of businesses remain either disconnected or have only basic digital proficiency.

Larger businesses and younger businesses with growth ambitions are more likely to embrace digital technology.
Economic Context: Future Challenges

• Industrial Disruption
• Emerging general purpose digital technologies
  • Industry 4.0
  • Artificial Intelligence
  • Machine Learning
  • Ethereum Blockchain
• Go beyond simple automation by exploiting large dynamic data sets using complex, adaptive algorithms to perform highly-skilled tasks normally requiring human intelligence
• Threaten low-skilled service-based work and professional work
• Fears of mass unemployment and growing levels of inequality in the near future
Economic Context: Future Challenges

Potential Effects & Policy Responses

• Less work, less employment, less income, more leisure
• Can we mitigate the potential job losses?
• What about incomes and Universal Basic Income?

• More work, more employment, more (unequal) income, less leisure
• Opportunities are intrinsic part of disruption - will this create more jobs than destroyed over longer run?
• ... as previous versions of automation
Enterprise & Skills Strategic Board

**Impacts**
- Productivity
- Equality
- Wellbeing
- Sustainability

**Outcomes**
- Population skill profile
- Wealth inequalities
- Healthy life expectancy
- Carbon footprint
- Access to broadband
- Gender pay gap
- Mental wellbeing
- Energy from renewables
- Spend on R&D
- Gender balance
- Work related ill health
- Waste generated
- Number of businesses
- Persistent poverty
- Natural Capital
- Innovative businesses
- Contractually secure work
- Workplace learning
- International exporting

**Inputs**
- The money agencies spend and the people they employ

**Activities**
- The things that get done with resources

**Outputs**
- What is produced as a result of the activities

**Outcomes**
- What is achieved and is measured using NPF indicators

**Impacts**
- The ultimate effects on productivity, equality, wellbeing and sustainability
Enterprise & Skills Strategic Board

- Works collaboratively to improve the enterprise & skills system with customer at centre
- Strategic plan October 2018
- Next steps
  - Implementing actions within the plan – coordinating agency plans, developing Performance Framework
  - Promoting development of the processes and culture to ensure delivery of commitments, improved performance and deeper collaboration
  - Continuing to look ahead to future opportunities – e.g. Innovation
Key to improving our rate of sustainable scale-ups creation is the concept of a start-up/scale-up funnel as detailed by Mark Logan, former COO of Skyscanner, one of Scotland’s ‘unicorn’ companies.
Graduate Jobs, Skills Utilisation, Value for Money

• Graduate Jobs: “49% of recent graduates were working in non-graduate roles” – UK Education Select Committee

• Skills utilisation: “48% of Scotland’s population has a tertiary education, but the skills and qualifications not being fully utilised” SDS

• What is a graduate job?
• What determines skills underutilisation?
• What is this debate really about?

“Number of students getting first class degrees sky-rocket as universities are accused of grade inflation - making 'Desmond' (2.2 awards) almost extinct”
Most graduates 'in non-graduate jobs', says CIPD

The majority of UK university graduates are working in jobs that do not require a degree, with over-qualification at "saturation point", a report claims.

Overall, 58.8% of graduates are in jobs deemed to be non-graduate roles, according to the Chartered Institute of Personnel and Development. It said the number of graduates had now "significantly outstripped" the creation of high-skilled jobs. The CIPD said the report's findings should be a "a wake-up call". "The assumption that we will transition to a more productive, higher-value, higher-skilled economy just by increasing the conveyor belt of graduates is proven to be flawed," said Peter Cheese, chief executive of the CIPD, the professional body for human resources managers.

'Simply wasted'
## What is a Graduate Job?

<table>
<thead>
<tr>
<th>SOC</th>
<th>Proportion of jobs classified as ‘Graduate Jobs’</th>
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<tbody>
<tr>
<td>1 – Managers, directors and senior officials</td>
<td>75% (2.6m graduate jobs)</td>
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<tr>
<td>2 – Professional occupations</td>
<td>100% (6.5m graduate jobs)</td>
</tr>
<tr>
<td>3 – Associate professional and technical occupations</td>
<td>53% (2.5m graduate jobs)</td>
</tr>
<tr>
<td>4 – Administrative and secretarial occupations</td>
<td>9% (0.3m graduate jobs)</td>
</tr>
<tr>
<td>5 – Skilled trade occupations</td>
<td>0% (no graduate jobs)</td>
</tr>
<tr>
<td>6 – Caring, leisure and other service occupations</td>
<td>3% (0.1m graduate jobs)</td>
</tr>
<tr>
<td>7 – Sales and customer service occupations</td>
<td>0% (no graduate jobs)</td>
</tr>
<tr>
<td>8 – Process, plan and machine operatives</td>
<td>0% (no graduate jobs)</td>
</tr>
<tr>
<td>9 – Elementary occupations</td>
<td>0% (no graduate jobs)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37% (12.0m graduate jobs)</td>
</tr>
</tbody>
</table>

Source: Peter Brant [https://wonkhe.com/blogs/what-is-a-graduate-job/](https://wonkhe.com/blogs/what-is-a-graduate-job/)
“It is important to understand whether or not higher education qualifications are benefiting graduates over their careers in terms of whether the skills they develop allow them to do more highly-skilled work, be more effective and productive in their jobs and enjoy higher earnings than non-graduates with similar characteristics. However, simplistic interpretations of subjective data which has a lot of caveats and is based on the situation early on in a graduate’s career will lead to the wrong conclusions being drawn and the wrong policies being implemented.”

Peter Brant [https://wonkhe.com/blogs/what-is-a-graduate-job](https://wonkhe.com/blogs/what-is-a-graduate-job)
Millennials: Generation Rent

• More opportunities
• More challenges
• Intergenerational injustices
• Higher Education costs
• Housing affordability
• Job insecurity
• (No) Pensions
• Challenges the non-parental role of HE
Generation Z: More mild than wild

- Volunteering - 46% up from 30% in 2000
- Community groups - 29% up from 10% in 2000
- Ethical consumers - 26% up from 19% in 2000
- Less alcohol - 28% view as ‘very risky’
- Crime down, institutional trust up
- Importance of employability
- Having a degree is no longer enough
- Want ROI in HE
- Want confidence in future employability
• Future graduates likely to work in job types and specialties that do not currently exist

• Future jobs are unpredictable, but a broad set of employability meta-skills can help our graduates to adapt to changes over their working lives

• Subject knowledge dates fast, capabilities are enduring

• HE Metaskills = Graduate Capabilities
## Meta-skills for Employability

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<tr>
<th>Leadership</th>
<th>Entrepreneurial thinking</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical thinking</td>
<td>Quantitative reasoning</td>
<td>Ability to manage complex tasks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-management</th>
<th>Social intelligence</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking responsibility for own behaviour and well-being</td>
<td>Awareness of others’ feelings, needs and concerns to effectively negotiate complex social relationships and environments</td>
<td>The ability to define and create significant positive change</td>
</tr>
</tbody>
</table>
Defining Employability

What it is

• It applies to all students, whatever their situation, course or mode of study
• It is about supporting students to develop a range of knowledge, skills, behaviours, attributes and attitudes that will enable them to be successful in employment and in life
• It is about making the components of employability explicit to students to support lifelong learning
• It is a university-wide responsibility

What it is not

• Not about replacing academic rigour or standards
• Not necessarily adding additional modules in curriculum
• Not just about preparing students for employment
• Not able to be quantified by a single metric (e.g. DLHE)
• Not just the responsibility of the careers service
Strathclyde’s Focus on Employability

For students ...

• A degree is not enough
• Return on investment
• Volunteering
• Social impact
• Ethical & environmental concerns

• Supports engagement in education - see the relevance of their studies to their future careers and life beyond university
• Supports engagement in wider student experience, formal volunteering, social innovation, making a difference

For staff ...

• Good learning practice
• Students who engage in developing their employability are likely to be independent, reflective and responsible learners
• Teaching practices encouraging students’ understanding and ‘deep’ learning also enhance their employability
• Industry / employer engagement helps students appreciate the relevance of their course and supports application of knowledge in the workplace
• Links to accreditation requirements from professional bodies
CareerEDGE Model

Employability

Self esteem

Self efficacy

Self confidence

Reflection and Evaluation

Career Development & learning
Experience Work & life
Degree subject knowledge, skills & understanding
Graduate attributes & enterprise skills
Emotional intelligence

Dacre Pool & Sewell (2007)
Careers & Employability at Strathclyde

- Developing an Employability Strategy for Strathclyde
- Embedding employability at course, department/school, faculty and University levels
- Developing a set of generic employability-related skills training courses (with certification/accreditation) for all UG and PG students

HEA Employability Framework

1. Defining employability and making this explicit at institutional and programme level and with all our students
2. Auditing and mapping provision
3. Prioritising actions to address gaps and share best practice
4. Measuring impact
Careers & Employability at Strathclyde

Founding mission: Useful Learning

Graduate attributes: Developing graduates that are engaged, enquiring, enterprising and ethically and globally aware.

Definition of Employability: Strathclyde student learners will develop the knowledge, skills, aptitudes, attributes, experience and confidence to be successful, valuable and responsible lifelong global citizens.

Ambition and approach: Every student learner will have the opportunity to undertake an experiential work placement, internship or work-based project while studying at the University of Strathclyde.