

Graduate Employability: the final performance measure in a long journey?



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Outline

- Evolution of UK HE Assessment 1986-2016
 - Research
 - Education (Training)
 - Entrepreneurship
 - Impact
- Most recent developments
 - Graduate Employability
 - Graduate Employment
- Dangers and Implications for HE
 - Management
 - Leadership

Research Assessment

- 1986
 - Research statements from Universities
 - » 37 Subject areas, 5 research outputs,
 - » Some funding determined by assessed quality
- 1989
 - 2 research outputs per staff member
 - 152 Subject Areas
 - 40% Funding determined by quality rest by volume
- 1992
 - 2 research outputs per staff member
 - Census Date for Staff leads to transfer market
 - Legal challenge to assessment process



ROYAL
ACADEMY OF
ENGINEERING

Research Assessment

- 1996
 - All funding related to quality
- 2001
 - Transfer Market issue addressed
 - 4 research outputs per staff member
- 2008
 - 4 research outputs per staff member for quality
 - Quality profile for a discipline based on each paper
- 2014
 - Fewer Subject Categories
 - Impact introduced with 15% of Funding



- 1991
 - Universities responsible for standards
 - Subject Level Review; Peer Review by Visit and observation of teaching
 - » Curriculum Design, Content and Organisation
 - » Teaching Learning and Assessment
 - » Student Progression and Achievement
 - » Student Support and Guidance
 - » Learning Resources
 - » Quality Management and Enhancement
 - University level review of Process (Governance)
 - Public report of score
- 1997
 - Replaced by Institutional Audit, Quality Assurance Agency
 - Self Assessment submitted for Institution
 - Disciplinary Audit trails
 - Public report
- 2001
 - Tuition fees introduced
 - Student Loans



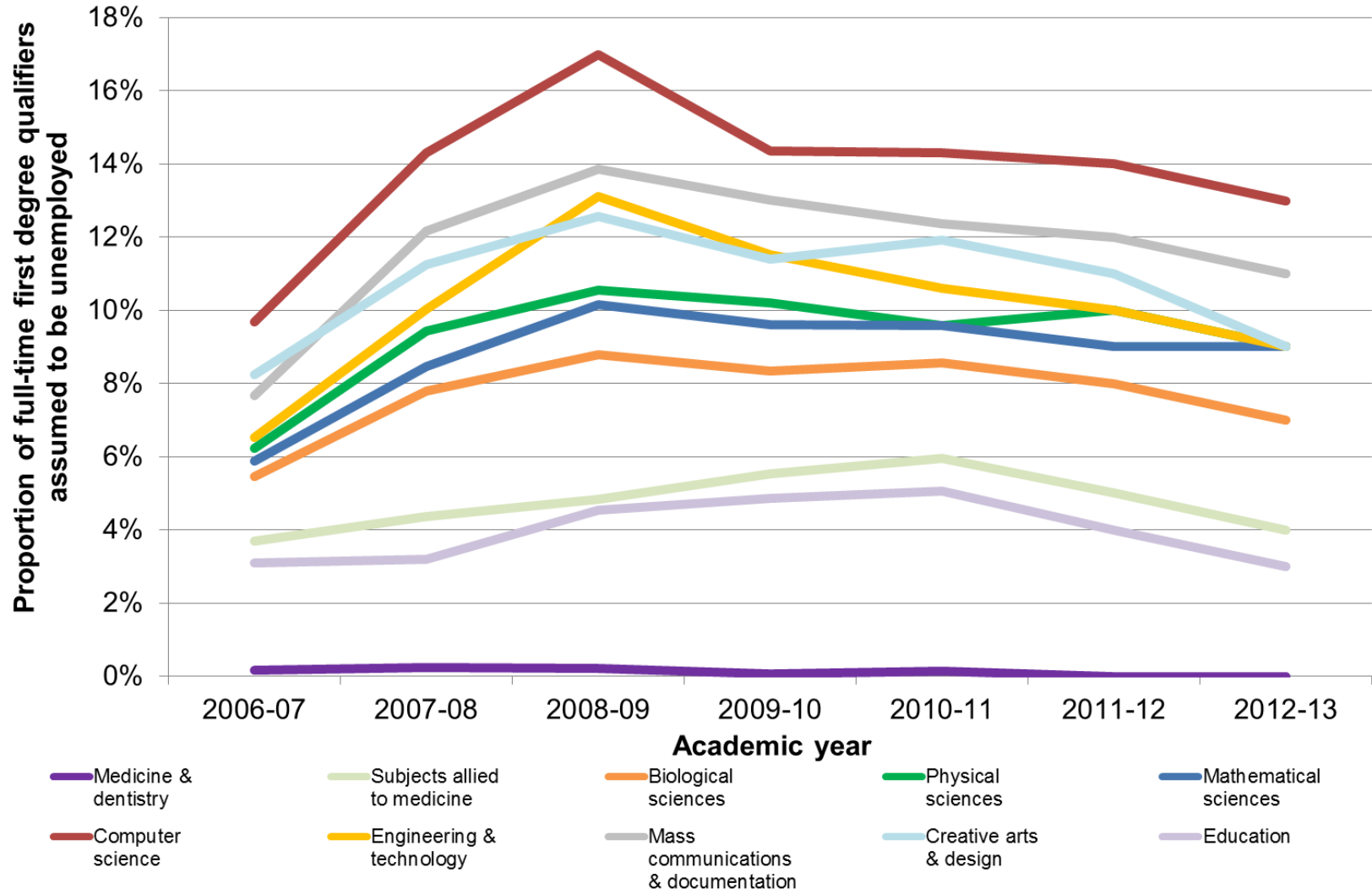
- 2011
 - Quality Code, Quality Assurance Agency
 - » setting and maintaining standards,
 - » meeting UK expectations about the quality of the student experience,
 - » providing trustworthy and reliable information about courses.
 - » Student views sought (national survey)
 - Tuition fees dramatically increased
- 2014
 - Employability becomes an issue for government in economic growth
- 2015
 - New Minister declares teaching in UK Universities lamentable
- 2016
 - Teaching Evaluation Framework
 - » Graduate employment as a measure of teaching quality
 - » Ability to increase fees depends upon result

- **Employability?**
 - Characteristics of an individual that make them desirable as an employee
 - Knowledge, flexible, articulate, teamworking, business acumen, self reliance, customer facing
 - Not easily measurable: employment as a surrogate?
- **2014**
 - Prompted by worries that UK STEM graduates are not employable, Ministers commission
 - » Shadbolt report on Computer Science Graduates
 - » Wakeham report on all other STEM subjects
 - What other subjects have an employability problem
 - Possible reasons and leading to in-depth study

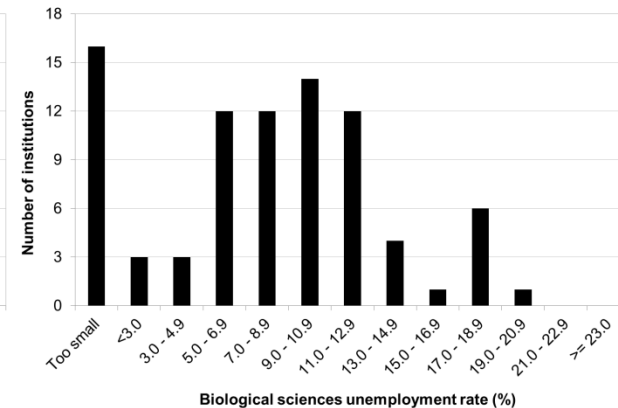
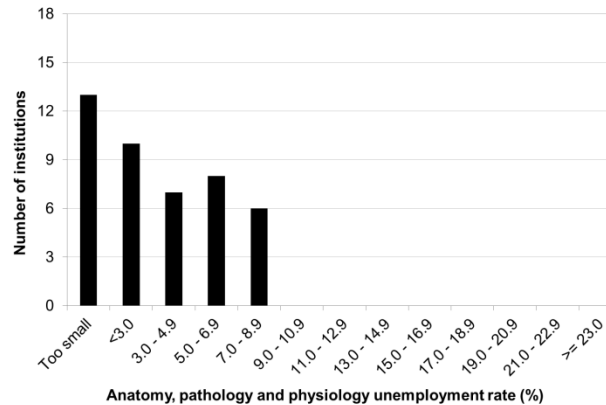
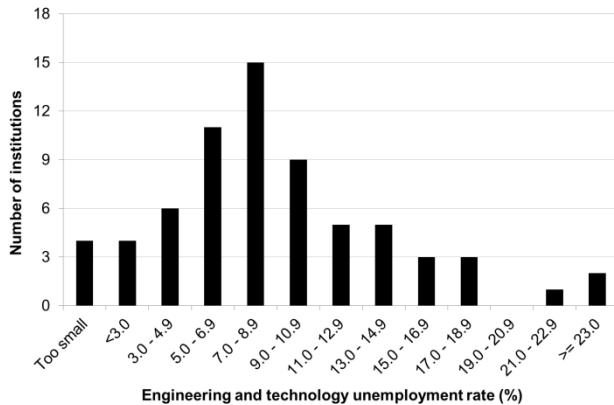
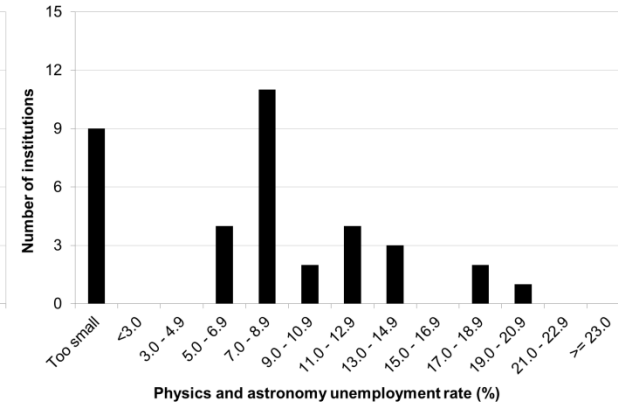
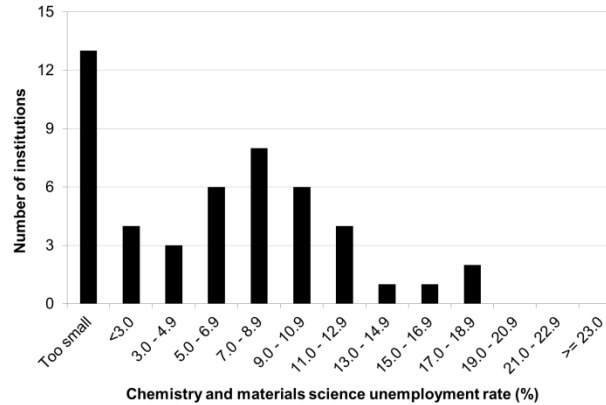
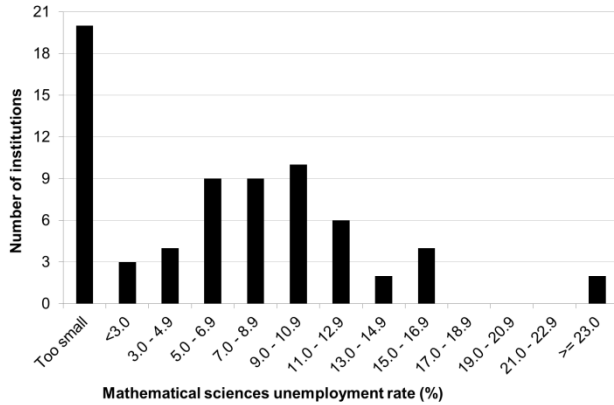
The review was broadly split into 3 overlapping phases:

- A) Define scope and interrogate existing data available through Higher Education Statistics Agency (HESA) to develop a more granular picture of STEM graduate employability across the range of institutional (tariff) types:
 - i. **Unemployment rate**
 - ii. **Proportion of graduates in 'non-graduate roles'**
 - iii. **Proportion of graduates earning low salaries (below £20,000)**
 - B) Conduct an evidence-gathering survey with stakeholders (PSRBs, industry and the HE sector) to develop the evidence base and thus identify the STEM disciplines which appear to have grounds for concern.
 - C) Target stakeholder focus groups/workshops to explore specific issues in more depth where there was agreement on the concerns.
 - Advice provided during course of review by Review Advisory Group – industry, PSRBs and HE sector
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Unemployment rates of full-time first degree leavers from UK HEIs, 2006-07 to 2012-13



Distribution of STEM unemployment rates by institution and subject area, 2012-13



Headline STEM disciplines of concern based on HESA data

Discipline	Unemployment level	Graduates in non-grad roles	Graduates on low salaries
Biological sciences	Above average unemployment for high tariff institutions. Below average for low tariff institutions.	High proportion in non-graduate roles for all institution types.	High proportion in low-pay roles.
Chemistry and materials science	Above average unemployment rates in 2013-14 (below average for low tariff institutions in 2011-12 and 2012-13)	Above average proportion in non-graduate roles across all institution types.	Above average proportion in low-pay roles from all institution types.
Computer sciences	Above average or high unemployment Sharp difference between low and high tariff institutions	Generally low proportion in non-graduate roles Sharp difference between low and high tariff institutions	Above average proportion in low-pay roles except for high tariff institutions.
Earth, marine and environmental sciences	Above average unemployment at high and medium tariff institutions, lower unemployment for low tariff institutions.	High proportion in non-graduate roles.	High proportion in low-pay roles.
Chemical, process and energy engineering	High unemployment especially for high tariff institutions.	Low proportion in non-graduate roles.	Low proportion in low-pay roles.
Others in engineering and technology	Variability in unemployment rates: below average in 2012-13, above average in 2011-12 and 2013-14.	High proportions at low tariff institutions in non-graduate roles and low proportions at high tariff institutions.	High proportions at low tariff institutions and low proportions at high tariff institutions.
Mathematical sciences	Below average unemployment.	Above average proportion in non-graduate roles for high tariff institutions.	Above average in low-pay roles for high tariff institutions.
Pharmacology, toxicology and pharmacy	Low unemployment rates/	Low proportions in non-graduate roles for all institution types.	High proportion in low-pay roles.
Physics and astronomy	Above average unemployment, especially for medium tariff institutions.	Below average proportion in non-graduate roles overall.	Below average proportions in low-pay roles.
Agriculture	Slightly above average	High proportion in non-graduate roles	High proportion in low pay roles

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- Stakeholder survey and focus group evidence seems to corroborate poor employment statistics from HESA data.
 - Disciplines that warrant future, targeted exploration:
 - **Biological Sciences**
 - **Earth, Marine and Environmental Sciences**
 - **Agri-Food disciplines**
 - Additional disciplines where graduate outcomes display some cause for concern
Biomedical Engineering; Aerospace Engineering, Engineering Design
 - Graduates lacking:
 - **‘Soft / work readiness’ skills; self discipline**
 - **Business/commercial awareness**
 - **Work experience**
 - **Sufficient levels of engagement in/awareness of career planning and or industry opportunities**
 - **Mathematical/statistical skills and training**
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- **Improved Data** which elucidates the links between the supply and demand for STEM graduate skills needs to be **better mapped and strengthened.**
 - Increased engagement between industry and HE providers:
 - **Graduate soft / work readiness skills need to be improved and adjusted as demands change**
 - **Careers advice / training for graduates could be improved**
 - **Work experience** needs to assume greater prominence in degree courses and the benefits must be clearly communicated to students
 - **Other Mechanisms** so that such benefits can be derived for the student.
 - **Accreditation can have a positive effect on employability.**
 - Where STEM disciplines are subject to new or emerging systems they should be enhanced.
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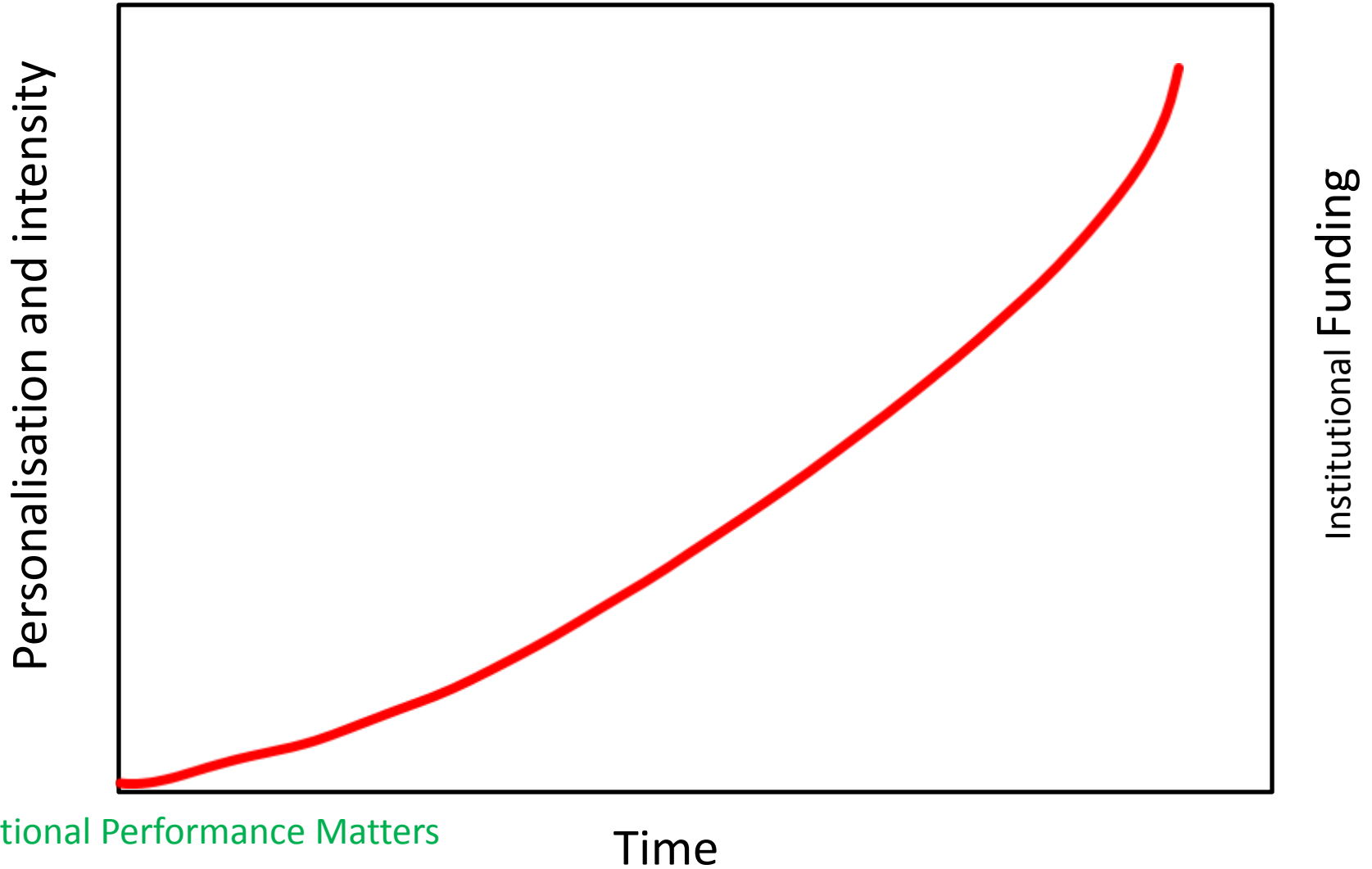
Recent Developments

- **Legislation**
 - ‘Private’ Universities to be authorised in the name of competition
 - Employment of graduates as a performance measure of institution (Teaching Evaluation Framework)
 - Student opinion to be used as well
 - Ability to increase tuition fees related to outcome
 - Employment data to be improved by following graduates through internal revenue (tax)
- **Issues of principle**
 - Is employment the same as employability?
 - Is employment a good measure of teaching quality?
 - Is employment outcome the only purpose of universities?
 - Are universities about education or training?
 - What does this mean for Staff?

Implications for Academic Staff

1. Secure funding for research
2. Perform research that is internationally competitive
3. Publish research in the most highly rated journals
4. Secure and measure the impact of this research
 1. On other research
 2. On the economy
 3. On the public
5. Deliver excellent teaching and feedback
6. Make sure students learn and like you
7. Develop in your students life and business-based skills
8. Manage your group and Department

Individual Staff Performance Matters



Institutional Implications; Leadership and Management of Staff

1. Do all staff have to do everything?
2. Does a business model work in which the total tasks are shared unequally
3. How to handle differences of esteem and reward
4. Real management of performance of all
5. Removal of failing staff must be possible
6. Training for Personnel Management must be spread
7. Far from the traditional model University Staff?
8. Will it remain an attractive career